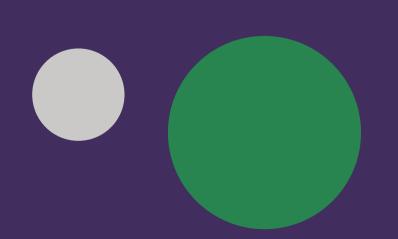
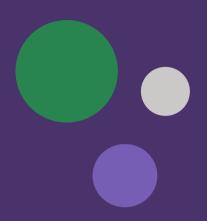


# Carbon Glossary







# Introduction

Our Sustainability Team has developed this Carbon Glossary to provide a clearer understanding of key environmental sustainability terms. The glossary offers an overview of commonly used terminology and concepts related to both corporate and environmental sustainability. While CO2 emissions and the climate crisis are central to many sustainability discussions, these issues are deeply connected to broader challenges. Therefore, we have also included terms that address social, political, ecological, and economic sustainability.

If you have any questions about this glossary or would like further information, please contact our Sustainability Manager, <u>Maggie Stewart</u>. To learn more about how our lawyers can help your business meet its ESG objectives, reach out to a member of our <u>ESG team</u>.



BURNESS PAULL

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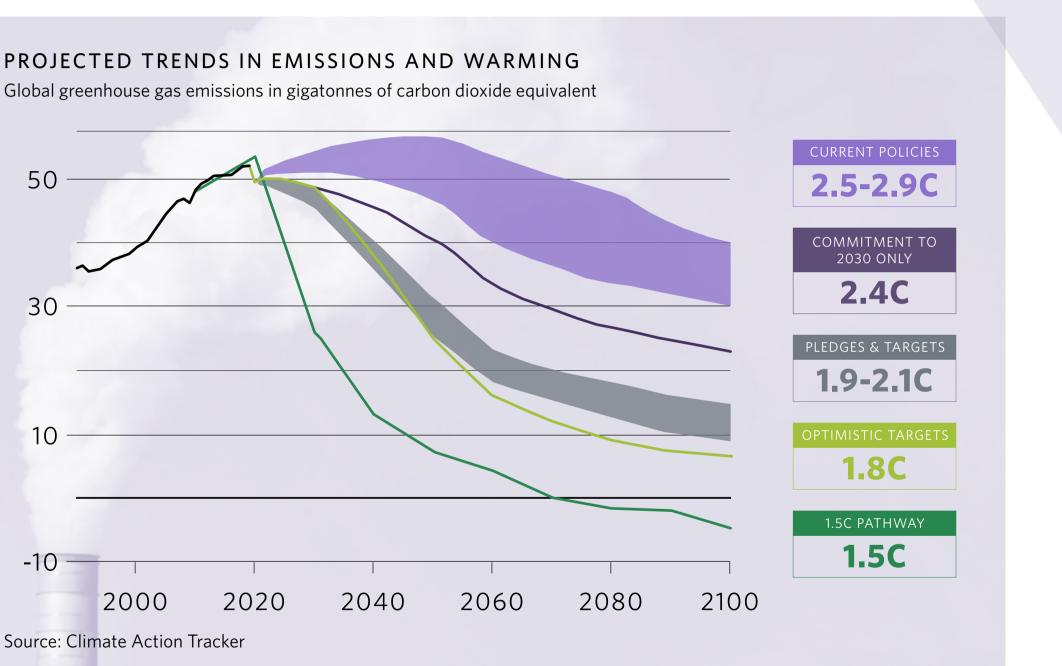


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## \1.5°C

The **Paris Agreement** commits countries to limit global warming to well-below 2°C above preindustrial levels, ideally following a more ambitious trajectory of 1.5°C. Any greater level of warming than 1.5°C could lead to vastly more destructive climate changes. Scientists have calculated that in order to follow a 1.5°C trajectory, the world must cut its emissions in half by 2030 and reach **net zero** by 2050.

Burness Paull has set carbon reduction and net zero goals in line with the Paris Agreement's recommended 1.5°C trajectory. We aim to reduce our **Scope 1 and 2** emissions by 50% and our **Scope 3** emissions by 42% by 2030, and to reach **net zero** emissions by 2050.



#### \Accuracy gap

The accuracy gap is the difference between the emissions a company calculates and those for which it is accountable. The accuracy gap can be traced back to the methodologies and data used in emissions estimates. Comprehensive and sciencebacked **carbon accounting** helps businesses overcome the accuracy gap.

#### **\Avoided emissions**

'Avoided emissions' are defined as the reductions in **greenhouse gas** emissions that occur outside of a product's life cycle or **value chain** but as a direct result of using that product/service.

For example, renewable energy, low-temperature detergents, fuel-saving tires, or teleconferencing equipment and services. These products, with their efficiency or functionality, help in reducing overall **GHG** emissions.

#### \Activity data

Activity data specifies how many units of a particular product or material that a company has purchased.

For example, it could be litres of fuel, kilograms of textile, etc. In carbon accounting, activity data generally allows for more accurate emissions estimates than **spend-based data**.

**Table 1:** Sample GHG emissions data. This table represents how a carbon footprint can be calculated using a mix of activity and spendbased data.

#### **GREENHOUSE GAS ACCOUNTING - SAMPLE SHEET**

Scope	Product/service	Activity/spend based data	Unit	Emission Factor	kgCO <sub>2</sub> e
2	Electricity	500,000	kWh	0.207074 kWh to kgCO <sub>2</sub> e	103,537
2	Natural Gas (heating)	500,000	kWh	0.18256 kWh to kgCO <sub>2</sub> e	91,280
3	Taxi Journeys	200	km	2.6784   to kgCO <sub>2</sub> e	21
3	Short-haul flight (EU)	10,000	km	0.2088 km to kgCO <sub>2</sub> e	2,088
3	Household residual waste combustion	3,000	kg	0.0213kg to kgCO <sub>2</sub> e	64
3	Paper & Packaging	5,000	GBP	0.3685 EUR to kgCO <sub>2</sub> e	1,399
3	Legal & Accounting Services	1,000,000	GBP	0.067 EUR to kgCO <sub>2</sub> e	50,860
				TOTAL	259,320

#### **Base year**

To set emission reduction targets and embark on the **net zero** journey, one must first specify a base year. The yearly reduction targets are set by the percentage of the total emissions in the base year.

## **Biodiversity loss**

Biodiversity is declining faster than it has at any other time in human history. The current rate of extinction is tens to hundreds of times higher than the average over the past 10 million years, and it is still accelerating. Since 1970, there has been a 69% decline in global wildlife populations.

The five biggest drivers of biodiversity loss are: changes in land use, over-exploitation of plants and animals, pollution, invasive species and climate change.



## \ Cap and trade

Cap and trade is a market-based approach to lowering greenhouse gas emissions. A central authority allocates a limited number of permits that allow the holder to emit a particular amount of greenhouse gases over a specific period. Companies that surpass the cap are taxed, while companies that cut their emissions may sell or trade unused credits. Companies that want to emit more than their allocated share must purchase additional permits from other companies willing to sell them.

The effectiveness of cap and trade systems are highly debated. While some argue it will incentivise companies to invest in clean technologies, others argue that carbon credits and penalties are still cheaper than converting to fossil-free technologies - and therefore do not incentivise real change. There are several other drawbacks and benefits

#### **\ Carbon accounting**

Carbon accounting, or GHG accounting, is the process of measuring how much carbon dioxide equivalents (CO2e) an organisation (company, state. etc.) emits.

## **Carbon dioxide equivalent (CO\_e)**

A CO<sub>2</sub> equivalent (CO<sub>2</sub>e) is a unit of measurement that is used to standardise the climate effects of various greenhouse gases. In addition to CO<sub>2</sub> there are other greenhouse gases such as methane or nitrous oxide. The various gases do not contribute to the greenhouse effect to the same extent and remain in the atmosphere for different periods of time.

### \ Carbon footprint

All of the greenhouse gas emissions (both **direct** and indirect) associated with a specific product, activity, or entity. For example, a product, an event, an individual or a company.

A carbon footprint is a component of an "ecological footprint" and is expressed in tonnes of CO<sub>2</sub> emitted. An ecological (or environmental **footprint**) measures more than just carbon and includes the total renewable and non-renewable resources consumed by a product, person or organisation.

## \ Carbon negative

A business is carbon negative (or **climate positive**) if the net result of its activities is a decrease the amount of carbon in the atmosphere, i.e., a company removes more carbon from the atmosphere than it emits. This is going a step further than **net zero**.

Not many companies are yet carbon negative, but businesses such as IKEA and Microsoft have announced plans to become carbon negative by 2030, by significantly reducing emissions alongside investing in renewable energy.

#### $\ \ Carbon \ dioxide \ (CO_{2})$

Carbon dioxide is a colourless gas that occurs naturally in the atmosphere. It is also created in many industrial processes. Carbon dioxide is a greenhouse gas and therefore contributes to global warming.

#### **Carbon neutral**

A business is carbon neutral when its core business activities do not contribute any additional GHG emissions, on balance. This means that a company can become carbon neutral without doing anything about its **scope 3 emissions**, even though this is where the majority of emissions are located for most companies. To meet the goals of the Paris **Agreement**, companies must go beyond carbon neutrality and reach net zero emissions.

#### **Carbon reduction**

Carbon reduction is the process of reducing the amount of **GHG** emissions a company produces. For example, this can be done by switching to more climate-friendly suppliers or to clean energy providers. Carbon reduction is a crucial step in the journey to **net zero**.

#### \ Carbon removal

Carbon removal is a particular kind of carbon offsetting where carbon is taken from the atmosphere and stored where it won't contribute to climate change. Various methods are used to do so and they can be both technological and naturebased.

The importance of carbon removal is increasing as it ensures active removal of carbon from the atmosphere, for example by planting trees or restoring seaweed which directly absorbs **CO**<sub>2</sub>. Carbon offsetting in general can include projects that, on the other hand, simply avoid emissions – such as investing in renewable energy.

## CARBON REDUCTION



Removal

Removes carbon from the atmosphere e.g. forestry or direct air capture



Reduction

Changes that reduce emission levels e.g. switching to renewable energy

## Avoidance



Avoided nature loss e.g. protecting from deforestation

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#### **Carbon sequestration**

Carbon sequestration (or **carbon removal**) is the capturing, removal and permanent storage of **CO**<sub>2</sub> from the earth's atmosphere. Sequestration methods can be both artificial and natural.

For example, carbon can be sequestered artificially through **CO**<sub>2</sub> **mineralisation** or naturally using **nature-based solutions** such as tree planting and peatland restoration. No major artificial systems remove carbon from the atmosphere on a large scale yet.

#### \ Carbon sink

Once carbon has been removed from the atmosphere (see carbon removal), it needs to be stored somewhere. This storage is called a carbon sink.

Carbon sinks can be both artificial and natural – for example geologic carbon sequestration that store carbon deep underground or nature-based solutions such as peatland restoration which store carbon in the soil. No major artificial systems remove carbon from the atmosphere on a large scale yet.

#### \ Carbon target

A carbon target is a commitment to reduce a company's **greenhouse gas** emissions by a specified amount before a given year. Burness Paull has set **carbon reduction** targets in line with the **Paris Agreement**'s commitment to limit global warming to under **1.5 degrees Celsius**. We are committed to achieving **net zero** by 2050, reducing absolute **scope 1 and 2** greenhouse gas emissions by 50% by 2030, and reducing absolute **scope 3 emissions** by 42% by 2030, all from a 2021 baseline. In 2023, we have already achieved a 47% reduction in Scope 1 and 2 emissions.

#### \ Carbon tax

A carbon tax is a tax on the carbon emissions required to produce goods and services. A carbon tax reduces emissions overall, both by decreasing demand for high emission goods and services and by incentivising efforts to make them less emission-intensive.

A carbon tax is different to **cap and trade** as it directly establishes a price on greenhouse gas emissions—so all companies are charged a dollar amount for every ton of emissions they produce—whereas a cap and trade program issues a set number of emissions "allowances" each year.

In April 2024, the Scottish Government announced a new package of climate action measures – including plans to consult on a new carbon tax on large estates to incentivise peatland restoration, tree planting and renewable energy generation.

#### \ CDP

CDP, Carbon Disclosure Project, is a framework for companies, cities, and states to report their environmental impact.

#### \ Climate adaptation

Climate adaptation means taking action to prepare for and adjust to the current and projected impacts of climate change. With climate change bringing more frequent and intense extreme weather events such as heatwaves, droughts and floods, individuals and communities can reduce their vulnerability and increase their resilience by adapting now.

Often, climate adaptation projects will revolve around future-proofing infrastructures against the impacts of extreme weather or ensuring food security in a warming climate.

#### **Climate** justice

Climate justice recognises the climate crisis as a social and political problem, as well as an environmental one. It acknowledges that different communities feel the effects of the climate crisis differently, and that the responsibility for the crisis rests with some countries and companies more than others. Climate justice understands that the lives of those already facing injustice and oppression - marginalised, disadvantaged or otherwise vulnerable communities - are made harder by the impacts of the climate crisis.

For example, it is communities in the Global South that bear the brunt of the consequences of climate change, whether physical - floods, desertification, increased water scarcity and tornadoes - or political: conflict and racist borders (Friends of the Farth).

#### **Climate mitigation**

Efforts to reduce emissions and enhance **carbon sinks** are referred to as "mitigation". Whereas climate adaptation efforts are focussed on adapting to existing and future impacts of climate change, mitigation efforts address its root causes by decreasing the amount of emissions released into the atmosphere and reducing the current concentration of atmospheric **carbon dioxide (CO\_)** by enhancing carbon sinks.

### \ CO, mineralisation

CO<sub>2</sub> mineralisation is a method of **carbon removal** in which atmospheric CO<sub>2</sub> is transformed into a solid mineral. It happens naturally when certain rocks are exposed to  $CO_{2}$ , but there are technologies that can speed up the process. Once CO<sub>2</sub> has been mineralised, it has essentially been permanently removed from the atmosphere.

#### \ COP

COP (Conference of the Parties) is a yearly UN climate change conference. Leaders from almost every country on Earth gather to review progress made in cutting emissions and ensure that climate targets are met.

#### **\ Corporate sustainability**

Corporate sustainability is the business strategy of providing goods and services in a way that is environmentally sustainable while also conducive to economic growth.

#### \ Climate positive

A business is climate positive (or **carbon negative**) if the net result of its activities is a decrease in the amount of carbon in the atmosphere. This is going a step further than **net zero**.

Not many companies are yet climate positive/ carbon negative, but businesses such as IKEA and Microsoft have announced plans to become carbon negative by 2030.

#### \ CSDDD

The CSDDD is a European Union directive aimed at enhancing the protection of the environment and human rights both within the EU and globally. It sets obligations for companies to address actual and potential adverse impacts on human rights and the environment, including those related to their own operations, their subsidiaries, and - vitally their suppliers.

#### \ CSR

Corporate social responsibility (CSR) refers to the set of policies a company implements with the aim of having a positive influence on the world.

CSR is becoming increasingly replaced by **ESG** frameworks and strategies.

#### \ CSRD

The Corporate **Sustainability Reporting** Directive (CSRD) modernises and strengthens the rules concerning the social and environmental information that companies must report in the EU. A broader set of large companies, as well as listed SMEs, will now be required to report on **sustainability**. Some non-EU companies will also have to report if they generate over EUR 150 million on the EU market. The CSRD entered into force in January 2023 and the first companies will be following these rules in the 2024 financial year and report it in 2025.

The CSRD replaces the Non-Financial Reporting Directive (NFRD) which is a piece of EU legislation that required large companies to disclose information regarding (1) environmental impact, (2) social and employee issues, (3) human rights, and (4) bribery and corruption.



#### \ **Decarbonisation**

Decarbonisation (also known as **carbon reduction**) is the process of reducing the amount of **GHG** emissions a company produces. For example, this can be done by switching to more climatefriendly suppliers or to clean energy providers. Decarbonisation is a crucial step in the journey to net zero.

#### **Direct air capture**

Direct air capture (DAC) is a method of **carbon** removal. DAC technologies absorb CO, directly from the atmosphere. To ensure that the absorbed CO<sub>2</sub> stays removed from the atmosphere, DAC is often combined with **CO**, mineralisation.

#### **\ Direct and indirect emissions**

Direct emissions are those that a company generates while performing its business activities. For example, this includes generation of electricity, manufacture and processing of materials, waste processing, and transportation using the company's own vehicle fleet. Direct emissions are also called scope 1 emissions.

A company's indirect emissions are the emissions from their purchased energy (scope 2 emissions) and from their value chain (scope 3 emissions).

#### **Downstream emissions**

Downstream emissions are emissions that occur after a company has sold its goods and services. Together with upstream emissions (or supply **chain emissions**) they make up a company's **scope** 3 emissions.

#### \ **Double-counting**

A carbon removal project engages in doublecounting if the same climate investment is sold multiple times. Avoiding double-counting is therefore an important principle of high-quality carbon **offsetting**.



#### **Eco labels**

Ecolabelling is a voluntary method of environmental performance certification and labelling. An ecolabel identifies products or services proven to be environmentally preferable within a specific category.

For businesses, eco-labels are a means of measuring performance and also communicating and marketing the environmental credentials of a given product or service.

#### **Emission factor**

An emission factor (EF) measures the emissions associated with one additional unit of a specified activity. For example, it could be the extra emissions associated with spending one euro on clothing or transportation. It could also be the extra emissions associated with purchasing one kilogram of textile or one litre of fuel.

If a company reports how much it has spent on various products and services, **spend-based** EFs allow for an estimation of the company's emissions. If a company more specifically reports the quantities of all purchased items, activity-based EFs provide an even more accurate estimate of the company's emissions.

## \ Environmental footprint

The term "environmental footprint" (or ecological footprint) is a multi-criteria measure to calculate the environmental performance of a product, service or organisation based on a life cycle approach. The results of the environmental footprint are given in the number of "planet Earths" it would take to support humanity if everyone follows the estimated lifestyle. The **carbon footprint** is the fastest growing part of humanity's overall environmental footprint – it accounts for 54% of the overall environmental footprint.

In 2022, the UK had an ecological footprint of 2.6 – meaning it would take 2.6 planet Earths to sustain the human population if everyone lived like we do in the UK. In comparison, the US has an ecological footprint of 5.1, whereas India has an ecological footprint of 0.8.

#### \ ESG

ESG – short for Environmental, Social and Governance – is a set of standards and frameworks measuring a business's impact on society, the environment, and how transparent and accountable it is. ESG is increasingly replacing **CSR – Corporate Social Responsibility** – frameworks.

An ESG report is a report published by a company about its environmental, social, and governance impact. While a lot of ESG reporting remains voluntary, businesses of a certain size in some jurisdictions are already required by law to report on their ESG impacts.

At Burness Paull, we published our most recent ESG report - the Responsible Business Report - in 2023

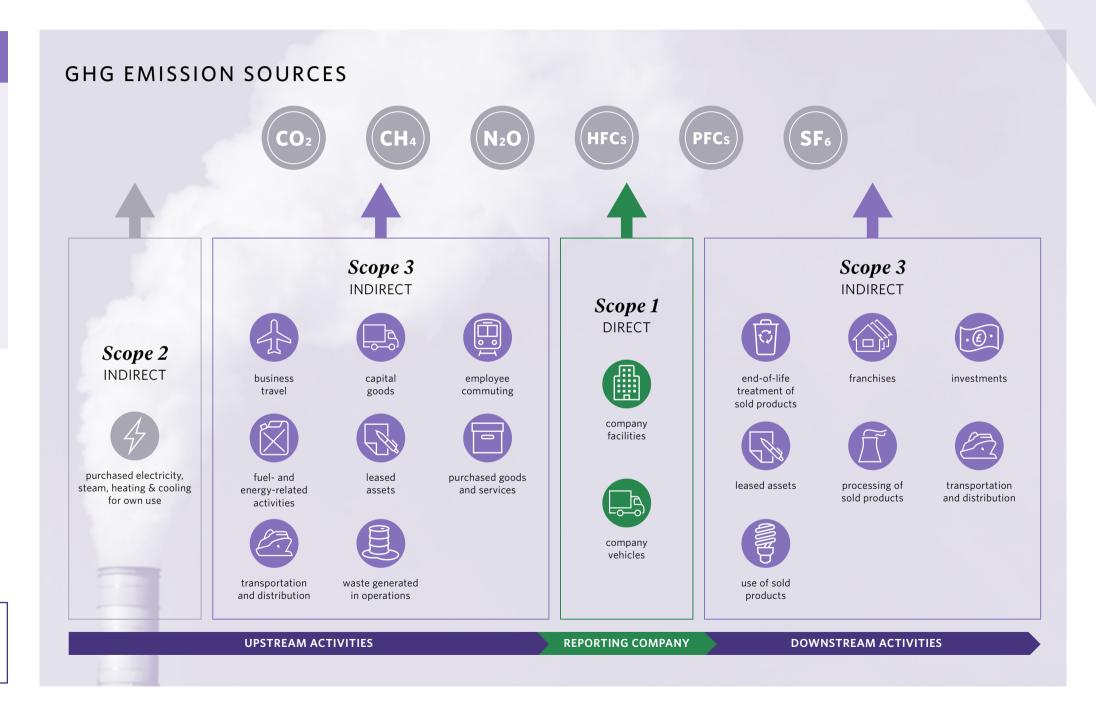
Under a **cap and trade** scheme, companies are allocated emission rights, which they can either use to for their own emissions, or sell to other companies that want to emit more than their allocated share.

#### **Emission rights**

#### **\ Fugitive emissions**

Fugitive emissions are defined as the unintentional and undesirable emission, **leakage** or discharge of gases or vapours from pressure-containing equipment or facilities and components inside plants such as valves, piping flanges, pumps, storage tanks, valves, compressors, etc. Fugitive emissions are part of a company's **scope 1 emissions**.

**Right:** This graph shows the possible sources of Scope 1, 2 and 3 emissions for a company reporting their GHG emissions.



#### \ GHG Protocol

The GHG Protocol provides the most widely used greenhouse gas accounting standards. Their corporate accounting and reporting standard describes requirements and guidance for companies, and serves as the basis for virtually every corporate reporting program in the world.

#### \ Greenhouse gas (GHG)

A greenhouse gas (GHG) is a gas that absorbs and emits radiant energy within the thermal infrared range, causing the greenhouse effect and thereby global warming.

#### \ Greenhouse effect

The greenhouse effect is the process through which heat is trapped near Earth's surface by substances known as 'greenhouse gases'.

The greenhouse effect causes global warming (also called global heating) and subsequent climatic changes and consequences such as loss of sea ice, melting of glaciers, rising sea levels and more extreme weather events.

### \ GRI

Global Reporting Initiative (GRI) is an independent international organisation that helps business, government, and other organisations understand and communicate their sustainability impacts. It provides standards, best practices, and industryspecific guidance for companies to use when reporting their environmental impact.

## \ Greenwashing

Greenwashing is the practice of providing misleading or false information about the **sustainability** of a company's business activities. Because companies may not realize that majority of their emissions are in **scope 3** or that many carbon **offsets** are of dubious efficacy, greenwashing can happen unintentionally as well as intentionally.



#### \ Leakage

A **carbon removal** project has leakage if its implementation will lead to negative consequences elsewhere. Avoiding leakage is therefore an important principle of high-quality climate offset.

Negative consequences could be the re-release of stored carbon or unintended negative impacts on humans or ecosystems.

### \Life cycle assessment (LCA)

Life cycle assessment (LCA) is a method for evaluating the environmental impact of a commercial product or service through all stages of its life cycle, from cradle (raw material extraction) to grave (final disposal).

#### \Loss and damage

Loss and damage refers to the negative, unavoidable and irreversible effects of the climate crisis that occur despite mitigation and adaptation efforts. Scientific evidence suggests that loss and damage is unequally distributed and not comprehensively addressed by current adaptation and mitigation, particularly in vulnerable countries in the Global South. Multiple climate hazards will occur simultaneously and interact, resulting in compounding risks across sectors and regions.

At **COP28** a historic agreement to launch a "loss and damage" fund to help vulnerable countries hit hard by climate disasters was reached. However, while the fund is a significant step in the right direction, critics highlight the need to ensure proportionate funding and independent governance, while others call for the need to also acknowledge liability for historical emissions.



#### \ Materiality assessment

Materiality is about measuring, managing and disclosing the issues that matter for an organisation. It's used for strategic planning, issues management, target setting, corporate reporting and increasingly in the field of **ESG** and sustainable finance. A materiality assessment (also referred to as 'single' or 'financial' materiality) is a way to determine which ESG issues impacts an organisation.

Single materiality is increasingly replaced by 'double materiality' which goes a step further in also considering the wider ESG impacts of a company or organisation. 'Triple materiality' is an emerging term that adds yet another layer. Whereas double materiality considers the ESG impacts of and on a company, triple materiality considers these in a systemic context and is therefore also known as a 'Context-Based Approach' to materiality. The contextual lens enables companies to consider materiality topics with ecological, social, and economic **sustainability** thresholds in mind, such as planetary boundaries, socio-cultural norms and geographic location.

## DOUBLE MATERIALITY





#### **Natural Capital**

Natural Capital can be defined as the world's stocks of natural assets which include geology, soil, air, water, and all living things. It is from this Natural Capital that humans derive a wide range of services, often called ecosystem services, which make human life possible.

The most obvious ecosystem services include food, water, plant materials used for fuel, building materials and medicines. There are also many less visible ecosystem services such as the climate regulation and natural flood defences provided by forests, the billions of tonnes of carbon stored by peatlands, or the pollination of crops by insects. Even less visible are cultural ecosystem services such as the inspiration taken from wildlife and the natural environment.

#### **Nature-based Solutions (NbS)**

Nature-based Solutions (NbS) address societal challenges through actions to protect, sustainably manage, and restore natural and modified ecosystems, benefiting people and nature at the same time. They target major challenges like climate change, disaster risk reduction, food and water security, **biodiversity loss** and human health, and are critical to sustainable development. NbS are often also referred to as 'green infrastructure'.

Examples of NbS include woodlands and forest management, peatland restoration, seaweed and reef restoration, sustainable grassland and farmland management, and urban solutions using greenery to reduce air and noise pollution, improve water quality, lower temperatures, increase food security and reduce flood risks.



#### \ Net zero

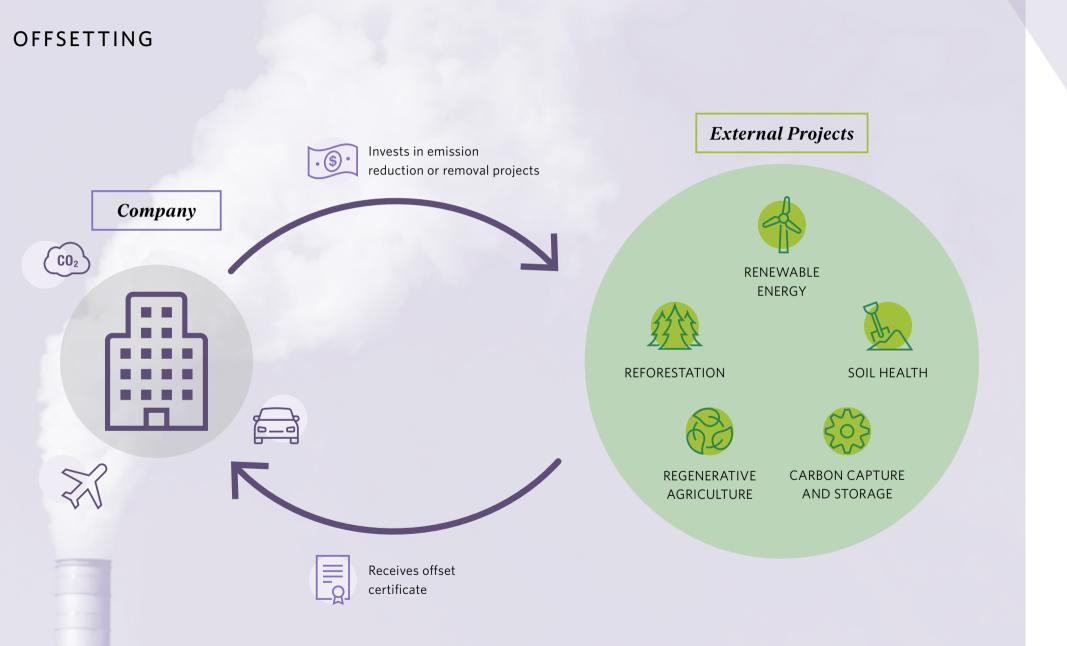
Net zero is a state in which the amount of greenhouse gases emitted into the atmosphere is counterbalanced by removing an equivalent amount of greenhouse gases. In a system that has reached net zero, the total amount of greenhouse gases (GHG) in the atmosphere will remain constant. In practice, net zero is most often discussed in relation to companies and countries, which set net zero targets to guide their GHG reduction efforts. But reaching net zero can also be a goal for individual people, industries, geographic regions, or the entire planet.

#### **Offsetting**

Carbon offsetting is the process of balancing a business's carbon emissions by removing a proportionate amount of carbon from the atmosphere. It is a necessary final step of a company's **net zero** journey. A company can buy "carbon offset credits" from a variety of projects including 'avoidance projects' which prevent emissions from occurring rather than actively removing carbon from the atmosphere.

This can lead to confusion where offsetting activities can be much less effective than the businesses that purchase offsetting credits believe, causing companies to unintentionally "greenwash" by only compensating a fraction of their **carbon** footprint.

It is therefore important to ensure that carbon offsetting projects are high quality and regularly revised as best practice evolves. This includes ensuring long-lived storage (i.e., a high degree of permanence), shifting towards carbon removal offsets, and considering wider socio-ecological impacts.



#### **\ Paris Agreement**

The Paris Agreement is a legally binding international treaty on climate change, adopted in 2015 and ratified by almost every country in the world. The Agreement commits its signatories to keep global warming to well below 2°C above pre-Industrial levels, and preferably limiting the increase to **1.5°C**.

#### \ Paris-aligned

A **carbon reduction** target is Paris-aligned if it is consistent with the Paris Agreement's commitment to limit global warming to well below 2°C greater than pre-Industrial levels.

#### \ Permanence

Permanence is a principle for evaluating **carbon removal** projects. A carbon removal project is permanent if it will result in a quantifiable piece of carbon being kept out of the air forever.

In the case of physically storing carbon (e.g. a forest, or a geological sink), the risk of reversal of that carbon going back into the atmosphere must be acknowledged and accounted for in the **offsetting** plan. For example, afforestation or reforestation generates carbon removal carbon offsets, but if forests are subsequently cut down or destroyed by pests, fire, or other natural disturbances the stored carbon is reversed and the carbon offset must be invalidated.



#### **Regeneration**

Regeneration is becoming an increasingly utilised alternative to **sustainability**. While the term 'sustainability' refers to something that can be sustained over time, or doing little harm to future generations, 'regenerative' is something that aims to do no harm, lead to benefits and the reversal of harm.

#### **\ Responsible business**

Responsible Business is an approach to conducting business that prioritises ethical practices, social responsibility, and environmental stewardship. It involves making decisions and taking actions that benefit stakeholders, including employees, customers, communities, and the planet.

Responsible businesses strive to operate transparently, ethically, and sustainably, considering the long-term impacts of their activities on society and the environment. This includes fair labour practices, minimising **environmental footprint**, ensuring product safety, and contributing positively to the communities in which they operate.

#### \ **Rewilding**

Rewilding is comprehensive, often largescale, conservation effort focused on restoring sustainable biodiversity and ecosystem health by protecting core wild/wilderness areas, providing connectivity between such areas, and protecting or reintroducing apex predators and highly interactive species (keystone species).



#### **SASB**

The Sustainability Accounting Standards Board (SASB) provides a set of standards for companies to use when reporting their environmental impact.

#### **SBTi**

The Science-Based Targets initiative (SBTi) encourages companies to set science-based targets in line with the Paris Agreement. They provide general as well as industry-specific guidance on how to meet these targets.

#### **\Science-based target**

An emissions reduction target is science-based if it accords with what climate science tells us about how to meet the goals of the Paris Agreement: to limit global warming to less than 2°C above pre-industrial levels and ideally pursue a stricter **1.5°C** target.

#### **Scope 2 emissions**

Scope 2 emissions are the **indirect emissions** generated by the production of purchased energy.

## \ Scope 3 emissions

Scope 3 emissions (also known as value chain emissions) are all indirect emissions that occur in the value chain of a company and are not already included within scope 2. These emissions are a consequence of the company's business activities, but occur from sources the company does not own or control. Scope 3 emissions include the following:

- Emissions generated in the company's supply chain, such as extraction, production, and transportation of purchased materials and fuels.
- Emissions generated from the use of sold products and services.
- Emissions generated from waste disposal. This includes the disposal of waste generated both in operations and in the production of purchased materials and fuels, as well as disposal of sold products at the end of their life.

## \ Scope 1 emissions

Scope 1 emissions are direct **GHG** emissions that a company generates while performing its business activities. This includes generation of electricity, manufacture and processing of materials, waste processing, and transportation using the company's own vehicle fleet.

#### **Scope 4 emissions**

Scope 4 emissions, also referred to as 'Scope X' or 'Advised' emissions, represent a relatively new concept in environmental sustainability and carbon accounting and is not yet widely used.

For law firms, Scope 4 would include the environmental impact of the advice provided by lawyers.

#### SECR

The Streamlined Energy and Carbon Reporting (SECR) is a piece of UK legislation. It requires large companies and all publicly traded companies to report on their energy consumption and associated greenhouse gas emissions.

#### **SFDR**

The Sustainable Finance Disclosure Regulation (SFDR) is a piece of EU legislation that regulates the sustainability information that financial advisors and financial market participants must disclose.

#### \ Spend-based data

The spend-based method of calculating GHG emissions takes the financial value of a purchased good or service and multiplies it by an **emission factor** - the amount of emissions produced per financial unit - resulting in an estimate of the emissions produced.

Since spend-based methods' emission factors are built on the industry average greenhouse gas emissions levels, spend-based calculations can lack specificity. For example: if you buy a chair, a spend-based approach would only factor in that you bought a piece of furniture, and wouldn't account for whether the chair was made of iron or wood. Activity data is generally more reliable.

#### Supply chain emissions

Supply chain emissions are emissions that occur upstream in the company's supply chain. Supply chain emissions are part of scope 3 emissions. They are also known as **upstream emissions**.

#### **Sustainability**

In the broadest sense, sustainability refers to the ability to maintain or support a process continuously over time. In business and policy contexts, sustainability seeks to prevent the depletion of natural or physical resources, so that they will remain available for the long term.

In 1987, the United Nations Brundtland Commission defined sustainability as "meeting the needs of the present without compromising the ability of future generations to meet their own needs.". Sustainability refers to both environmental, social and economic sustainability.

## **Sustainability reporting**

Sustainability reporting is a way for companies to disclose their environmental and social performance. In some jurisdictions, sustainability reporting is mandatory for companies of a certain size. However, even when it's not mandatory, customers, investors, and potential employees are increasingly demanding to know what measures companies are taking to reduce their greenhouse gas emissions and reach **net zero** by 2050, in line with the Paris Agreement.

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#### **Sustainable development goals**

The Sustainable Development Goals (SDGs) are a set of global goals designed to be a "blueprint to achieve a better and more sustainable future for all." The goals were set up by the UN's General Assembly in 2015, and are intended to be achieved by 2030. Goal 13 is to "take urgent action to combat climate change and its impacts by regulating emissions and promoting developments in renewable energy.".



### \ TCFD

The Task Force on Climate-related Financial Disclosures (TCFD) provides a set of recommendations for the reporting of climaterelated financial information.

#### \**TNFD**

The Task Force on Nature-Related Financial Disclosures (TNFD) is a framework that enables companies to integrate nature loss into risk analysis and decision making. The TNFD has developed a set of disclosure recommendations and guidance that encourage and enable business and finance to assess, report and act on their nature-related dependencies, impacts, risks and opportunities.



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## \ UN Global Compact

The United Nations Global Compact (UN GC) is an initiative to encourage companies to work toward environmentally and socially sustainable practices, and disclose their progress.

## \ Upstream emissions

Upstream emissions are emissions that occur upstream in the company's supply chain. Upstream emissions fall under the **scope 3 emissions** category. They are also known as **supply chain emissions**.



## **\Value chain emissions**

Value chain emissions (also known as **scope 3 emissions**) are the emissions that occur either **upstream** (i.e. in the **supply chain**) or **downstream** (i.e. during product use and disposal) of the company itself. For many companies, value chain emissions make up 90% of their total emissions, which makes it crucial for these emissions to be taken into account when setting reduction targets.



# References

1	Carbon Glossary   Pangolin Associates	16	Grattan Institute	31	Value chain emissions   GHG Protocol	46
2	Carbon Glossary   Normative	17	National Grid	32	The Greenhouse Gas Protocol	47
3	Normative.io	18	gov.scot	33	NASA	48
4	ВВС	19	CDP	34	Global Reporting Initiative	49
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6	WWF	21	Friends of the Earth	36	The Conversation	51
7	Ecologi	22	UNFCCC	37	Richard Hardyment	52
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9	Myclimate	24	European Commission	39	Paia	54
10	footprintnetwork.org	25	Global Eco Labelling	40	LSE	55
11	8billiontrees.com	26	UNEP	41	Worldfavor	56
12	European Council	27	Sphera	42	ICUN	57
13	Smith School	28	data.footprintnetwork.org	43	Scottish Wildlife Trust	58
14	plana.earth	29	British Business Bank	44	CBD	
15	Forbes	30	ScienceDirect	45	Embedding Project	





