



**Book Industry
Communication**

Principles of Offsetting

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Contents

Purpose	4
Disclaimer	4
Data collection	4
Definition of Carbon Offsetting	4
Introduction	5
Overview of Net Zero and Carbon Offsets	5
When to Offset: A Principled Approach	5
Reduction	5
Removal	6
Avoidance	6
Definition of Carbon Credits	6
Role of Carbon Credits in Achieving Net Zero	7
Understanding Carbon Offset Markets	7
Voluntary Carbon Market (VCM)	7
Compliance Market	8
The Compliance Market is regulated by national, regional, or international carbon reduction regimes (e.g., Kyoto Protocol, California Cap and Trade Market).	8
Regulation Initiatives	8
Verification of the Voluntary Carbon Market	8
Verification of Carbon Market Standards	8
Regulation Initiatives	9
Book Industry Supply Chain Offsetting	9
Paper Mills	9
Printers	9
Publishers	10
Tool Kit	12
Choosing Carbon Offset Projects	12
Quality Standards & Certification	12
Transparency	12
Additionality	12
Double counting	12
Leakage	13
Permanence	13
Alignment	13
Co-Benefits	13

Cost-Effectiveness	13
Legal and Ethical Considerations	13
Avoiding Anti-Competitive Practices	14
Maturity supplier questionnaire	14
Resource	14
Commitment	14
Engagement	14
Data Accuracy	15
Data Transparency	15
Data Completeness	15
Data Consistency	15
Carbon Performance	15
Resources	16
Glossary	16

Purpose

This report has been commissioned and developed by members of the BIC Green Supply Chain committee working as the Task and Finishing Working Group (T&FWG) for this project. The purpose of this report is to provide information, key principles, and resources to foster a better understanding of the role of global carbon offsetting in combatting climate change and achieving net zero goals within the book industry and supply chains.

This report is intended for educational purposes only and does not constitute financial, legal, or professional advice. The information provided herein is based on publicly available sources. While efforts have been made to ensure the accuracy and reliability of the information presented, readers are advised to conduct their own research and consult with appropriate experts or professionals before making decisions based on the information contained in this report.

Disclaimer

Firstly, the data provided in this report was accurate at the time of publication.

Secondly, it must be stated that BIC is not advising an organisation to use offsetting as a means of reducing its carbon footprint. That is up to the individual organisation. This report is about helping people and organisations to navigate and understand the offsetting market.

Thirdly, the T&FWG recognise the fact that there is a lot of press coverage and talk about the various offsetting projects that are available and how good they are. This is why it is so important that an organization does its own research and investigations when looking at offsetting.

Data collection

In compiling this report, various sources were used to ensure accuracy and depth of analysis relevant to the book industry. Primary data sources included internal organisational policies and approaches, as well as examples of procurement and supplier questionnaires as supplied by BIC Green Supply Chain Committee members. Additionally, the report utilised secondary sources such as scholarly articles, industry reports, and market research studies. These sources provided valuable insights into the dynamics and role of carbon credits in net zero strategies. Furthermore, articles from a variety of news sources contributed to a solid understanding of the current challenges and opportunities associated with the voluntary carbon market (VCM).

Definition of Carbon Offsetting

The first thing the T&FWG decided was that this report needed to provide a definition for carbon offsetting. A good explanation is provided by the [Green House Gas \(GHG\) Management Institute](#).

Introduction

Overview of Net Zero and Carbon Offsets

To combat climate change and to achieve the goals set out in the [Paris Agreement](#), rapid and deep cuts in greenhouse gas (GHG) emissions are required. Climate negotiations at governmental levels have embraced the concept of "net zero". This refers to the ambition to reduce GHG emissions produced by human activities to as close to zero as possible, and to remove any remaining emissions from the atmosphere by supporting carbon sinks such as forests and oceans.

Whilst net zero was developed as a scientific concept, it also provides a useful frame of reference to conceptualise and track action needed to combat climate change. Whilst there is no safe amount of global warming, most countries, organisations, and individuals will continue to generate GHG through their activities as they decarbonise. Carbon offsetting is the action or process of compensating for these residual emissions².

When to Offset: A Principled Approach

There are many views about how offsetting should and can be used as part of a net zero strategy. Scientifically speaking, to achieve rapid decarbonisation the focus of any organisation's action should be to first reduce its carbon footprint, before using offsetting to achieve their stated targets. This approach is also supported under the Science Based Targets Initiative (SBTi) that requires organisations to reduce/remove first before offsetting a part of the validation process of net zero targets. It should be noted that SBTi requirements around offsetting can change with time and the latest version can be found [here](#).

There is one way to reduce an organisation's carbon footprint and that is by reduction. In the carbon offsetting market, there are three options to do this through the various projects that are on offer. These options are reduction, removal, and avoidance. Definitions of these carbon offsetting projects come from [Climate Impact Partners](#) and links to their projects. It should be noted that a representative of Climate Impact Partners spoke to the T&FWG as part of the team's research.

Reduction

Reducing your carbon footprint means changing how you approach and participate in activities that produce greenhouse gasses. Some projects prevent carbon emissions entering the atmosphere, such as those that replace devices using fossil fuels with cleaner technology ([clean cooking](#)). These are often known as carbon reduction or avoidance projects.

The positive impacts delivered by emission reduction projects are not limited to the climate. Many projects also deliver positive outcomes for local communities, economies, health, and the natural world, contributing to the [UN Sustainable Development Goals](#).

¹ <https://www.nature.com/articles/s41558-021-01245-w>

² <https://www.lse.ac.uk/granthaminstitute/explainers/what-are-carbon-offsets/>

Funding emission reduction projects by purchasing carbon credits helps provide necessary finance to sustain the project.

Removal

Carbon removal is the process of removing carbon dioxide from the atmosphere and storing it securely for decades, centuries, or millennia. One example of a removal project is biochar, which is made from organic materials burned in an environment devoid of oxygen. When added to soil (one of the world's most effective carbon sinks), it encourages root growth and microbial activity and increases the [soil's](#) capacity to store carbon for hundreds to thousands of years. Other projects take CO2 out of the atmosphere, such as planting trees which sequester carbon as they grow. These are known as removals projects.

Avoidance

Carbon avoidance projects prevent additional greenhouse gas emissions from entering the atmosphere by reducing sources of emissions. Projects related to water infrastructure often fall into this category. Installing water filtration systems and optimising waste management systems helps people in low-income communities avoid the need to boil drinking water, thus eliminating emissions from burning firewood (and protecting people from smoke inhalation at the same time). There are some interesting projects can be found through the rePLANT [website](#).

There are challenges and opportunities to using carbon credits. It should be noted that there have been serious concerns raised regarding how carbon credits are used and communicated by buyers as well as how they are calculated and sold, and regarding the management of the credit-generating projects. For carbon markets to be successful, these issues need to be addressed. There are several regulatory initiatives underway to provide further assurances (see section Regulation Initiatives, page 8).

For organisations looking to integrate carbon credits into their net zero strategy, developing guiding principles to navigate the creditability of carbon credits is important. The [Oxford Principles of Net Zero Aligned Carbon Offsetting](#) (revised 2024) provide a helpful guide and framework when developing offsetting strategies. Developed by an interdisciplinary team of researchers at Oxford University, the Principles emphasise the importance and priority of reducing emissions and provide four basic guidelines for any organization to follow:

1. **Cut emissions as a priority**, ensure the environmental integrity of credits, and regularly revise as best practice evolves
2. **Transition to carbon removal offsetting** for any residual emissions (away from emissions avoidance or reduction) by the global net zero target date
3. **Shift to removals with durable storage** and low risk of reversal
4. **Support the development of innovative and integrated approaches** to achieving net zero

Definition of Carbon Credits

The most common approach to compensate for residual emissions is by purchasing carbon credits. These are tradable "rights" or certificates linked to activities that will

lower the amount of carbon dioxide (CO₂) in the atmosphere³. By purchasing these certificates, a person, organisation, or country can fund projects that will remove CO₂ when they are unable to lower their own emissions. With this approach, carbon credits "offset" the buyer's CO₂ emissions with an equal amount of CO₂ reduction elsewhere. Examples of carbon offset funded projects include reforestation, building renewable energy, carbon storage, and waste and landfill management.

Role of Carbon Credits in Achieving Net Zero

Carbon credits can be a valuable tool for an organisation in their journey towards achieving net-zero emissions. If used as part of a comprehensive net zero strategy, carbon credits can accelerate net zero progress whilst supporting sustainability initiatives. Carbon credits are often used to compensate for challenging emissions that are hard to address for many reasons. As a hypothetical example, consider an organisation that requires air travel to do business. It has reduced travel as much as possible, but still must conduct some air travel. The organisation can utilise carbon offsets as part of its net-zero strategy, reducing its total emissions and supporting sustainable projects while the aviation sector itself moves toward decarbonization.

Understanding Carbon Offset Markets

The purchase and sale of carbon credits are managed through a carbon market. There are two types of carbon offset markets: the Voluntary Carbon Market and the Compliance Market.

Voluntary Carbon Market (VCM)

The VCM is a non-regulated market where organisations purchase carbon offset credits by investing in environmental projects that can avoid, reduce, or remove carbon emissions.

- This market functions outside of the compliance market. Those who participate in the market do not *need* to reduce their emissions, it is entirely voluntary, but organisations opt to do so to meet a self-defined sustainability goal.
- It is a project-based system with no finite supply of allowances. More VCM carbon credits can be created through the development of environmental projects.
- As of 2022, the VCM was valued at around 2 billion US dollars. VCM credits tend to be cheaper as these credits cannot be traded on the compliance market.
- An example of the VCM: A company wishes to claim carbon neutrality. They calculate the emissions they cannot get rid of. They purchase an equivalent amount of carbon offset credits by investing in a project (for example, a regenerative farming project in Brazil) using the VCM. In doing so, they claim carbon neutrality.

³ <https://climate.mit.edu/explainers/carbon-offsets>

Compliance Market

The Compliance Market is regulated by national, regional, or international carbon reduction regimes (e.g., [Kyoto Protocol](#), [California Cap and Trade Market](#)).

- This market works on allowances – a permit that allows an organisation to emit GHG, then limits the amount that a country or industry can emit (i.e., a cap is imposed on the emissions)
- The cap represents a finite supply of allowances; an organisation cannot create or remove allowances, but they can be traded.
- The ability to trade surplus credits helps to financially motivate participants to reduce overall emissions.

Regulation Initiatives

Verification of the Voluntary Carbon Market

- There is no centralised VCM and no formal market. Project developers can either sell credits directly to buyers, sell through a broker or exchange, or sell to a retailer who then resells to a buyer.
- VCM is used by businesses, governments, NGOS and individuals. Many companies participate because they feel a responsibility to do so, pressure from shareholders, or a desire for PR.
- The types of projects found in VCM are diverse. They range from small community-based projects, like facilitating cleaner cook stoves, to larger reforestation projects. Projects can also create co-benefits such as those aligned to the SDGs. These can increase the value of the credit.
- To be part of the market, each project must demonstrate “additionality,” which means that the carbon removal or reduction *would not have occurred* without the offset project. For example, a forest preservation project would need to prove that without the project, the forest would have been cut down. (It should be noted that there are some renewable energy projects that happen with government support that are also available to purchase through the VCM.)
- Prices vary between projects depending on the category of the project. Live prices can be seen here: <https://carboncredits.com/carbon-prices-today/>
- Selling and buying of VCM credits are primarily done through brokers. All voluntary credits must be verified by an independent third party and must adhere to existing standards.

Verification of Carbon Market Standards

- The VCM is open to anyone to participate – from businesses to even individual investors. There is no government agency monitoring or established criteria for what makes a viable project.
- VCM carbon offsets do not fall under existing government regulation. It is a new, natural market in response to demand.
- With no government regulator, there are third party verification providers. These ensure the legitimacy of the credits by assessing the data provided by the project and ensuring it meets the criteria of the chosen carbon credit standard. If the verifier is satisfied, it issues carbon credits, which then can be traded on the VCM.

- There are multiple standards who have different approaches on their methodology for measuring and verifying the carbon emission reduction. The most widely used are the following:
 - Verra (The Verified Carbon Standard)
 - Plan Vivo
 - The Gold Standard
 - The American Carbon Registry
 - Climate Action Reserve
 - The Verified Carbon Standard Program

Regulation Initiatives

- [Taskforce on scaling Voluntary Carbon Markets](#): a private-sector led initiative to bring all parts of the value chain together to scale high-integrity voluntary carbon markets.
- The Integrity Council for the Voluntary Carbon Market (ICVCM or Integrity Council) launched Core Carbon Principles and Program-Level Assessment Framework <https://icvcm.org/the-core-carbon-principles/>

Book Industry Supply Chain Offsetting

The results from the T&FWG's research found the following:

Paper Mills

Having approached five large Scandinavian/European paper mill groups, the T&FWG found that only one offered a product (packaging) with any carbon offsetting credentials. The T&FWG does realise that this is only a small representation of the global market. The mills that the T&FWG spoke to have a range of views on offsetting from 'we are currently using offsetting' to 'offsetting is something we are not even considering' as they believe that is not the right approach to reach net zero. Three mills were not actively investigating carbon offsetting, and the last was “keeping an eye on the situation.”

The T&FWG did find one paper merchant Denmaur who is working with the World Land Trust to provide their customers with [carbon balanced paper](#).

A good resource for paper in Europe is CEPI's (Confederation of European Paper Industries) [sustainability platform](#). The CEPI Sustainability Platform was launched in 2018 to show that sustainability and competitiveness must go hand in hand for industry to excel; the paper industry is a leading example.

Printers

The limited number of printers that the T&FWG spoke to have signed up to the SBTi. This means they are working on reducing the carbon footprint as much as possible before even thinking about offsetting. More research could be conducted in this area, but it all depends on where in their sustainability journey a printer is.

Printers are also obtaining ISO standards: ISO 9001 Quality Management Systems, ISO 14001 Environmental Management, and ISO 50001 Energy Management. There are other accreditations that printers are working towards. For a detailed explanation of all the accreditations and standards please see the [BIC Environmental Accreditations and Standards Map](#).

Printers in the UK have the BPIF (British Printing Industries Federation) and in Europe Integraf working on their behalf. The BPIF (British Printing Industries Federation) are a leading trade association for British print. They are dedicated to supporting their members and the wider print industry. They promote progression, invite innovation and encourage empowerment in every area of the sector. Integraf is the European printing industry association, representing employers in the graphical sector. They advocate for Europe's printing industry towards the European Union, working with EU policymakers to support the sector's competitiveness through advocacy, information-sharing, networking, campaigning, social dialogue, and EU projects. These two organisations have created CarbonClac a dedicated carbon calculator specifically for the printing industry.

Publishers

The T&FWG found that some publishers are using several offsetting partners/brokers. The following list contains some examples that are publicly available on their websites at the time of writing this report; there are many more and this list is liable to change over time:

Offsetting Partner/Broker	Specific offsetting project (if known)	Web links
Climate Partner	Afforestation project in the Campo Grande Region of Brazil	https://fpm.climatepartner.com/racking/project/details/53722-2201-1001/1146/en
South Pole	Solar Power, Vietnam Afforestation, China Forest conservation, Cameroon Indus Delta Blue Carbon	https://bonnierbooks.com/sustainability/
Climate Impact Partners	Solar power, water filters, clean cookstoves, afforestation	Details about individual projects can be found on Climate Impact Partners website
SRL Publishing	Verified Carbon Standard	https://verra.org/programs/verified-carbon-standard/
	Gold Standard	https://www.goldstandard.org/
	Ecologi	https://ecologi.com
	TreeApp	https://www.thetreeapp.org
	Rainforest Trust	https://www.rainforesttrust.org/

Shipping

Although there are three types of shipping - road, rail and air - due to the make-up of the T&FWG our research only covered sea freight and organisations associated with that method of transport.

Shipping organisations are increasingly being required to prove their credentials by signing up to various organisations, such as EcoVadis which helps organisations manage Environmental, Social and Governance (ESG) risk and compliance, as well as obtaining ISO standards (ISO 9001 Quality Management Systems, ISO 14001 Environmental Management, and ISO 50001 Energy Management). This is now becoming a requirement for shippers to be able to trade, with organisations wishing to ship goods.

Regarding sea freight, the T&FWG found that shipping organisations are undertaking several initiatives to facilitate their journey to net zero, mainly regarding fuel sources. They are beginning to transition away from conventional fuels and towards biofuel and methanol alternatives. They are also offering schemes that involve charging customers supplementary fees to purchase biofuels, which in turn helps customers reduce their own emissions. Customers are provided with certificates of carbon savings.

The T&FWG only found evidence of one shipping broker using offsetting as part of their strategy, Woodland see p.38 of their [sustainability report](#).

Tool Kit

Choosing Carbon Offset Projects

Choosing a reliable carbon offset project is a critical step in ensuring that your organisation's offsetting efforts truly contribute to reducing greenhouse gas emissions and are addressing climate change. With a growing number of projects available, it is essential to identify those that are trustworthy, effective, and aligned with broader sustainability goals. Here is a list of considerations to keep in mind when selecting a carbon offset project:

Quality Standards & Certification

Quality standards indicate that carbon offset projects are credible and effective. Look for projects that are verified by reputable third-party organisations. Examples of common certification schemes include the Gold Standard (GS) (<https://www.goldstandard.org/>), Verified Carbon Standard (VCS) (<https://verra.org/programs/verified-carbon-standard/>), and Climate Action Reserve (CAR) (<https://www.climateactionreserve.org/>) – however many more exist. These certifications indicate that the project has been rigorously evaluated to achieve its objectives and meets stringent criteria for carbon reduction.

Transparency

Transparency is key when assessing the reliability of a carbon offset project. Choose projects that offer clear and accessible documentation, including the project's goals, methods, and verification reports. A transparent project will also provide regular updates on its progress, allowing stakeholders to track its impact over time.

Additionality

Additionality is a fundamental principle of carbon offsetting. It means that the carbon reduction achieved by the project would not have happened without the offsetting investment. Additionality is subjective and difficult to determine; however, it is important to consider when evaluating a project. Projects that do not demonstrate additionality may not contribute to reducing carbon emissions in a meaningful way.

Double counting

Double counting occurs when the benefits of a carbon offsetting project are counted by multiple entities, for instance by the organisation selling the carbon offset *and* the organisation purchasing the offset. In this scenario, the benefit from the carbon offset would be inflated due to double counting. Therefore, when selecting an offsetting project, it is important to ensure that the benefit achieved by the project can only be counted towards one organisation's goals.

Leakage

Leakage occurs when there are unintended consequences of the offsetting project outside of the carbon accounting boundary. This could occur when an offsetting project simply shifts the issue to another area, potentially without the safeguards and controls in place in the offsetting project. For instance, protecting an area of forest from logging may increase the risk of deforestation in another area to meet the same demand. The indirect effects of an offsetting project may counteract its benefits, so it is important consider how these are accounted for and what safeguards are put in place.

Permanence

Permanence refers to a project's ability to deliver lasting carbon reductions and storage. A reliable carbon offset project should have mechanisms in place to ensure that the achieved carbon reductions are not reversed. Such mechanisms may involve risk management strategies to protect against natural events like forest fires, or unintended consequences such as deforestation, which would result in the re-release of stored carbon. Projects with a higher level of permanence are considered more likely to deliver sustained benefits.

Alignment

Alignment refers to the time gap between the release of emissions and the point at which the emissions are offset. Certain carbon credits can be issued based on the amount of carbon a project is expected to offset in the future, which is highly uncertain considering financial and regulatory risks to the continuation of the project. Therefore, when selecting an offset, forward-buying should be minimised to ensure the credibility of the offset.

Co-Benefits

Co-benefits are *positive* consequences of an offset project. These can include environmental benefits such as cleaner water, or social benefits such as job creation or increased access to clean air and green spaces. Projects that support biodiversity, reforestation, or community development can contribute to broader sustainability goals. Look for projects that align with the United Nations Sustainable Development Goals (SDGs), as this indicates a commitment to broader positive impacts.

Cost-Effectiveness

While cost is a consideration, it's important to balance cost with quality. Low-cost projects may not always deliver the best results. Aim to select projects that offer good value without compromising on quality or reliability. A cost-effective project should provide a reasonable return on investment in terms of carbon reduction and co-benefits.

Legal and Ethical Considerations

A good carbon offset project complies with all relevant local, national and international regulations and operates in an ethical manner. Projects should have the necessary permits and approvals, and they should not engage in any exploitative practices.

Avoiding Anti-Competitive Practices

It's essential to maintain neutrality when choosing carbon offset projects to avoid anti-competitive behaviour. Ensure that your approach is unbiased, focusing on established quality standards and best practices, and take care to avoid favouritism or the promotion of specific organisations.

By following these principles, your organisation can choose carbon offset projects that are reliable, effective, and aligned with broader sustainability goals. The above considerations will help you make informed decisions and contribute meaningfully to reducing carbon emissions.

Maturity supplier questionnaire

The below provides a generic questionnaire framework for evaluating the maturity of existing and potential suppliers on sustainability. Maturity evaluation offers a structured approach to understanding the current state of sustainability practices within an organization and mapping out the desired trajectory for future improvements. By employing maturity maps in supplier evaluation, one can gain valuable insights into the depth and breadth of a supplier's commitment to sustainability across various dimensions.

This could be particularly useful if a supplier offers an offsetting solution either in replacement of or to complement a carbon reduction programme.

Resource

1. Do you have dedicated resources for managing and implementing carbon offsetting initiatives?
2. Is there a senior executive or board-level oversight for your carbon offsetting programs?
3. How do you ensure the integration of sustainability and carbon offsetting into your overall business strategy?

Commitment

4. What specific environmental or sustainability policies do you have that cover the use of carbon offsetting?
5. Are you committed to setting science-based targets (or do you already have validated SBTi targets) for carbon emissions reduction?
6. Do you plan to reduce first, or offset first?

Engagement

7. How do you engage with internal teams, customers, and suppliers about your carbon offsetting and sustainability goals?
8. Are you involved in any trade organizations or advocacy groups focused on carbon offsetting and sustainability?
9. What initiatives do you support or participate in to encourage industry-wide carbon offsetting and sustainability?

Data Accuracy

10. How do you ensure the accuracy of your emissions data related to carbon offsetting activities?
11. How do you allocate emissions for carbon offsetting schemes?
12. What steps do you take to validate and ensure the integrity of the data you use for carbon offsetting?

Data Transparency

13. Do you publicly report your carbon offsetting activities and related emissions data?
14. Do you report carbon offsets separately from greenhouse gas emissions?
15. Are you using any third-party platforms or frameworks to disclose your physical activity and emissions data?
16. Is there external verification for your emissions measurement and reporting practices?

Data Completeness

17. Which scopes of emissions are covered in your carbon offsetting strategy?
18. Do you have a plan to cover all relevant scopes, including scope 3 (indirect emissions)?
19. Are your offsetting schemes comprehensive, or do they focus on specific parts of your emissions?

Data Consistency

20. Is your emissions data regularly updated and aligned with your reporting period?
21. How do you ensure the consistency of your carbon offsetting calculations across reporting cycles?

Carbon Performance

22. Are you demonstrating continuous improvements in your greenhouse gas emissions across years?
23. Are your emissions at, above or below the average greenhouse gas emissions for your sector?
24. Are your greenhouse gas emissions on track for your own reduction goals?

Resources

- PAS 2060:2014 specification for the demonstration of carbon neutrality (British Standard Institution [2014](#))
- Net Zero Initiative: A framework for collective carbon neutrality (Dugast [2021](#))
- SBTi Corporate Net-Zero Standard (Watson et al. [2021](#))
- Securing Climate Benefit: A Guide to Using Carbon Offsets (Broekhoff et al. [2019](#))
- The Oxford Principles for Net Zero Aligned Carbon Offsetting (Allen et al. [2020](#))
- The CarbonNeutral Protocol (Natural Capital Partners [2022](#)): The global standard for carbon neutral programmes
- VCMi – Voluntary Carbon Market Integrity Initiative ([2022](#)): Provisional Claims Code of Practice
- **Sustainability - If It's Everything, Is It Nothing?** Second Edition, Heather M. Farley and Zachary A. Smith, Hbk ISBN 978-0815357155, Pbk ISBN 978-0815357162, Second edition published 2020 by Routledge, 2 Park Square, Milton Park, Abingdon, Oxon, OX14 4RN

Glossary

It should be noted that not all the terms in the glossary can be found in this report. They have been added to the list to help the reader with their sustainability journey.

Acronym	Full name	Description	Further notes
	1.5°C	Science has made it clear that we must limit global temperature rise to 1.5°C above pre-industrial levels. We are currently at 1.1°C and are on track for 2.7°C according to the UNDP's Emissions Gap Report 2021. Every fraction of a degree matters. Wildfires, heavy flooding, intense heat, drought, and storms are becoming more frequent and devastating. Every bit of warming we avoid will reduce the climate risks we face. We need to keep global warming to 1.5°C to have a fighting chance of having a habitable and a thriving planet for all of us.	Net-Zero Jargon Buster - a guide to common terms - Science Based Targets
	Abatement	Measures that companies take to prevent, reduce, or eliminate sources of GHG emissions within their value chain. Examples include reducing energy use, switching to renewable energy, and retiring high-emitting assets. Another similar term is decarbonization, which refers to the process by which CO2 emissions associated with electricity, industry, and transport are reduced or eliminated. Under the Net-Zero Standard, most companies are required to reduce emissions by at least 90% to reach net-zero.	Net-Zero Jargon Buster - a guide to common terms - Science Based Targets
	Additionality	A requirement for carbon offsetting schemes to prove the carbon reduction would not have happened anyway; i.e., it is <i>in addition</i> to carbon reductions already taking place, or already planned.	WWF

Acronym	Full name	Description	Further notes
	Afforestation	Afforestation is the establishment of a forest or stand of trees in an area where there was no recent tree cover.	
	Anthropogenic	This means from humans or their activities and is usually used when talking about climate change, environmental damage and pollution	Net-Zero Jargon Buster - a guide to common terms - Science Based Targets
	Biochar	'Biochar' is a catch-all term describing any organic material that has been carbonised under high temperatures (300-1000°C), in the presence of little, or no oxygen. This process (called 'pyrolysis') releases bio-oils plus gases and leaves a solid residue of at least 80% elemental carbon which is termed biochar.	Biochar Is 'Low-Hanging Fruit' for Sequestering Carbon and Combating Climate Change - Inside Climate News
	Carbon Insetting	The implementation of nature-based solutions such as reforestation, agroforestry, renewable energy, and regenerative agriculture, with the aim of slashing greenhouse gas emissions from one's own value chain (as opposed to offsetting, which is slashing GHGs in someone else's value chain).	World Economic Forum
	Carbon neutral	Although often used interchangeably with 'net-zero', the two are not the same. In general, when companies claim carbon neutrality, they are counterbalancing CO2 emissions with carbon offsets without necessarily having reduced emissions by an amount consistent with reaching net-zero at the global or sector level. This may conceal the need for deeper emissions reductions that are in line with what the science requires for the world to keep global warming to 1.5°C. Carbon neutrality claims also do not necessarily cover non-CO2 GHGs. The SBTi does not validate carbon neutrality claims.	Net-Zero Jargon Buster - a guide to common terms - Science Based Targets
	Carbon Offset	Carbon offset broadly refers to a reduction in GHG emissions – or an increase in carbon storage (e.g., through land restoration or the planting of trees) – that is used to compensate for emissions that occur elsewhere.	https://www.offsetguide.org/understanding-carbon-offsets/what-is-a-carbon-offset/
	Carbon Offset Credit	A carbon offset credit is a transferrable instrument certified by governments or independent certification bodies to represent an emission reduction of one metric tonne of CO2, or an equivalent amount of other GHGs. The purchaser of an offset credit can “retire” it to claim the underlying reduction towards their own GHG reduction goals.	https://www.offsetguide.org/understanding-carbon-offsets/what-is-a-carbon-offset/
	Carbon offsetting	The action or process of compensating for carbon dioxide emissions arising from industrial or other human activity, by participating in schemes designed to make equivalent reductions of carbon dioxide in the atmosphere	Google Dictionary

Acronym	Full name	Description	Further notes
	Carbon offsetting	The act of paying for things to be done, for example planting trees, that reduce the amount of carbon dioxide in the environment, as a way of trying to reduce the damage caused by activities that produce carbon dioxide	https://dictionary.cambridge.org/dictionary/english/carbon-offsetting#google_vignette
	Carbon offsetting	Offsetting GHG emissions, that cannot be reduced.	https://www.climateimpact.com/business-solutions/carbon-offsetting/
	Carbon offsetting	In simple terms, offsetting one tonne of carbon means there will be one less tonne of carbon dioxide in the atmosphere than there would otherwise have been.	https://www.climateimpact.com/business-solutions/carbon-offsetting/
	Carbon offsetting	Carbon offsets are just one tool to tackle climate change and should not be considered as a stand-alone action. After measuring a carbon footprint, organizations and individuals should reduce their emissions as much as possible, as well as taking responsibility for what remains, by buying carbon credits.	https://www.climateimpact.com/business-solutions/carbon-offsetting/
	Carbon offsetting	Carbon offsetting enables business to meet ambitious climate goals, puts a price on carbon to incentivize further action, and provides critical finance to accelerate the world's transition to a low-carbon future. Carbon offsets are an internationally recognized way to take responsibility for unavoidable carbon emissions.	https://www.climateimpact.com/business-solutions/carbon-offsetting/
	Carbon offsetting	To offset emissions a company must purchase the equivalent volume of carbon credits (independently verified emissions reductions) to compensate for the emissions they cannot avoid. The purchase of these carbon credits enables carbon finance to go to projects which are avoiding and reducing emissions elsewhere in the world, and ensures they are financially viable and sustainable.	https://www.climateimpact.com/business-solutions/carbon-offsetting/
	Carbon sink	A reservoir (natural or human, in soil, ocean, and plants) where a greenhouse gas, an aerosol, or a precursor of a greenhouse gas is stored, or a process that removes CO ₂ from the atmosphere.	Net-Zero Jargon Buster - a guide to common terms - Science Based Targets
	CarbonNeutral®	CarbonNeutral® mark indicates you have followed The CarbonNeutral Protocol, which is the global standard, managed for over 20 years, to deliver clear, credible, and transparent carbon neutral programs.	https://www.climateimpact.com/business-solutions/carbon-offsetting/
	Climate change adaptation	Policies and measures which make societies and companies more resilient to the impacts of climate change such as flooding and heatwaves.	List of Sustainability Definitions - CDP
	Climate change mitigation	Policies and measures which aim to reduce greenhouse gases from companies and governments with the intention of lessening the global impacts of climate change, such as reducing the amount and intensity of fossil fuel burning.	List of Sustainability Definitions - CDP

Acronym	Full name	Description	Further notes
CRVA	Climate risk and vulnerability assessment	An assessment of the likelihood of current and future climate hazards. It is a critical process for local authorities to understand the environmental and social impacts that climate change will have on their jurisdiction.	List of Sustainability Definitions - CDP
	Co-Benefits	Social and environmental benefits (such as improved air quality, enhanced biodiversity, job creation, etc.) that go beyond GHG reduction as a result of carbon offsetting schemes.	WWF
COP	Conference of Parties	The decision-making body of the United Nations Framework Convention on Climate Change (UNFCCC) which meets annually to encourage intergovernmental policy on climate change.	List of Sustainability Definitions - CDP
	Double Claiming	A credit issued for a reduction or removal of carbon that is already covered by a domestic compulsory mitigation scheme.	CDP
	Double Issuance	Multiple credits being issued for the same emissions reduction or removal.	CDP
	Double Materiality	An extension of the key accounting concept of materiality of financial information. Information on a company is material and should therefore be disclosed if “a reasonable person would consider [the information] important,” according to the US Securities and Exchange Commission (SEC). Thanks to the work by the TCFD [Task Force on Climate-related Financial Disclosures], it is now widely accepted within financial markets that climate-related impacts on a company can be material and therefore require disclosure. The concept of double materiality takes this notion one step further: it is not just climate-related impacts on the company that can be material but also impacts of a company on the climate – or any other dimension of sustainability, for that matter (often subsumed under the environmental, social and governance, or ESG, label).	London School of Economics and Political Science
	Double Use	A single credit being claimed multiple times	CDP
	Ecocide	The severe, widespread, and long-term destruction of the environment. A coalition of countries motivated by the climate crisis, like the island nation of Vanuata, and by interest in prosecuting environmental war crimes, like Ukraine, share a goal of making ecocide the fifth international crime the International Criminal Court can process.	Grist.org
	EcoVadis	EcoVadis helps you manage your sustainability network both upstream and downstream, either by sharing your performance with your stakeholders or monitoring the performance of your own value chain.	Ecovadis.com
GRI	Global Reporting Initiative	For over 25 years, the GRI have developed and delivered the global best practice for how organisations communicate and demonstrate accountability for their impacts on the environment, economy and people.	

Acronym	Full name	Description	Further notes
GHGs	Greenhouse gases	Gases that absorb and trap heat (i.e. infrared radiation) from the Sun in the Earth's atmosphere. Includes the following gases that are covered by the UNFCCC/Kyoto Protocol: carbon dioxide (CO ₂), methane (CH ₄), nitrous oxide (N ₂ O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulphur hexafluoride (SF ₆) and nitrogen trifluoride (NF ₃). These gases are the direct cause of climate change. The term "GHGs" is often used interchangeably with "all UNFCCC/Kyoto GHGs," and these gases must be covered by targets set under the Net-Zero Standard. Water vapor is also a GHG but is not covered by the UNFCCC/Kyoto Protocol or GHG emissions targets because concentrations of this gas are self-limited by the atmosphere and thus not a direct cause of global warming.	Net-Zero Jargon Buster - a guide to common terms - Science Based Targets
	Greenwashing	The practice of falsely promoting an organisation's environmental efforts, or spending more resources to promote the organisation as green than are spent to engage in environmentally sound practices	List of Sustainability Definitions - CDP
	Gross Ecosystem Product	Gross ecosystem product (GEP) is a measure of the aggregate monetary value of final ecosystem-related goods and services in a specific area and for a given accounting period. GEP accounting captures the use of many ecosystem services in production processes across the economy, which are then valued in terms of their benefits to society. GEP has five key elements that make it transparent, trackable, and readily understandable: (1) a focus on nature's contributions to people; (2) the measurement of ecosystem assets as stocks and ecosystem services as flows; (3) the quantification of ecosystem service use; (4) an understanding of ecosystem service supply chains through value realization; and (5) the disaggregation of benefits across groups.	Springer Nature
	Leakage	A project's unintended effects on GHG emissions, such as causing emissions elsewhere or later (for example, in bio-sequestration projects).	WWF

Acronym	Full name	Description	Further notes
	Net-zero	A state of balance between anthropogenic emissions and anthropogenic removals. In most cases, it is important to specify either net-zero CO2 emissions or net-zero GHG emissions, which also includes non-CO2 GHGs. Net-zero GHG emissions must be achieved at the global level to stabilise temperature increase, and targets set using the Net-Zero Standard must cover all UNFCCC/Kyoto GHG emissions. The SBTi's Net-Zero Standard outlines what companies need to do to enable the global economy to achieve net-zero. The Standard makes clear that for corporate net-zero targets in line with keeping global warming to 1.5°C require rapid and deep emission reductions. Companies must take action to halve their emissions by around 2030. Likewise, long-term deep emissions cuts of at least 90% before 2050 are crucial for net-zero targets to align with science.	Net-Zero Jargon Buster - a guide to common terms - Science Based Targets
	Paris Agreement	A legally binding international treaty on climate change, adopted at COP21 in Paris in 2015. Its goal is to limit global warming to well below 2, preferably to 1.5 degrees Celsius, compared to pre-industrial levels.	List of Sustainability Definitions - CDP
	5Rs	Reduce, Remanufacture, Reuse, Recycle, Recover.	
	Reversal Risk	The risk that achieved GHG emissions reductions or removals may be reversed or undone in the future if appropriate preventative mechanisms have not been put in place.	CDP
	Scope 1	Direct GHG emissions occurring from sources that are owned or controlled by the company, for example, emissions from combustion in owned or controlled boilers, furnaces, vehicles, etc. or emissions from chemical production in owned or controlled process equipment.	Net-Zero Jargon Buster - a guide to common terms - Science Based Targets
	Scope 2	Emissions from purchased electricity, heat, and steam for use in business operations. Scope 2 emissions physically occur at the facility where electricity is generated, and so would fall into the scope 1 category for the power generator.	Net-Zero Jargon Buster - a guide to common terms - Science Based Targets
	Scope 3	Scope 3 is a reporting category that allows for the treatment of all other indirect emissions. Scope 3 emissions are a consequence of the activities of the company but occur from sources not owned or controlled by the company - typically because of supplier or customer activities. These can be up or down the value chain - for example, transport and distribution, or the disposal of goods or services after they reach the consumer. Some examples of scope 3 activities are extraction and production of purchased materials; transportation of purchased fuels; and use of sold products and services.	Net-Zero Jargon Buster - a guide to common terms - Science Based Targets

Acronym	Full name	Description	Further notes
	Shadow Carbon Pricing	A method of investment or decision analysis that adds a hypothetical surcharge to market prices for goods or services that involve significant carbon emissions in their supply chain. For example, if a firm is analysing acquisitions of new energy-using equipment, it would use expected energy costs of expected market prices plus a charge associated with the carbon dioxide that would be released when the fuel is combusted. Shadow prices can apply in all sorts of analyses of investments, procurements, and other strategic decisions to give an edge to options that are more emissions-efficient, other things equal. These decisions then allow firms to reduce their emissions gradually up to the incremental cost reflected in the carbon price they apply.	Brookings
SDGs	Sustainable Development Goals	17 social goals established by the United Nations Department of Economic and Social Affairs to promote prosperity while protecting the planet. The goals are: No poverty; zero hunger; good health and wellbeing; quality education; gender equality; clean water and sanitation; affordable and clean energy; decent work and economic growth; industry, innovation and infrastructure; reduced inequalities; sustainable cities and communities; responsible consumption and production; climate action; life below water; life on land; peace, justice and strong institutions; and partnerships for the goals	List of Sustainability Definitions - CDP
	Sustainable Finance Taxonomy	Sustainable finance taxonomies are one of the instruments that have been developed to support the redirection of financial flows towards environmentally (and socially) sustainable activities. According to the Bank for International Settlements, sustainable finance taxonomies are “set[s] of criteria which can form the basis for an evaluation of whether and to what extent a financial asset can support given sustainability goals”. The central goal of taxonomies is driving capital allocation towards sustainable activities, reducing greenwashing and enabling simpler comparison.	List of Sustainability Definitions - CDP

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