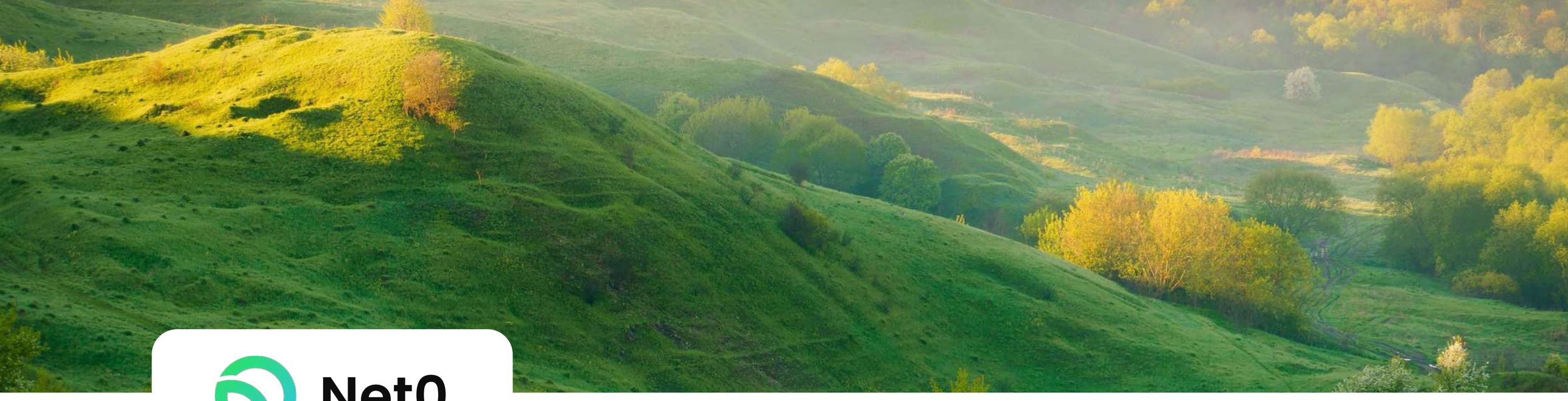


Net0

CARBON ACCOUNTING AND CARBON MANAGEMENT

TERMS TO KNOW

ACTIVITY DATA

Activity data refers to the specific actions or events that generate or contribute to carbon emissions. In the context of carbon management, activity data is used to track and monitor the sources and levels of carbon emissions, and to develop strategies for reducing or mitigating these emissions

For example, a company may use activity data to track the carbon emissions associated with its operations, such as the use of fossil fuels in its manufacturing processes or the emissions from its fleet of vehicles. This data can then be used to identify opportunities for reducing emissions, such as implementing energy-efficient technologies or switching to renewable energy sources.

ADAPTATION

Adaptation is the process of adjusting to new conditions or circumstances in order to better survive and thrive. In the context of carbon accounting, adaptation refers to the strategies and actions taken by organisations and individuals to reduce their carbon footprint and minimise the impacts of climate change on their operations.

For example, a company may implement a recycling program or switch to renewable energy sources in order to reduce its carbon emissions and adapt to a changing climate. This can be accounted for in their carbon accounting efforts by tracking and reporting on the reduction in emissions and the associated cost savings or other benefits.

ADDITIONALITY (ENVIRONMENTAL)

Additionality is a concept in the field of environmental economics that refers to the idea of ensuring that any project or action that receives financial support or incentives is truly "additional" to what would have happened without that support. In other words, the project or action must be something that would not have happened without the financial support, and it must provide additional environmental benefits over and above what would have happened without the support.

For example, a company may receive financial support to install solar panels on its factory roof. This project would not have happened without the support, and it provides additional environmental benefits by reducing the factory's carbon emissions. In this case, the project would be considered "additional" and would meet the criteria for additionality.

AFFORESTATION

Afforestation is the process of planting trees in areas where there were previously no trees. This can be done for a variety of reasons, including to restore ecosystems, to improve air and water quality, and to combat climate change by sequestering carbon in trees. Afforestation can be used as a strategy to offset emissions from other sources.

For example, a company that produces a lot of greenhouse gas emissions may plant trees to absorb some of those emissions and reduce their overall carbon footprint. This can help the company to meet its carbon reduction targets and contribute to global efforts to combat climate change.

AIR QUALITY INDEX (AQI)

The Air Quality Index (AQI) is a measure of the concentration of harmful pollutants in the air, typically expressed as a numerical value on a scale from 0 to 500. It is used to provide the public with information about the quality of the air they are breathing, and to alert them to any potential health risks associated with exposure to high levels of pollutants.

In the context of carbon management, the AQI is an important tool for monitoring the levels of carbon dioxide and other greenhouse gases in the atmosphere. By measuring the concentration of these gases, and comparing them to established safety thresholds, the AQI can help individuals and organisations to assess the potential impact of their activities on the environment, and to take appropriate action to reduce their carbon footprint.

For example, if the AQI indicates that the level of carbon dioxide in the air is approaching a critical level, a city or region may implement measures to reduce emissions from local sources, such as by promoting the use of public transit or encouraging residents to switch to more fuel-efficient vehicles.

AIR POLLUTION

Air pollution refers to the presence of harmful substances in the air, such as particulate matter, gases, and other pollutants. These substances can have negative impacts on human health, the environment, and wildlife.

Air pollution can be caused by the release of carbon emissions into the atmosphere.

For example, the burning of fossil fuels for energy production, transportation, and industrial processes can release carbon dioxide and other greenhouse gases, which contribute to air pollution. Reducing carbon emissions through various strategies, such as implementing renewable energy technologies and energy-efficient practices, can help to mitigate air pollution and protect the air quality for current and future generations.

ANTHROPOGENIC

Anthropogenic refers to something that has been caused or influenced by human activity. This term is often used in the context of environmental issues, where it refers to negative impacts on the environment caused by human actions.

For example, climate change is considered to be an anthropogenic phenomenon because it is largely the result of human activities such as burning fossil fuels and deforestation.

ATMOSPHERE

Atmosphere is the envelope of gases that surrounds a planet or other celestial body. It is made up of various gases, such as oxygen, nitrogen, and carbon dioxide, and plays a crucial role in supporting life on Earth.

In the context of carbon management, atmosphere refers to the level of carbon dioxide and other greenhouse gases in the air. These gases trap heat in the Earth's atmosphere, leading to global warming and climate change. Therefore, managing the levels of carbon dioxide and other greenhouse gases in the atmosphere is crucial for reducing the impacts of climate change and promoting sustainable development. This can be achieved through a range of measures, such as reducing emissions from fossil fuels, promoting renewable energy sources, and planting trees to absorb carbon dioxide from the air.

B

BASE YEAR

A base year in carbon accounting is the year that is used as a reference point for measuring and tracking carbon emissions. It is the starting point for calculating emissions reductions and carbon footprint.

For example, if a company decides to use 2019 as their base year, they would track and measure their carbon emissions from 2019 onwards and compare them to their emissions in 2019 to see if they have been successful in reducing their carbon footprint. This information can be useful for companies that are using a carbon management platform, as it allows them to set targets for reducing emissions and track their progress over time.

BIOFUEL

Biofuel is a type of fuel that is derived from renewable organic materials, such as plant or animal waste. Biofuels are considered to be more environmentally friendly and sustainable than fossil fuels, as they can be produced from a variety of sources and do not contribute to greenhouse gas emissions.

An example of a company that produces biofuels is Biofuels Corporation, which uses waste vegetable oil from restaurants to create biodiesel fuel for use in vehicles.

BIOCHAR

Biochar is a type of charcoal that is produced through the process of pyrolysis, which involves heating organic matter in the absence of oxygen. This process results in the production of a porous and highly stable material that can be used in a variety of applications, including as a soil amendment, in water filtration systems, and as a carbon sequestration tool.

An example of a company that produces and uses biochar is TerraChar, which creates biochar from agricultural waste and wood chips. The biochar is then sold to farmers and gardeners as a soil amendment, improving soil health and water retention while also reducing greenhouse gas emissions.

BIOMASS / BIOGAS

Biomass, or biogas, is a type of renewable energy that is derived from organic materials such as agricultural waste, wood, and manure. Biomass is typically used to generate electricity or heat through processes such as combustion or anaerobic digestion.

One example of a company utilising biomass is a dairy farm that collects cow manure to use in an anaerobic digester. The biogas produced from the digester can then be used to generate electricity for the farm or sold to the local power grid.

BLUE CARBON

Blue carbon refers to the carbon stored in coastal and marine ecosystems such as tidal marshes, seagrass beds, and mangrove forests. These ecosystems play a critical role in the global carbon cycle by sequestering and storing carbon in their vegetation and soils.

An example of blue carbon management is the restoration of mangrove forests in order to increase their carbon sequestration potential. Mangroves are highly efficient at capturing and storing carbon, with some estimates indicating that they can store up to five times more carbon per unit area compared to tropical forests.

Carbon reduction strategies that can be implemented with blue carbon include protecting and restoring coastal ecosystems, promoting sustainable fishing and aquaculture practices, and reducing pollution and coastal development. These strategies can help to maintain and enhance the carbon sequestration capacity of blue carbon ecosystems, while also providing additional benefits such as protecting coastal communities from storms and sea level rise.

C

CARBON ACCOUNTING

Carbon accounting is the process of measuring, tracking, and reporting an organization's greenhouse gas emissions. This typically includes calculating the amount of carbon dioxide (CO2) and other greenhouse gases that are emitted from the organization's activities, such as energy use, transportation, and waste management.

The concept of carbon accounting is based on the idea that organizations should be accountable for the carbon emissions they produce, and that reducing these emissions is critical for mitigating climate change. By accurately measuring and reporting emissions, organisations can identify areas where they can reduce their carbon footprint and make more sustainable choices.

For example, an organisation may conduct a carbon accounting audit to determine the amount of CO2 emissions generated by their office buildings, vehicles, and manufacturing processes. They may then implement strategies to reduce these emissions, such as switching to renewable energy sources, implementing energy-efficient technologies, or purchasing carbon offsets. By regularly tracking and reporting their emissions, the organisation can monitor their progress towards reducing their carbon footprint and take action to further reduce their emissions.

CARBON BUDGET

The carbon budget is the total amount of carbon that can be emitted into the atmosphere within a specified time period while still maintaining a stable climate and preventing dangerous levels of global warming. It is a key concept in carbon management, as it helps to determine the maximum amount of carbon that can be released without exceeding the limits of the Earth's natural ability to absorb and store it. By setting a carbon budget, organizations and governments can plan and implement strategies to reduce their carbon emissions and stay within their allocated budget. This helps to ensure that human activities do not contribute significantly to climate change and other negative environmental impacts.

CARBON CAPTURE AND STORAGE (CCS)

Carbon capture and storage (CCS) is a technology that involves capturing carbon dioxide (CO2) emissions from power plants, industrial processes, and other sources, and storing it in underground geological formations or other secure locations. The goal of CCS is to reduce greenhouse gas emissions and combat climate change.

Examples of CCS include capturing CO2 from coal-fired power plants and injecting it into underground saline aquifers, or capturing CO2 from cement manufacturing and injecting it into oil wells for enhanced oil recovery.

CARBON DIOXIDE (CO2)

Carbon dioxide is a chemical compound consisting of one carbon and two oxygen atoms. It is a colorless and odorless gas that is present in the Earth's atmosphere. Carbon dioxide is a byproduct of cellular respiration and is also produced by the burning of fossil fuels and other chemical reactions. Carbon dioxide is a major driver of global warming and climate change, exacerbating the greenhouse effect.

CARBON DIOXIDE EQUIVALENT (CO2E)

Carbon dioxide equivalent (CO2e) is a measure of the global warming potential of different greenhouse gases. It is calculated by converting the emissions of each gas into an equivalent amount of carbon dioxide, based on the gas's global warming potential. This allows for comparison and aggregation of emissions from various sources and gases, allowing for more accurate quantification and understanding of their impact on climate change.

CARBON EMISSIONS

Carbon emissions refer to the release of carbon dioxide (CO2) into the atmosphere. This can come from natural sources, such as the respiration of plants and animals, but is largely a result of human activities, such as the burning of fossil fuels, deforestation, and industrial processes. Carbon emissions are a major contributor to climate change and global warming.

CARBON FOOTPRINT

A carbon footprint is a measure of the impact that human activities have on the environment in terms of the amount of carbon dioxide (CO2) emissions produced. It is a way of quantifying the amount of CO2 emissions that are generated from a particular activity or individual, and can be used to evaluate the environmental impact of different actions and lifestyles. A carbon footprint is typically measured in units of carbon dioxide equivalent (CO2e), which is a measure of the global warming potential of different greenhouse gases.

CARBON LEAKAGE

Carbon leakage is the phenomenon in which the reduction of greenhouse gas emissions in one country or region leads to an increase in emissions in another country or region. This can happen when companies relocate their operations to countries with less stringent environmental regulations, or when consumers switch to products made in countries with higher emissions. This undermines efforts to combat climate change and can result in a net increase in global emissions.

CARBON MARKET

A carbon market is a market mechanism that allows for the buying and selling of carbon credits, which are units of measurement for greenhouse gas emissions. The goal of a carbon market is to incentivize companies and individuals to reduce their carbon emissions and promote the use of renewable energy sources. This is often done through a system of cap-and-trade, where a government or regulatory body sets a limit on the amount of emissions allowed and companies can buy or sell carbon credits to meet their emissions targets.

CARBON NEGATIVE

Carbon negative refers to a situation or process where the amount of carbon dioxide removed from the atmosphere is greater than the amount released. This can be achieved through various methods, such as planting trees or using carbon capture technologies. Carbon-negative practices are important in mitigating climate change and reducing the greenhouse effect.

CARBON NEUTRALITY / CARBON-NEUTRAL

Carbon neutrality, also known as carbon-neutral, is the state of having a net zero carbon footprint. This means that the amount of carbon dioxide (CO2) released into the atmosphere by an individual, organization, or community is balanced out by the amount of CO2 absorbed or offset through carbon-reducing initiatives such as renewable energy use, carbon offset projects, and other environmental conservation efforts. To reduce the negative effects of human activities on our planet, and to fight against climate change, carbon neutrality is a goal we should all strive towards.

CARBON OFFSETTING

Carbon offsetting is a method used to compensate for the greenhouse gas emissions that are released into the atmosphere by human activities. This is typically achieved by funding projects that reduce or eliminate carbon emissions, such as renewable energy projects or reforestation initiatives. Carbon offsetting seeks to counterbalance the detrimental effects of greenhouse gas emissions, ultimately assisting in alleviating the consequences of global warming.

CARBON POSITIVE

Carbon positive refers to a state where an individual or organization has a net positive impact on the environment by reducing or offsetting their carbon footprint. This can be achieved through various actions such as reducing energy consumption, using renewable energy sources, and investing in carbon offset projects. A carbon positive individual or organization is focused on actively reducing their carbon emissions and actively working to reduce the overall impact of climate change.

CARBON TARGET

A carbon target is a material or device used in scientific or industrial processes that is made of carbon or a carbon-based compound. This type of target is often used in applications such as sputtering or ion beam deposition, where ions or particles are directed at the target to create a thin film or coating. Carbon targets are known for their high conductivity and durability, making them a popular choice for various applications

CARBON SINK

A carbon sink is a natural or artificial system that absorbs and stores carbon dioxide from the atmosphere, helping to mitigate the negative effects of greenhouse gas emissions on the environment. **Examples** of natural carbon sinks include forests, oceans, and soils, while artificial carbon sinks include carbon capture and storage technologies.

CARBON SEQUESTRATION

Carbon sequestration is the process of capturing and storing carbon dioxide (CO2) from the atmosphere, typically through the use of vegetation, soils, and geological formations. This immensely diminishes the amount of CO2 released in our atmosphere, ultimately curbing climate change and its adverse effects.

CERTIFICATION OF CARBON CREDITS

Certification of carbon credits is the process by which a third party verifies that a certain amount of greenhouse gas emissions have been reduced or offset through a carbon reduction project. This verification ensures that the carbon credits being sold are legitimate and have been generated through verified and verified emission reduction activities. Certification is an essential factor in providing trustworthiness and visibility to the carbon credit industry.

CARBON TAX

A carbon tax is a tax imposed on the emission of carbon dioxide and other greenhouse gases. It is intended to incentivize the reduction of these emissions by making them more expensive.

An example of a recent carbon tax regulation in Europe is the European Union's Emissions Trading System (EU ETS), which is the largest carbon market in the world. The EU ETS sets a cap on the total amount of carbon emissions that can be emitted by industries covered by the system, and companies must purchase allowances for each ton of carbon they emit. The price of these allowances is determined by supply and demand, and the market is used to incentivize companies to reduce their emissions in order to save on the cost of purchasing allowances.

CAP AND TRADE

Cap and trade is a market-based approach to reducing greenhouse gas emissions. It works by setting a cap, or limit, on the total amount of emissions that a country or group of countries can produce. This cap is then reduced over time, so that the total amount of emissions decreases. Companies that produce emissions, such as power plants and factories, are given allowances or permits that allow them to emit a certain amount of emissions. If a company wants to emit more than its allotted amount, it must buy additional allowances or permits from another company that has not used all of its allotted amount. This creates a market for emissions allowances and provides an incentive for companies to reduce their emissions in order to save money on allowances.

In the context of carbon management, cap and trade can be used to reduce carbon dioxide emissions from sources such as power plants and industrial facilities. The cap is set at a level that is consistent with the goals of reducing greenhouse gas emissions and limiting global warming. As the cap is reduced over time, companies must find ways to reduce their emissions in order to stay within the cap. This can be done through a variety of measures, such as improving energy efficiency, switching to cleaner energy sources, or using carbon capture and storage technologies.

For sustainability teams, cap and trade can be an effective tool for reducing carbon emissions and promoting the transition to a low-carbon economy. It provides a market-based mechanism for incentivising emissions reductions, and it can be a useful complement to other policy measures, such as regulations and subsidies. However, it is important to carefully design and implement a cap and trade program in order to ensure that it is effective and fair. This may involve setting the cap at an appropriate level, allocating emissions allowances in a way that promotes emissions reductions, and monitoring and enforcing compliance with the cap.

CARBON BORDER ADJUSTMENT MECHANISM (CBAM)

The Carbon Border Adjustment Mechanism (CBAM) is a proposed policy that aims to level the playing field for domestic producers by taxing imported goods based on their carbon emissions. This would incentivize companies to reduce their emissions and encourage the use of cleaner production methods. The CBAM would work by imposing a tax on imported goods based on the amount of carbon emissions associated with their production.

For example, if a company in a country with high carbon emissions produces a product and exports it to a country with lower emissions, that company would be required to pay a tax on the carbon emissions associated with the production of that product.

The goal of the CBAM is to reduce global carbon emissions and promote the use of cleaner production methods. This would help countries that have already implemented carbon pricing policies to avoid being at a competitive disadvantage with countries that do not have such policies in place.Examples of how the CBAM could be implemented include the European Union considering the introduction of a carbon border tax and the United States potentially implementing a carbon border adjustment as part of its climate policy.

CDP

CDP, or the Carbon Disclosure Project, is a nonprofit organization that collects and provides standardized data on greenhouse gas emissions and climate change strategies of major companies and cities.

CDP is important for carbon management because it provides a consistent and transparent method for companies to report their emissions and climate change efforts. This allows for accurate and comparable data on emissions, which can be used to track progress and identify areas for improvement in carbon management.

Additionally, CDP's reports can provide investors and stakeholders with important information on a company's carbon footprint and efforts to reduce emissions, which can impact their decision-making and support for the company.

For businesses, measuring and reducing emissions through CDP can help improve their environmental and social responsibility, as well as potentially reduce their operating costs and improve their reputation and competitiveness.

CLIMATE INVESTMENT

Climate investment refers to the allocation of financial resources towards initiatives and projects that aim to reduce greenhouse gas emissions, adapt to the impacts of climate change, and support the transition to a low-carbon economy. This type of investment typically involves both private and public funds, and may include investments in renewable energy, energy efficiency, climate-resilient infrastructure, and other climate-related initiatives. Investing in climate-related projects can help communities and ecosystems thrive, by mitigating the detrimental effects of a changing environment. It also provides an opportunity to bolster economic growth while creating sustainable development opportunities.

An example of climate investment is the construction of a wind farm. This type of project involves the development and installation of wind turbines, which generate electricity through the use of wind power. The project may require significant upfront investment, but it can provide long-term benefits in the form of reduced greenhouse gas emissions, as well as cost savings on electricity bills. Additionally, the construction and operation of the wind farm may create jobs and stimulate economic growth in the local community.

COP

COP is short for "Conference of the Parties". In the context of climate and carbon emissions, it refers to the annual conference of the parties to the United Nations Framework Convention on Climate Change (UNFCCC). The conference is attended by representatives of the UNFCCC's 197 member states, as well as observer organizations and media. The purpose of the conference is to assess progress in addressing climate change and to negotiate and implement measures to reduce greenhouse gas emissions and mitigate the impacts of global warming. COP is also the name of the annual meeting of the parties to the Kyoto Protocol, a separate international treaty that sets binding targets for reducing greenhouse gas emissions.

CORPORATE SUSTAINABILITY

Corporate sustainability is the practice of a business operating in a way that meets the economic, social, and environmental needs of the present without compromising the ability of future generations to meet their own needs. This means that a business is responsible for its impact on the environment, the well-being of its employees and communities, and the long-term financial success of the company.

One real-life example of corporate sustainability is the efforts of Patagonia, an outdoor clothing and gear company, to reduce its environmental impact. This includes using sustainable materials in their products, reducing waste and water usage in their manufacturing process, and partnering with organizations to conserve natural resources. Additionally, the company also offers fair labor practices and philanthropic efforts to support the local communities where they operate.

CLEAN DEVELOPMENT MECHANISM (CDM)

The Clean Development Mechanism (CDM) is a mechanism established under the United Nations Framework Convention on Climate Change (UNFCCC) that allows developed countries to invest in greenhouse gas reduction projects in developing countries in order to offset their own emissions. This allows developed countries to meet their emission reduction targets while also providing economic and environmental benefits to the host developing country.

An example of a CDM project is the installation of a wind farm in a developing country. The wind farm reduces emissions of greenhouse gases by generating clean energy, and the developed country that invested in the project can use the emissions reductions from the wind farm to offset their own emissions. This benefits the host country by providing clean energy and economic development, and the developed country by meeting its emission reduction targets.

CLIMATE CHANGE

Climate change is the long-term alteration of weather patterns in a specific region or globally. It is caused by the emission of greenhouse gases, such as carbon dioxide, from human activities, such as burning fossil fuels and deforestation.

The concept of climate change has been recognized for centuries, with some of the earliest discussions of it dating back to the 1800s. In the mid-20th century, scientists began to study the effects of greenhouse gases on the Earth's climate and their findings showed that these emissions were causing the planet to warm.

In the 1980s and 1990s, global climate negotiations began to take place, with the United Nations Framework Convention on Climate Change being established in 1992. The Paris Agreement was reached in 2015, with almost every country in the world committing to reduce greenhouse gas emissions to combat climate change.

However, despite these efforts, climate change continues to be a major global issue, with rising temperatures, sea levels, and extreme weather events all contributing to its impacts.

CLIMATE CONTRIBUTION

Climate contribution refers to the effect that a particular action or activity has on the climate. For example, the burning of fossil fuels such as coal and oil releases large amounts of carbon dioxide into the atmosphere, which can contribute to global warming and climate change.

Another example of a climate contribution would be the deforestation of a forest, which can reduce the amount of carbon dioxide that is absorbed from the atmosphere and contribute to climate change.

CO-BENEFITS

Co-benefits refer to additional positive effects that result from implementing a particular policy or action.

For example, a policy aimed at reducing air pollution may also result in health benefits for the population, such as reduced rates of respiratory illness.

COMPENSATION

Compensation in the context of carbon management and climate change refers to the act of providing financial or other forms of compensation to individuals, businesses, or organizations that have been affected by the negative impacts of climate change. This can include damages caused by extreme weather events, loss of livelihoods, or other negative impacts of climate change.

An example of compensation in this context could be providing financial support to farmers in a region that has been severely impacted by drought, in order to help them recover from the loss of crops and income.

CORPORATE CARBON FOOTPRINT

A corporate carbon footprint is the total amount of greenhouse gas emissions produced by a company's operations and supply chain. This includes emissions from energy use, transportation, waste management, and other activities.

For example, a clothing manufacturer might have a large corporate carbon footprint due to the energy needed to run their factories, the transportation of raw materials and finished products, and the disposal of waste.

The concept of a corporate carbon footprint is important because it allows companies to measure and track their greenhouse gas emissions and take action to reduce them. This can help mitigate the negative impacts of climate change and improve a company's sustainability and reputation. Companies may also be held accountable for their carbon footprint through regulations or consumer pressure.

CORPORATE SUSTAINABILITY DUE DILIGENCE

Corporate sustainability due diligence is the process of evaluating and assessing a company's environmental, social, and governance (ESG) practices and performance in order to identify potential risks and opportunities for improving sustainability. This includes analyzing a company's policies, processes, and performance in relation to key sustainability indicators such as greenhouse gas emissions, waste reduction, labor practices, and diversity and inclusion.

An example of corporate sustainability due diligence would be an investment firm conducting a thorough review of a potential investment's ESG practices in order to determine whether the company aligns with the firm's sustainability goals and whether there are any potential risks or opportunities for improving the company's sustainability performance.

The concept of corporate sustainability due diligence has become increasingly important in recent years as more and more companies, investors, and stakeholders recognize the importance of considering ESG factors in decision-making. By conducting sustainability due diligence, companies and investors can identify potential risks and opportunities related to sustainability, and make informed decisions that align with their sustainability goals and values. This can help companies to improve their sustainability performance, reduce their environmental impact, and build stronger, more resilient businesses.

CORPORATE SUSTAINABILITY REPORTING DIRECTIVE (CSRD)

The Corporate Sustainability Reporting Directive (CSRD) is a European Union directive that requires large companies and certain public-interest entities to disclose information on their environmental, social, and governance (ESG) performance in their annual financial reports. The goal of the CSRD is to promote transparency and accountability in corporate sustainability practices, allowing investors and other stakeholders to better assess the sustainability of companies and make informed decisions. The directive also aims to encourage companies to improve their sustainability performance and contribute to the transition to a more sustainable economy.

DECARBONISATION

Decarbonisation is the process of reducing the amount of carbon emissions in the atmosphere. It involves transitioning away from fossil fuels and other sources of greenhouse gases towards cleaner and renewable energy sources.

An example of a company working on decarbonisation is Tesla, which produces electric vehicles and renewable energy products such as solar panels and battery storage systems. Tesla's mission is to accelerate the world's transition to sustainable energy, and the company has made significant strides in reducing carbon emissions through its electric vehicle and renewable energy technologies.

DIRECT AIR CAPTURE

Direct air capture (DAC) is a technology that uses specialized equipment to capture carbon dioxide (CO2) directly from the atmosphere. This technology is seen as a potential solution to reducing atmospheric CO2 levels, which have been rising due to human activities such as burning fossil fuels and deforestation.

DAC involves using large fans or blowers to draw in air from the atmosphere and then passing it through a series of filters and chemical processes. The CO2 is then captured and concentrated, and can be stored or used for various purposes.

One potential use for DAC-captured CO2 is in the production of fuels or other chemicals. The CO2 can be combined with hydrogen to produce a synthetic gas called synthesis gas, which can then be used to make a variety of products, including synthetic fuels.

Another potential use for DAC-captured CO2 is in enhanced oil recovery, where it is injected into oil fields to increase the amount of oil that can be extracted.

DAC technology is still in its early stages of development, and there are significant challenges to overcome, including the high cost of the technology and the need for large amounts of energy to power the capture process. However, as climate change continues to be a major concern, DAC could potentially play a significant role in reducing atmospheric CO2 levels and mitigating the effects of climate change.

DIRECT EMISSIONS

Direct emissions are the greenhouse gases (GHGs) that are directly released into the atmosphere by a business's activities or processes.

An example of a business's direct emissions would be the carbon dioxide (CO2) emissions from burning fossil fuels for electricity or transportation.

DOUBLE COUNTING

Double counting in carbon accounting occurs when the same amount of carbon emissions is counted multiple times in different accounting systems or reporting frameworks. This can happen when different organizations or entities use different methods to measure and report emissions, or when emissions are counted in more than one country or jurisdiction. Double counting can lead to over- or under-estimation of emissions and can create confusion and uncertainty in carbon accounting and emissions reduction efforts.

DOWNSTREAM EMISSIONS

Downstream emissions refer to the release of greenhouse gases and other pollutants from the use, disposal, or end-of-life disposal of a product or service. These emissions typically occur after the product or service has been sold and are not directly associated with the production process. Examples of downstream emissions include emissions from the combustion of fossil fuels in vehicles, the disposal of waste in landfills, and the use of appliances and electronics in households.

E

EU TAXONOMY

The EU Taxonomy is a classification system developed by the European Union to define and categorize economic activities that contribute to environmental sustainability. It is intended to help investors, companies, and other stakeholders identify and evaluate environmentally sustainable investments and activities, as well as to provide guidance on how to measure and report on their environmental impact. The taxonomy is based on six key environmental objectives, including climate change mitigation and adaptation, sustainable use of water and marine resources, protection and restoration of biodiversity and ecosystems, pollution prevention and control, transition to a circular economy, and sustainable use of natural resources.

EMISSIONS

Emissions refer to the release of gases, particulate matter, and other substances into the atmosphere. These substances can have negative effects on the environment and human health.

One example of a corporation having emissions is a power plant. The power plant may release carbon dioxide, sulfur dioxide, and nitrogen oxides into the air through its operations.

Scope 1 emissions are direct emissions from a company's own operations, such as the burning of fossil fuels at a power plant.

Scope 2 emissions are indirect emissions from the consumption of purchased electricity, heat, or steam. For example, a company may use electricity from a power plant that releases emissions.

Scope 3 emissions are indirect emissions from other sources in a company's value chain, such as the transportation of goods or waste disposal.

Scope 4 emissions are indirect emissions from a company's indirect value chain, such as the emissions from the production of raw materials used by the company.

EMISSION FACTOR

An emission factor is a numerical factor used to estimate the amount of a particular pollutant emitted from a specific source. It is typically expressed as the amount of a pollutant emitted per unit of activity, such as grams of a pollutant per unit of fuel burned or pounds of a pollutant per mile travelled. Emission factors are used in the calculation of emissions from a specific source, such as a power plant or vehicle, and can vary depending on the type of pollutant and the type of source.

EMISSIONS RIGHTS

Emissions rights refer to the allowances or permits granted to a company or individual to release a certain amount of greenhouse gases into the atmosphere. These rights are typically allocated by governments or regulatory bodies as part of a plan to reduce overall emissions and combat climate change.

For example, the European Union has a cap and trade system in place where companies are allocated a certain number of emissions rights based on their size and industry. If a company exceeds its allocated emissions rights, it must purchase additional allowances from other companies who have not used all of their allocated rights. This creates a market for emissions rights and provides an incentive for companies to reduce their emissions in order to save on costs.

ENERGY MIX

An energy mix is the combination of different sources of energy used to meet the energy needs of a specific region or country. This can include fossil fuels, such as coal and natural gas, renewable sources like wind and solar, and other sources like nuclear and hydroelectric power. The specific mix of energy sources depends on the availability and cost of each type of energy, as well as the goals and priorities of the region or country.

ESG REPORTING

ESG reporting refers to the practice of publicly disclosing environmental, social, and governance (ESG) information by a company. This information provides insight into a company's sustainability performance and allows investors and other stakeholders to assess the potential risks and opportunities associated with a company's operations. ESG reporting typically includes information on a company's carbon emissions, labor practices, human rights policies, and governance structures, among other topics.

F

FOSSIL FUELS

Fossil fuels are a type of energy source that are formed from the remains of plants and animals that lived millions of years ago. These fuels include coal, oil, and natural gas, and they are extracted from the ground and burned to produce electricity or heat. Fossil fuels are considered non-renewable, as their formation takes millions of years and they are being used up faster than they can be replenished. The burning of fossil fuels also releases greenhouse gases into the atmosphere, contributing to climate change.

FUGITIVE EMISSIONS

Fugitive emissions are unintentional or accidental releases of gases or vapors into the atmosphere from a variety of sources, such as industrial processes, leaks in pipelines or storage tanks, or evaporation from liquids. These emissions can contribute to air pollution and greenhouse gas emissions, and are regulated by various environmental laws and regulations.

GREENHOUSE GASES (GHG)

Greenhouse gases (GHG) are gases that trap heat in the Earth's atmosphere, leading to the greenhouse effect. The main greenhouse gases are water vapor, carbon dioxide (CO2), methane, and nitrous oxide. These gases occur naturally, but their levels in the atmosphere have been increasing due to human activities such as burning fossil fuels, deforestation, and agriculture.

In the context of carbon management, greenhouse gases are often referred to as "carbon" or "carbon emissions." Carbon management involves reducing, offsetting, or mitigating carbon emissions to limit their impact on the Earth's climate. This can include implementing energy efficiency measures, transitioning to renewable energy sources, and reducing deforestation and other land use changes that contribute to carbon emissions.

GREENHOUSE GAS (GHG) PROTOCOL

The Greenhouse Gas Protocol (GHG Protocol) is a global standardized framework for quantifying, managing, and reducing greenhouse gas emissions. Developed by the World Resources Institute and the World Business Council for Sustainable Development, the GHG Protocol provides guidance and tools for businesses, governments, and other organizations to measure, report, and manage their greenhouse gas emissions.

Recent updates to the GHG Protocol include the release of new standards for calculating the carbon footprint of financial products, as well as updates to the Corporate Accounting and Reporting Standard to improve the transparency and comparability of corporate emissions reporting. The GHG Protocol also recently launched a new program, the Net Zero Company Measurement Initiative, which aims to provide guidance for companies to measure and report on their progress towards achieving net zero emissions.

GLOBAL WARMING

Global warming is the gradual increase in the overall temperature of the Earth's atmosphere, particularly as a result of increased levels of greenhouse gases caused by human activities such as burning fossil fuels and deforestation. This phenomenon has been linked to a range of negative effects on the Earth's climate, including more frequent and intense heatwaves, droughts, and natural disasters, as well as the melting of polar ice caps and rising sea levels.

GLOBAL SURFACE TEMPERATURE

Global Surface Temperature is the average temperature of the Earth's surface, calculated by measuring temperatures at various locations around the globe. It is a key metric for understanding and predicting climate change, as changes in global surface temperature can impact weather patterns, sea levels, and other factors that affect the Earth's climate.

GLOBAL WARMING POTENTIAL (GWP)

Global Warming Potential (GWP) is a measure of the heat-trapping potential of different greenhouse gases. It is calculated by comparing the amount of heat absorbed by a given gas to the amount of heat absorbed by a reference gas, typically carbon dioxide, over a specific time period.

GWP is expressed in units of carbon dioxide equivalent (CO2e), which allows for the comparison of different gases in terms of their global warming potential.

For example, methane has a GWP of 28-36 over a 100-year time period, meaning that one ton of methane has the same heat-trapping potential as 28-36 tons of carbon dioxide over 100 years.

GWP is a critical metric for understanding and mitigating climate change, as it helps to identify the most significant greenhouse gases and inform policies and strategies to reduce emissions.

GREENWASHING

Greenwashing is the practice of making false or exaggerated claims about the environmental benefits of a product, service, or company in order to gain a competitive advantage or improve their public image. This often involves using vague or misleading language, such as "green" or "eco-friendly," without providing evidence to support the claims.

To avoid greenwashing, it is important to do your own research and look for third-party certifications or labels that verify a product's environmental claims. It is also important to look for companies that have transparent and comprehensive sustainability policies, rather than just focusing on a few "green" initiatives.

GRI

GRI is an abbreviation for the Global Reporting Initiative, an international organization that promotes sustainability and transparency in business practices through the development and use of standardized sustainability reporting guidelines. These guidelines provide a framework for companies to disclose information about their environmental, social, and economic performance, allowing stakeholders to make more informed decisions about their investments and partnerships.

HYDROGEN

Hydrogen is a chemical element with the atomic number 1 and the symbol H. It is the lightest and most abundant element in the universe, and is a gas at standard temperature and pressure. Hydrogen can be used as a fuel source in various ways, including in fuel cells to generate electricity. When hydrogen is burned, the only byproduct is water, making it a clean and efficient source of energy. This means that using hydrogen as a fuel source can help reduce emissions of greenhouse gases and other pollutants, as compared to using fossil fuels like coal and oil. Additionally, hydrogen can be produced through a process called electrolysis, which uses electricity to split water into hydrogen and oxygen. This means that hydrogen can be produced using renewable energy sources, such as solar and wind power, making it a potentially sustainable fuel option.

INDIRECT EMISSIONS

Indirect emissions are greenhouse gases that are emitted as a result of an indirect source, such as the production of goods or services. These emissions are not directly emitted by the individual or organization, but rather are a result of the activities and processes involved in the production of the goods or services.

Examples of indirect emissions include emissions from electricity generation to power a factory, emissions from the transportation of goods, or emissions from the disposal of waste products.

INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE (IPCC)

The Intergovernmental Panel on Climate Change (IPCC) is an international body of scientists and experts that provides scientific assessments of the state of the climate, its impacts, and potential future risks and responses. It was established by the United Nations in 1988 to provide policy-relevant information to governments on climate change and its impacts. The IPCC conducts periodic assessments of the latest scientific research on climate change and its impacts, and provides advice to policy makers on potential responses to address the issue. The IPCC does not conduct its own research, but rather synthesizes and assesses the latest scientific research from around the world.

KYOTO PROTOCOL

The Kyoto Protocol is an international agreement signed in 1997 by participating countries of the United Nations Framework Convention on Climate Change (UNFCCC) to reduce greenhouse gas emissions and combat global warming. The protocol sets binding targets for participating countries to reduce their emissions of six greenhouse gases: carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. The goal of the protocol is to reduce overall emissions by 5.2% below 1990 levels by the year 2012. The protocol has been ratified by 189 countries and is considered a key component of the international efforts to address climate change.

LEAKAGE

Leakage in carbon accounting refers to the phenomenon where emissions reductions in one location or sector are offset by increased emissions in another location or sector.

For example, if a company reduces its carbon emissions by switching to renewable energy sources, but this leads to increased emissions from the production of the renewable energy in another location, the overall net impact on carbon emissions may be minimal or even negative.

A real-life example of leakage in carbon accounting is when a company in the developed world reduces its own emissions by outsourcing production to a developing country with lax environmental regulations. This may result in a reduction in emissions at the company's own facilities, but an increase in emissions at the outsourced production facilities. In this scenario, the overall net impact on global emissions may be minimal or even negative.

LIFE CYCLE ASSESSMENT (LCA)

Life cycle assessment (LCA) is a method used to assess the environmental impact of a product or service throughout its entire lifecycle, from raw material extraction to disposal or recycling. It considers all the inputs and outputs, including energy, water, and materials, as well as any emissions or waste produced. The goal of LCA is to identify and evaluate potential environmental impacts and identify opportunities for improvement.

LOW CARBON LABEL

A low carbon label is a certification or mark that indicates a product or service has been produced in a way that minimizes its carbon footprint and contributes to reducing greenhouse gas emissions. This may include using renewable energy sources, reducing energy consumption, or incorporating sustainable materials and practices. Low-carbon labels are often used to promote environmentally-friendly products and services and can help consumers make more informed purchasing decisions.

An example of a low-carbon label is the Energy Star label, which is a certification program run by the United States Environmental Protection Agency (EPA). Products with the Energy Star label are required to meet strict energy efficiency standards and are typically 30% more energy efficient than standard products. By purchasing products with the Energy Star label, consumers can reduce their own carbon footprint and help support the transition to a low-carbon economy.

M

MITIGATION

Mitigation in the context of carbon management refers to actions or strategies that are taken to reduce or prevent the release of carbon dioxide (CO2) and other greenhouse gases into the atmosphere. These actions can help to slow or halt the process of climate change, which is largely driven by the increase in atmospheric levels of greenhouse gases.

An example of carbon mitigation might be the adoption of renewable energy sources, such as wind or solar power, which do not produce greenhouse gases when generating electricity. This can help to reduce the amount of CO2 and other gases that are released into the atmosphere from the burning of fossil fuels, such as coal or natural gas. Other examples of carbon mitigation might include the implementation of energy-efficient technologies, such as LED lightbulbs, or the adoption of sustainable land use practices, such as reforestation or the preservation of natural carbon sinks.

METHANE (CH4)

Methane (CH4) is a colorless, odorless gas that is the simplest member of the alkane family of hydrocarbons. It is commonly found in natural gas deposits and is a major component of biogas produced from the breakdown of organic matter. Methane is also a potent greenhouse gas, with a global warming potential much higher than carbon dioxide. It is commonly used as a fuel for heating and cooking, as well as in the production of other chemicals such as methanol and hydrogen.

NON-FINANCIAL REPORTING DIRECTIVE (NFRD)

The Non-Financial Reporting Directive (NFRD) is a European Union directive that requires large public-interest entities to disclose information on the environmental, social and governance (ESG) aspects of their operations. The directive applies to companies with more than 500 employees that are listed on a regulated market and banks, insurance companies and asset managers with more than 500 employees and assets of over €20 billion. The NFRD aims to increase transparency and accountability, and to provide investors with a better understanding of the risks and opportunities associated with ESG issues.

NATURE-BASED SOLUTIONS

Nature-based solutions are strategies that use natural systems, such as forests, wetlands, and coastal ecosystems, to address environmental challenges, such as climate change, natural disasters, and habitat loss.

An example of a nature-based solution in the context of carbon management is reforestation. This involves planting trees in areas where forests have been cleared or degraded, which helps to remove carbon dioxide from the atmosphere and store it in the trees. This not only helps to combat climate change, but it can also provide other benefits, such as improved air and water quality, habitat for wildlife, and recreational opportunities for people.

NET ZERO JOURNEY

Net zero journey in carbon accounting refers to the process of reducing and offsetting carbon emissions in order to reach a state of net zero carbon emissions. This means that any remaining emissions are offset through the use of carbon sinks or other means, resulting in a balance between emissions and removal of carbon from the atmosphere. This journey typically involves setting emissions reduction targets, implementing strategies to achieve those targets, and regularly monitoring and reporting on progress.

NET-ZERO

Net zero in the context of carbon accounting means that the total amount of greenhouse gases emitted is equal to the amount removed from the atmosphere. This can be achieved through a combination of reducing emissions and offsetting remaining emissions through activities that remove carbon dioxide from the atmosphere, such as reforestation or carbon capture and storage.

One example of a company achieving net zero emissions is the electric utility company, EDF. They have committed to reducing their greenhouse gas emissions to zero by 2050 and plan to achieve this through a combination of transitioning to renewable energy sources, implementing energy efficiency measures, and purchasing carbon offsets. This is an ambitious goal that will require significant effort, but it shows that it is possible for companies to take action to reduce their carbon footprint and combat climate change.

NITROUS OXIDE (N2O)

Nitrous oxide (N2O) is a chemical compound made up of two nitrogen atoms and one oxygen atom. It is commonly known as laughing gas or nitrous and is used as a recreational drug, as an anaesthetic in dentistry and medicine, and as a propellant in aerosol cans. Nitrous oxide is a colorless, sweet-tasting gas that is non-flammable and non-toxic. When inhaled, it produces a feeling of euphoria and can cause hallucinations.

OZONE (O3)

Ozone (O3) is a gas that is present in the Earth's stratosphere. It is formed from the reaction of ultraviolet light with oxygen molecules (O2), and is a potent absorber of ultraviolet radiation. Ozone plays a critical role in protecting the Earth's surface from the harmful effects of UV radiation, such as skin cancer and cataracts. It also acts as a greenhouse gas, helping to regulate the Earth's temperature. However, the depletion of the ozone layer due to human activities, such as the release of chlorofluorocarbons (CFCs), has been a major concern in recent years.

OFFSETTING

Offsetting is a way of compensating for greenhouse gas emissions by funding projects that reduce or remove emissions elsewhere.

For example, if a company emits a certain amount of carbon dioxide from its operations, it can offset this by investing in a renewable energy project that reduces emissions elsewhere.

There are different types of offsetting projects, such as reforestation, carbon capture and storage, and renewable energy generation. Some offsetting projects are designed to reduce emissions from the same sector that is responsible for the original emissions, while others focus on removing emissions from the atmosphere.

The main downside to offsetting emissions is that it fails to actually reduce the amount of greenhouse gases in our atmosphere. In contrast, removing emissions directly can have a much greater impact on curbing climate change and promoting sustainability. While offsetting can help to mitigate the impact of emissions, it does not address the root cause of climate change and does not prevent further emissions from being released.

Greenwashing is often a concern in the realm of offsetting. It can occur when a company claims to be offsetting its emissions without actually investing in genuine offsetting projects or when it exaggerates the environmental benefits of its offsetting efforts.

To avoid greenwashing in the offsetting industry, it is important for companies to be transparent and accountable about their offsetting activities. This can be achieved through third-party verification of offsetting projects and regular reporting on the progress and impact of offsetting efforts.

P

PARIS CLIMATE AGREEMENT

The Paris Climate Agreement is a legally binding international treaty that was adopted in 2015 by the United Nations Framework Convention on Climate Change (UNFCCC). It aims to address the issue of climate change and its negative impacts on the planet by reducing greenhouse gas emissions and limiting global warming to well below 2 degrees Celsius above pre-industrial levels. The agreement also sets goals for countries to adapt to the impacts of climate change and to provide financial support to developing countries to help them transition to renewable energy sources and reduce their emissions.

PARIS-ALIGNED

Paris-aligned refers to actions and policies that are in alignment with the goals and targets of the Paris Climate Agreement. This may involve reducing greenhouse gas emissions, increasing the use of renewable energy sources, and implementing strategies to adapt to the impacts of climate change. Paris-aligned efforts are aimed at helping countries meet their commitments under the agreement and achieving the global goal of limiting global warming to well below 2 degrees Celsius above pre-industrial levels.

PERMANENCE

Permanence refers to the long-term stability or durability of something. In the context of climate change, permanence refers to the ability of carbon sequestration or greenhouse gas mitigation efforts to have a lasting impact on reducing emissions and mitigating the effects of climate change. This may involve the use of strategies such as reforestation, carbon capture and storage, or renewable energy sources that have the potential to permanently remove or reduce emissions.

R

REGULATORY CARBON MARKET

A regulatory carbon market is a system in which the government sets a limit on the amount of greenhouse gases that can be emitted within a certain area or sector, and then issues permits or allowances to emitters that allow them to release a certain amount of gases. The number of permits or allowances is equal to the overall emissions limit, and they can be bought and sold on a carbon market. This type of market is designed to provide a financial incentive for companies to reduce their emissions and to help meet climate change mitigation targets. Regulatory carbon markets are often implemented as part of a broader regulatory framework, such as a cap-and-trade system or a carbon tax.

REDD+

REDD+ is a voluntary program that aims to reduce greenhouse gas emissions from deforestation and forest degradation. The program, which stands for Reducing Emissions from Deforestation and Forest Degradation, was established under the United Nations Framework Convention on Climate Change (UNFCCC) as a means of incentivizing forest conservation and sustainable management. The "+" in the acronym refers to the additional activities that can be included in the program, such as forest conservation, sustainable management of forests, and enhancement of forest carbon stocks. The program allows for the creation of carbon credits, which can be bought and sold on the international carbon market, providing a financial incentive for reducing emissions from deforestation and forest degradation.

REFORESTATION

Reforestation is the process of planting trees in areas where forests have been removed or degraded. This can help to reduce carbon emissions by increasing the amount of carbon sequestered in vegetation and soil, and by providing an alternative to fossil fuels for energy production. In the context of carbon accounting, reforestation can be used as a carbon offsetting strategy, with the amount of carbon sequestered by the trees being counted towards an organization's emissions reduction targets.

SDGS

The SDGs, or Sustainable Development Goals, are a set of 17 global goals adopted by the United Nations in 2015 to address the world's most pressing challenges and improve the lives of people everywhere. The goals cover a range of issues, including poverty, inequality, climate change, and peace and justice, and aim to create a more sustainable, equitable, and inclusive world for all. The SDGs are intended to be universal, meaning they apply to all countries, regardless of their level of development. They are also integrated, meaning they are interconnected and require action on multiple fronts in order to be achieved.

SME CLIMATE COMMITMENT

SME Climate Commitment is a voluntary commitment made by small and medium-sized enterprises (SMEs) to reduce their greenhouse gas emissions and take action to address climate change. SMEs that make the commitment agree to measure and report on their emissions, set emissions reduction targets, and implement strategies to achieve those targets. The goal of the SME Climate Commitment is to support and encourage SMEs to take action on climate change and contribute to the global effort to reduce greenhouse gas emissions.

SCIENCE-BASED TARGETS INITIATIVE

The Science-Based Targets Initiative (SBTi) is a partnership between several organizations, including the World Wildlife Fund (WWF), the United Nations Global Compact (UNGC), and the Carbon Disclosure Project (CDP), that aims to encourage businesses to set and achieve science-based targets for reducing greenhouse gas emissions. The SBTi provides companies with a framework for setting targets that are aligned with the latest scientific evidence on climate change and the goals of the Paris Agreement.

The SBTi is relevant to carbon management for corporations because it provides a clear, science-based approach for companies to set emissions reduction targets that are in line with the global effort to limit global warming to well below 2 degrees Celsius. By setting and achieving such targets, companies can demonstrate their commitment to addressing climate change and can help to drive the transition to a low-carbon economy.

Additionally, by setting science-based targets, companies can reduce their risk of being impacted by future climate regulations and can better manage their carbon footprint to reduce costs and improve their overall sustainability performance.

SCOPE 1 EMISSIONS

Scope 1 emissions refer to direct emissions from sources that are owned or controlled by a company. A unique example of Scope 1 emissions could be the carbon dioxide emissions from the on-site combustion of fossil fuels in a manufacturing facility. This would include emissions from boilers, furnaces, and other equipment used to generate heat or power for the facility's operations.

SCOPE 2 EMISSIONS

Scope 2 emissions refer to indirect greenhouse gas emissions that are a result of the consumption of purchased electricity, steam, heating, and cooling. **An example** of a Scope 2 emission would be a factory using purchased electricity to power its operations, resulting in carbon dioxide emissions from the electricity generation source.

SCOPE 3 EMISSIONS

Scope 3 emissions are indirect emissions that are not directly caused by an organization or individual, but are associated with the activities of the organization or individual. These emissions can include supply chain emissions, waste disposal emissions, and emissions from the use of a company's products by customers.

A unique **example** of Scope 3 emissions could be the emissions associated with the transportation of raw materials to a manufacturing facility. These emissions would not be directly caused by the manufacturing facility, but are indirectly related to the activities of the organization.

SCOPE 4 EMISSIONS

Scope 4 avoided emissions refer to emissions that are avoided through the design and production of a product, or by working with more sustainable suppliers. An **example** of this would be a company that designs a product to be made with materials that have a lower carbon footprint, such as using recycled plastics instead of virgin plastics. Another **example** would be a company that works with suppliers who have implemented sustainable practices, such as renewable energy usage or reducing waste, to reduce their own emissions and the emissions associated with the production of the product.

SPEND-BASED DATA

Spend-based data in carbon accounting refers to the method of calculating an organization's carbon footprint by analyzing the amount of money that the organization spends on activities that produce greenhouse gas emissions. This method involves tracking the organization's expenditures on items such as fuel, electricity, and transportation, and then using emission factors to calculate the corresponding amount of greenhouse gas emissions. This approach can provide a more detailed and accurate picture of an organization's carbon footprint compared to other methods, such as inventory-based data, which only takes into account the direct emissions produced by the organization.

SPOT/FORWARD AGREEMENT

A Spot/Forward Agreement in carbon management is a contract between two parties in which one party agrees to buy or sell a specific amount of carbon credits or allowances at a predetermined price on a specific future date. The agreement allows the parties to manage their carbon emissions and costs by locking in a price for future carbon transactions, reducing the uncertainty and potential risks associated with fluctuating carbon prices. This type of agreement is commonly used in the carbon markets to manage emissions and compliance with carbon reduction targets.

STREAMLINED ENERGY & CARBON REPORTING (SECR)

Streamlined Energy & Carbon Reporting (SECR) is a mandatory reporting framework introduced in the United Kingdom in April 2019. It requires certain large businesses and public sector organizations to disclose their greenhouse gas emissions and energy usage in their annual reports. The aim of SECR is to increase transparency and accountability in organizations' energy and carbon management practices, encouraging them to reduce their emissions and improve energy efficiency.

SUPPLY CHAIN EMISSIONS

Supply chain emissions refer to the greenhouse gas emissions associated with the production, transportation, and disposal of goods and materials within a company's supply chain. This can include emissions from the extraction of raw materials, the manufacturing of products, their transportation to consumers, and the disposal of waste products. Supply chain emissions are a significant contributor to overall carbon emissions, and companies are increasingly focused on reducing these emissions to meet sustainability goals and combat climate change.

SUSTAINABILITY REPORTING

Sustainability reporting is the practice of disclosing information about a company or organization's environmental, social, and governance (ESG) performance and impact. This type of reporting helps stakeholders understand the organization's sustainability efforts and progress towards achieving long-term sustainability goals. Sustainability reports may include data on the organization's carbon emissions, waste reduction efforts, employee diversity and inclusion initiatives, and other key ESG metrics. These reports help organizations demonstrate their commitment to sustainable practices and transparency, and can serve as a tool for continuous improvement and accountability.

SUSTAINABLE FINANCE DISCLOSURE (SFDR)

Sustainable Finance Disclosure (SFDR) is a set of regulations introduced by the European Union in March 2021. The SFDR aims to increase transparency and improve the quality of sustainability-related information provided by financial market participants, such as banks, insurance companies, and asset managers.

The SFDR requires financial market participants to disclose information about their sustainability-related policies and practices, as well as the sustainability-related risks and opportunities associated with their products and services. This information must be included in their annual financial reports and other public communications, and must be presented in a manner that is easily understandable to investors and other stakeholders.

The SFDR is intended to help promote sustainable finance and support the transition to a more sustainable economy.

TCFD

TCFD is the abbreviation for the Task Force on Climate-related Financial Disclosures. It is a voluntary set of guidelines for organizations to disclose information about the potential financial impacts of climate change on their operations and investments. The TCFD was established by the Financial Stability Board (FSB) in 2015.

Since its inception, the TCFD has continued to evolve and expand. In 2019, the TCFD released updated recommendations for organizations to improve their climate-related financial disclosures. The recommendations included providing information on an organization's governance structure, strategies, and metrics for managing climate-related risks and opportunities.

In 2020, the TCFD released a report on the state of climate-related financial disclosures, highlighting the progress that has been made since the release of its initial recommendations. The report found that over 1,100 organizations have publicly supported the TCFD recommendations, and that more than 50% of the world's largest companies have provided some level of climate-related financial disclosure.

The TCFD has also continued to engage with a wide range of stakeholders, including investors, regulators, and companies, to promote the adoption of its recommendations. In addition, the TCFD has worked with other international organizations, such as the G20 and the United Nations, to support the integration of climate-related financial disclosures into global financial systems.

TIPPING POINT

The tipping point in climate change is the point at which the Earth's climate system reaches a critical threshold and begins to rapidly change in a way that is irreversible or difficult to reverse. This can be caused by a variety of factors, such as the melting of glaciers and ice caps, the release of large amounts of carbon dioxide and other greenhouse gases into the atmosphere, and the loss of natural habitats. Once the tipping point is reached, the Earth's climate may become much more unstable, leading to extreme weather events, sea level rise, and other impacts on human and natural systems.

TREE PLANTING

Tree planting in the context of carbon management refers to the practice of planting trees specifically for the purpose of capturing and storing carbon from the atmosphere. This is done as a means of mitigating climate change and reducing the amount of greenhouse gases in the atmosphere. Trees absorb carbon dioxide through photosynthesis and store it in their wood and leaves, thus removing it from the atmosphere and reducing the overall level of carbon dioxide. Tree planting can be done on a large scale, such as through reforestation efforts, or on a smaller scale, such as through individual or community tree planting projects.

TWO-DEGREE LIMIT / TWO-DEGREE TARGET

The two-degree limit or two-degree target is a global warming threshold that aims to limit the average global temperature increase to 2 degrees Celsius above pre-industrial levels. This limit was established by the United Nations Framework Convention on Climate Change (UNFCCC) and is considered a crucial target to avoid the most severe impacts of climate change. The two-degree target is based on scientific evidence that suggests that an increase of 2 degrees or more would have catastrophic consequences for the planet and its inhabitants.

UN FRAMEWORK CONVENTION ON CLIMATE CHANGE (UNFCCC)

The United Nations Framework Convention on Climate Change (UNFCCC) is an international treaty signed in 1992 that aims to address the issue of global climate change. The UNFCCC is the primary framework for international cooperation on climate change, and provides a platform for countries to negotiate and implement policies to reduce greenhouse gas emissions and adapt to the impacts of climate change. The UNFCCC also hosts the annual Conference of the Parties (COP) meetings, where countries come together to discuss and make decisions on climate action. The UNFCCC has been ratified by 196 countries, making it one of the most widely-supported international agreements in history.

UPSTREAM EMISSIONS

Upstream emissions are emissions that are generated at the source of a product or service, prior to its consumption. For example, the emissions generated during the extraction and processing of raw materials for a car, such as oil and steel, would be considered upstream emissions.

VALUE CHAIN EMISSIONS

Value chain emissions refer to the greenhouse gas emissions that are generated throughout the various stages of a product's life cycle, from raw material extraction and production to distribution, use, and disposal. An example of value chain emissions would be the carbon dioxide released during the transportation of goods from a factory to a retail store, or the methane emitted during the disposal of a product in a landfill.

VOLUNTARY EMISSION REDUCTIONS (VER)

Voluntary Emission Reductions (VER) are reductions in greenhouse gas emissions that are not mandated by government regulations or international agreements, but rather are voluntarily undertaken by individuals, businesses, or organizations. These reductions can be achieved through a variety of means, such as investing in renewable energy sources, implementing energy efficiency measures, or switching to low-carbon fuels. VERs are often seen as a way for individuals and organizations to take action on climate change and reduce their carbon footprint, and can be a valuable addition to government and international efforts to reduce global emissions.

Some recent examples include:

1. Google, which has pledged to use 100% renewable energy for its operations, and has purchased large amounts of renewable energy credits to offset its emissions.
2. Microsoft, which has committed to becoming carbon negative by 2030, and is using a combination of internal emissions reductions, carbon capture technologies, and VERs to achieve this goal.
3. Walmart, which has set a goal of being powered entirely by renewable energy by 2035, and is investing in a range of renewable energy projects and purchasing VERs to help achieve this goal.
4. Toyota, which has committed to reducing its greenhouse gas emissions by 90% by 2050, and is using a variety of measures, including VERs, to achieve this goal.
5. General Motors, which has pledged to become carbon neutral by 2040, and is using VERs as part of its strategy to achieve this goal.

VOLUNTARY CARBON MARKET

A voluntary carbon market is a market in which individuals or organizations voluntarily choose to purchase carbon credits in order to offset their carbon emissions. These credits represent a specific amount of carbon that has been reduced or avoided through a carbon reduction project, such as renewable energy or reforestation. The voluntary carbon market operates separately from the mandatory carbon market, which is regulated by governments and requires companies to meet certain emissions reduction targets.

VOLUNTARY COMMITMENTS

Voluntary commitments are agreements or pledges made by individuals or organizations to take certain actions or achieve certain goals without the requirement of external pressure or coercion. These commitments are often made in the interest of contributing to social or environmental causes and can range from reducing greenhouse gas emissions to increasing charitable donations. Voluntary commitments are often made publicly and are intended to demonstrate an organization's commitment to addressing important issues and improving their operations.

Here are some of examples:

1. Amazon recently announced a commitment to reach net-zero carbon emissions by 2040, 10 years ahead of the Paris Agreement goal.
2. Nestle pledged to make 100% of its packaging recyclable or reusable by 2025.
3. Google committed to achieving 100% renewable energy for its global operations by 2030.
4. Apple announced a commitment to become carbon neutral by 2030, including its supply chain and products.
5. Walmart pledged to reduce greenhouse gas emissions from its global operations by 1 billion metric tons by 2030.

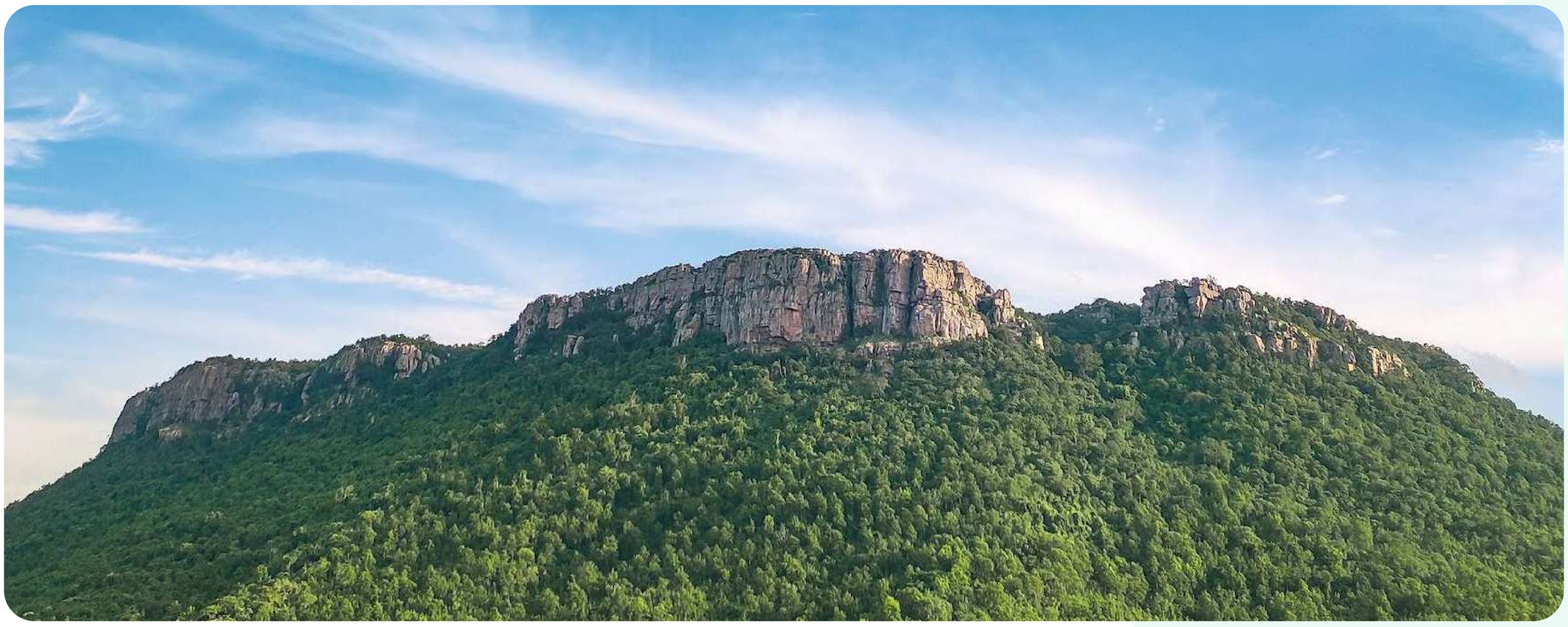
W

WEATHER

Weather refers to the state of the atmosphere at a particular place and time, with respect to variables such as temperature, humidity, atmospheric pressure, wind, precipitation, and cloudiness. Weather can vary greatly over short periods of time and from one location to another, and it is a major factor in the daily lives of people and animals. Some common weather phenomena include thunderstorms, hurricanes, blizzards, and tornadoes.

ZERO CARBON

Zero carbon refers to the absence of carbon emissions or the neutralization of carbon emissions through carbon offsetting. This term is often used in discussions about reducing greenhouse gas emissions and achieving climate neutrality. Zero carbon can be achieved through a variety of strategies, including transitioning to renewable energy sources, improving energy efficiency, and implementing carbon capture and storage technologies.



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