

# A GUIDE TO CLIMATE CONTRIBUTIONS

Taking responsibility for emissions without offsetting



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## Acknowledgements

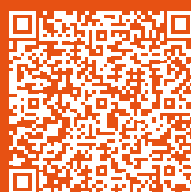
This work was generously funded by the IKEA Foundation (grant no. G-2010-01689). The authors express their thanks to Polina Korneeva for graphic design and layouting; Amandeep Gill-Lang for editing; and to Victoria Fischdick for communications and outreach.

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<https://newclimate.org/resources/publications/a-guide-to-climate-contributions-taking-responsibility-for-emissions>



# SUMMARY

**Climate contributions** reflect finance provided by an organisation to support climate action beyond its own value chain, without claiming to offset, or neutralise, any actual emissions. They represent a financial commitment that is a **complement** – and in **no way an alternative** – to directly reducing one's own climate footprint.

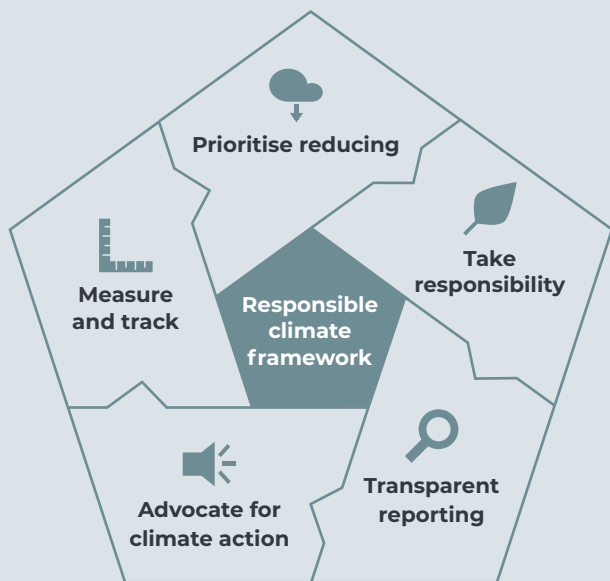
## OUR RECOMMENDATIONS FOR ADOPTING THE CLIMATE CONTRIBUTION APPROACH:



The climate contribution approach provides companies with an effective mechanism for **preserving and maintaining long-term value**, ensuring a **competitive advantage amidst the current global climate emergency**, both in terms of product offering to consumers as well as to investors.

## KEY MOTIVATION TO ADOPT THE CLIMATE CONTRIBUTION APPROACH

Applying an **ambitious carbon price to a company's full climate footprint**, in the form of an explicit fee, facilitates a number of critical elements of a responsible climate framework.



**Incentivises a company to prioritise reducing its own emissions.** Through establishing a carbon fee, a company automatically creates an incentive for it to implement all measures to cut emissions throughout its value chain that are cheaper, per tonne of carbon dioxide reduced, than the level of the price. A carbon fee can therefore serve to internalise the cost of emissions and ensure these costs are incorporated into a company's decision-making on day-to-day operations as well as its investments.

**Provides a tool for a company to take responsibility for the impacts it causes.** A carbon fee directly links the volume of a company's climate footprint to the volume of funding made available for climate contributions. A company responsible for a larger volume of emissions provides, for the same price level, a proportionately larger financial contribution to supporting climate action.

**Offers a transparent and unambiguous measure of a company's level of ambition.** A carbon fee provides a clear signal to both internal stakeholders – such as employees and shareholders – as well as external stakeholders – such as consumers or regulators – on how serious a company is about taking action to cut its emissions. It is also expressed in a way which facilitates comparison between different companies and can demonstrate how aligned a company's business model is with global climate strategies.

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An accompanying set of **frequently asked questions to this guide** is available online here: <https://newclimate.org/news/faqs-climate-contributions>

**>> 01**

**INTRODUCING OUR  
GUIDANCE ON CLIMATE  
CONTRIBUTIONS**



In recent years the engagement of corporate actors on the topic of climate change has increased considerably (Data-Driven EnviroLab and NewClimate Institute, 2020). Driven by a wide range of factors, including rising public awareness of the urgency of the climate crisis, the emergence of new regulations and plummeting costs for clean technologies, companies of all sizes around the world are preparing climate strategies, setting themselves targets and taking initial steps to lower their climate footprint. The scale of the task is unprecedented, and the latest science is clear on the imperative to act rapidly to transform our economic activities (IPCC, 2022).

This guide aims to shed light on one aspect of this challenging puzzle: how to take responsibility for emissions through raising and channelling funds from companies in support of achieving the goals of the Paris Agreement. We set out recommendations for implementing so-called 'climate contributions' in a manner which both incentivises cutting a company's own emissions and enables climate action elsewhere, particularly in sectors and parts of the world where public finance is in short supply. Current approaches, in particular the prevailing narrative of offsetting emissions with low-cost carbon credits, adopted by many companies today, are not delivering the pace of structural change required to avert the most dangerous impacts of global warming. In some instances, they are actively undermining progress on decarbonisation.

**Climate contributions reflect finance provided by an organisation to support climate action beyond its own value chain, without claiming to offset, or neutralise, any actual emissions. They represent a financial commitment that is a complement – and in no way an alternative – to directly reducing one's own climate footprint.**

There is no room for weak, or false measures to tackle the climate crisis. Yet research shows that the integrity and transparency of the climate pledges of some of the world's biggest companies is poor, despite bold claims (Day et al., 2022; Day, et al., 2023a). A major concern with the climate strategies of highly influential companies is that they rely on offsetting large chunks of their climate footprint, both now and in the future. Offsetting approaches are presented under a range of different guises. These include neutralising, balancing out, compensating for, netting-off, etc. actual emissions that are released into the atmosphere. Companies that make claims they are offsetting their emissions (or will in the future) are effectively telling their consumers, shareholders and regulators that their activities have no harmful impact on the climate. All too often, this is not the case and is not possible to unambiguously guarantee.

One mechanism aimed at channelling climate finance – carbon credit markets – is attracting major attention, with a huge increase in engagement from the financial sector, market intermediaries, advisory firms and large corporates.

Carbon credits are certificates which tell the holder they have financed a reduction of carbon dioxide from the atmosphere, relative to what would otherwise have occurred, measured and vetted by a standard-setting organisation. In theory, this is a route to channelling much-needed finance towards climate action. Concerns with the integrity of carbon credits currently on offer are widespread and – coupled with a fundamental incompatibility with playing a major role under the global governance of the Paris Agreement (Fearneough et al., 2020) – are generally not suitable instruments to substantiate offset claims, either today or in the future.

This document aims to help address a growing demand for guidance on how companies can take responsibility for their emissions by contributing to climate action and the overarching global goals enshrined in the Paris Agreement. Many of the themes are equally valid for other public or private organisations as well as individuals, and we refer throughout to companies, primarily for simplicity. Our objective is to increase understanding of the ‘climate contribution’ approach as an alternative to the prevailing offsetting narrative, and provide a common foundation from which other actors, networks and initiatives can integrate the concept into their own guidance and activities. It is intended as a resource that can be used by experts within the voluntary climate action community, corporate actors and observers alike, to set a recognised definition for the emerging approach.

The climate contribution approach does not offer the magical simplicity of a silver bullet for companies to wipe-off emissions from their balance sheet and absolve themselves of responsibility. However, it does offer a number of strengths for building resilient, future-oriented businesses that can thrive in an increasingly carbon-constrained global economy. Many of these strengths are either missing, or materially undermined, where companies adopt an approach in which they claim to offset their actual emissions.

This guide starts with an overview of key elements of a responsible climate framework for companies (→ **Section 2**), before setting out what climate contributions are and how to structure them to fit into this framework (→ **Section 3**). We then explain some of the relative merits of climate contributions, compared to offsetting (→ **Section 4**) and finally discuss appropriate claims for those adopting a climate contribution approach (→ **Section 5**). An accompanying set of online frequently asked questions (→ **FAQs**) attempts to unpick common reactions to debate on the relative merits of climate contributions (compared to offsetting), help resolve misunderstandings and add further clarification on the approach and its potential use.

**Box 1****A note on key terminology**

The landscape of corporate climate strategies is rife with jargon and catchphrases. Such shorthand can help distil complex concepts, simplifying communication. However, it also raises the risk of introducing misunderstandings, both by those using the jargon as well as their audience. Language is important. As we explain, particularly in → **Section 5** on claims, responsible, impactful climate strategies rely on transparent communication. If they confuse, or mislead stakeholders – be they employees, consumers, suppliers, investors or regulators – this can materially undermine their overall climate impact. Where possible we aim to limit jargon in this guide, although almost inevitably will not have caught all terms which are potentially unclear, or open to ambiguous interpretation, by some readers. Here we set out some of the more critical terminology used in this guide that we feel important to clarify upfront.

**Climate contributions** reflect finance provided by an organisation to support climate action beyond its own value chain, without claiming to offset, or neutralise, any actual emissions. They represent a financial commitment that is a complement – and in no way an alternative – to directly reducing one’s own climate footprint.

**Carbon credits** are certificates which tell the holder they have financed a reduction of carbon dioxide from the atmosphere, relative to what might otherwise have occurred, mostly measured and vetted by a standard-setting organisation. The actions underlying carbon credits vary considerably but generally rely on measuring the climate impact of an investment, such as a project, compared to a baseline that is determined by a methodology specific to the circumstances of the investment, e.g. a programme to reduce the emissions from cooking, replacing fossil fuelled electricity generation with renewables, or increasing carbon stored in forests. There is considerable variation in the climate impact of carbon credits issued by different standards, across different technologies and geographies (Carbon Credit Quality Initiative, 2022), which means that they are typically not fungible (as a commodity is).

**Offsetting** is a practice whereby an entity makes a claim that its actual emissions are balanced out, or neutralised, by purchasing and retiring a carbon credit, thereby asserting that the aggregate climate impact of releasing emissions and investing in a carbon credit is equivalent to not releasing the emissions in the first place. Offsetting is presented under the guise of a variety of terminologies used in company marketing materials, such as “compensating”, “reducing the footprint”, netting-out (e.g. “net zero”), neutralising (e.g. “climate neutral”), or “insetting”, as well as purported claims that products, or activities, are “carbon negative” or “climate positive”. Whilst some actors propose the use of different nomenclature to describe offsetting in different contexts, the theoretical concept they rely on is fundamentally the same.

The link between a carbon credit (a noun) and to offset (a verb) has led to prevalent use of terms such as “carbon offsets”, or simply “offsets”. These examples should refer to the action of offsetting climate impact by using a carbon credit. However, many commentators and practitioners appear to use the terms ‘carbon credits’ and ‘offsets’ synonymously, which can be the source of fundamental misunderstanding. We avoid implicitly conflating carbon credits with the practice of offsetting and aim to not use terminology which could create confusion. Carbon credits are certificates. Some elect to use them to justify a claim to offset emissions released elsewhere. However, the certificates are equally valid as a tool for entities aiming to channel climate finance, without any offsetting claim.

## 02

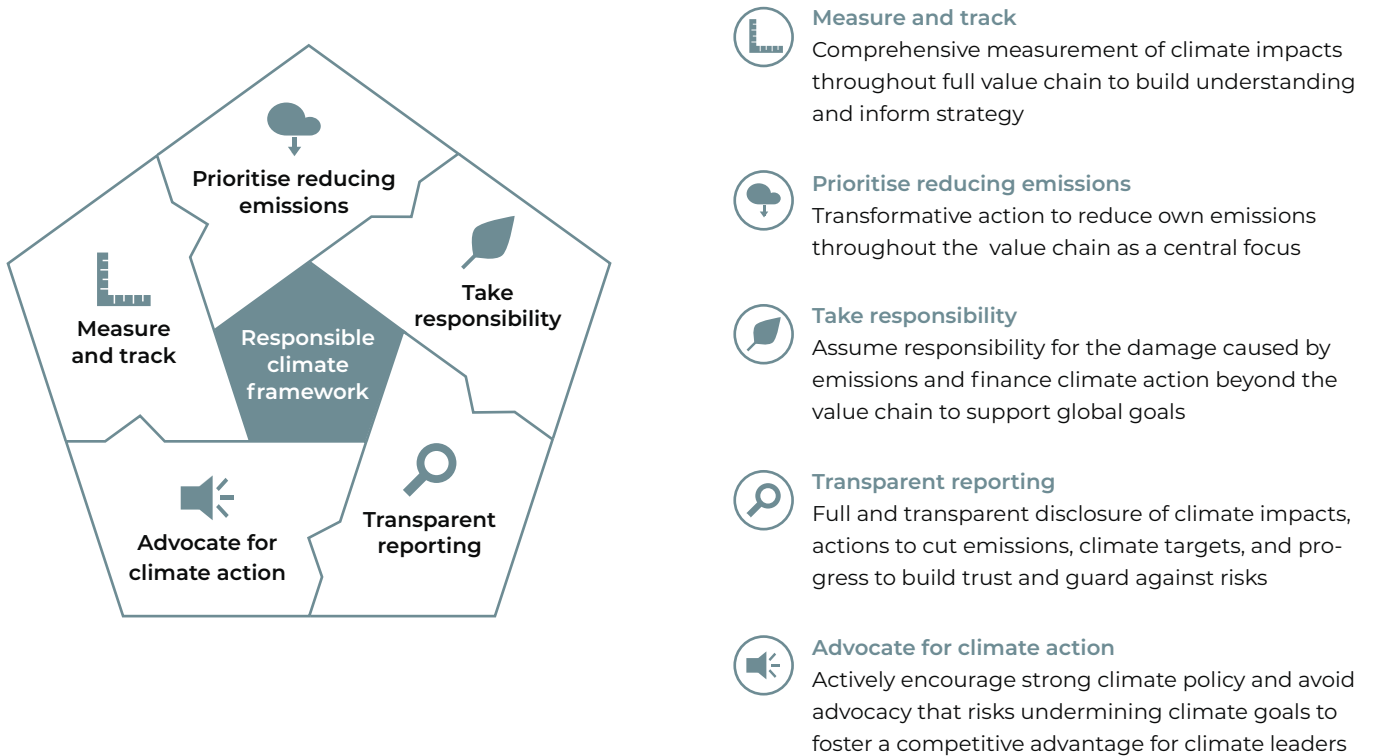
# A RESPONSIBLE CLIMATE FRAMEWORK

**A company aiming to recognise and reduce the climate impact of its activities needs to develop an overarching strategy and embed this throughout its operations and wider value chain. Whilst it goes beyond the scope of this guide to provide comprehensive recommendations on how companies should prepare and implement a climate strategy, we still set out key headline features of what a credible and robust strategy should include in order to explain how and where climate contributions can fit into this framework.**

**In particular, the approach to climate contributions we recommend in this guide can encourage and reinforce efforts to prioritise reducing emissions; to take responsibility for actual emissions; and to provide transparent reporting. This is in-line with a broad range of corporate climate strategy guidance published by other organisations which emphasise the importance of measuring the full scope of a company's climate impact, putting in place a robust emission reduction strategy that aligns with the latest scientific evidence on what is needed to deliver the goals of the Paris Agreement, financing climate action beyond the value chain, and ensuring transparency.<sup>1</sup>**

<sup>1</sup> Whilst the exact labelling and granularity of the steps differs across recommendations, there is broad consensus on key elements of a climate strategy, from organisations such as WWF (Kooijman and Mallon, 2022), Gold Standard (Leugers et al., 2018), SBTi (Science Based Targets Initiative, no date) as well as NewClimate Institute's own climate responsibility approach (NewClimate Institute, 2022).

**Figure 1**  
**Overview of key steps to address climate impacts**



Source: Authors



## MEASURE AND TRACK CLIMATE IMPACTS

As a first step, companies need to build up a comprehensive understanding of the impact on the climate of their activities. This should cover all impacts throughout their value chain. Depending on the type and size of the company, this may involve collecting extensive data both from within the organisation as well as via upstream suppliers and downstream consumers. Preparing a complete overview of climate impacts is an essential basis for a climate strategy. The measurement exercise should be regularly repeated as well as improved over time to track changes as well as incorporate new methods and data.

Emissions from a company's activities are commonly divided up into so-called emissions 'scopes', where scope 1 refers to all direct emissions, such as carbon dioxide released from burning fossil fuels or methane from livestock; scope 2 refers to indirect energy-use emissions, such as from electricity or heat consumption; and scope 3 refers to other upstream and downstream indirect emissions, for example those associated with product use, waste, in the production of input materials, or business travel. A comprehensive climate strategy should measure and incorporate all emissions and, where relevant, wider climate forcers. All types of climate impact – covering different types of greenhouse gases as well as other climate forcers – should typically be converted into carbon dioxide equivalent units to have a comparable, holistic overview, expressed in a common unit.



## PRIORITISE REDUCING EMISSIONS

The most important aspect of any credible climate strategy is to reduce emissions rapidly and at scale across all three scopes. These emission reductions need to be transformative, not incremental. For a company this means investing in new technologies, improving operations and imposing stringent requirements on suppliers, as well as reducing activities where technical solutions to decarbonise do not exist.

It is not feasible to reduce all emissions today. The speed of decarbonisation will vary by sector or type of activity. For example, the prevalence of affordable, mature technologies to cut emissions in the electricity supply sector is greater than in producing steel or cement. However, it is critical that companies prioritise reducing their climate footprint, informed by the latest scientific evidence specific to each particular activity.

A number of tools are available to help prioritise reducing emissions. Companies should put in place incentives throughout their decision-making procedures to ensure a collective attention to decarbonisation, such as imposing a form of carbon price, or ensuring employees are motivated to consider and address climate impacts in their day-to-day activities. They should also avoid creating any perverse incentives which might counteract the primary goal of a climate

strategy to cut emissions, such as using carbon credits to justify offsetting claims as an equivalent alternative. Companies should also set ambitious, transparent decarbonisation targets both in the long-term as well as with interim milestones ensuring a clear vision, with concrete plans for achieving them. The strategy should clearly be compatible with the global goal to cut almost all carbon dioxide emissions by 2050 and avoid any flexibilities that would delay action.

## TAKE RESPONSIBILITY FOR ACTUAL EMISSIONS



Even with a robust climate strategy, companies today still release large volumes of greenhouse gas emissions into the atmosphere and will continue to on their decarbonisation paths. These emissions impose an increasingly high cost on society, the effects of which we are already seeing around the world today, and which will worsen over time. Climate costs are generally not borne by the companies, governments or individuals that are creating the emissions. Economists refer to these as “external” costs if the entities responsible for the damage do not face the full cost associated with their activities. Due to inherent uncertainties in quantifying their value, the damages associated with releasing one tonne of carbon dioxide into the atmosphere are typically presented in ranges. The German Federal Environment Agency uses a damage cost of EUR2022 237 per tCO<sub>2</sub> in 2021, increasing to EUR2022 286 in 2050 (Umweltbundesamt, 2023). Agencies in the United States use a central figure of USD2020 51 per tCO<sub>2</sub> to inform policy decisions (U.S. Environmental Protection Agency, 2021), although the U.S. Environmental Protection Agency (EPA) has proposed to raise this to USD2020 190 per tCO<sub>2</sub>, rising over time (U.S. Environmental Protection Agency, 2022).

Companies creating the damage should also assume responsibility for it. A first step is to minimise emissions wherever possible (see above). However, this alone is insufficient. The emissions released on the decarbonisation pathway still cause harm, both today and into the future. Whilst it is not possible to identify and directly compensate all that are negatively impacted by a warming planet, one means for companies to take (imperfect) responsibility for emissions is to finance climate action beyond their own value chains that would not otherwise have occurred, in a way that supports the goals of the Paris Agreement. This does not absolve companies for the harm caused by actual emissions but can offer a valuable contribution to the global challenge of cutting emissions as fast as possible.

## TRANSPARENT REPORTING



Companies communicate to a wide range of stakeholders, either due to regulatory obligations, or as part of their marketing strategy. Their audiences are varied and can include employees, subcontractors, suppliers, customers, inves-

tors, regulators, civil society groups, amongst a broad group of other possible interests. Providing accurate, factual and complete information in relation to climate matters is an important element of a responsible climate strategy. Companies should report at least annually on the climate impacts associated with all activities throughout their value chain, actions they are taking to cut emissions, climate targets they set themselves, and progress towards achieving these. Full and transparent disclosure is critical to enabling trust and for driving action both via the help of external, as well as internal, stakeholders.

Incomplete reporting or hiding relevant information about a company's impact on the climate and its actions, can risk misleading stakeholders and in many cases may prove counterproductive; a lack of transparency can lead to delay in global climate action, dissatisfaction amongst strategically important stakeholders, and reputational and legal risks for the company.

We also encourage companies to communicate key risks and challenges they face on the journey to decarbonising their operations and wider value chains. These may include highlighting policies that fail to incentivise actions and investments that would reduce emissions. Or it could raise awareness amongst customers that certain products or services have a large climate footprint. Raising attention to barriers to cutting emissions can help put pressure on regulators or consumers to support ambitious climate action.



## **ADVOCATE FOR CLIMATE ACTION**

And finally, companies should embed a commitment to advocate for ambitious climate action throughout their externally facing activities. An important element of advocacy is to encourage strong climate policy. On the other side, companies must avoid any participation – either directly, or via membership associations – in advocacy that seeks to undermine, or otherwise weaken, existing or proposed climate policy measures. Lobbying against effective climate policy, both directly to political decision-makers as well as through misinformation campaigns designed to influence public opinion, has historically proven a critical barrier to government action to tackle climate change.

Current policy landscapes in all major economies around the world are far too weak to provide the enabling conditions to meet the goals of the Paris Agreement (Climate Action Tracker, 2022). This is changing, but at too slow a pace. Businesses committed to decarbonising their activities should work with regulators to raise the stringency of climate policy. This can help deliver a level playing field amongst companies in terms of incentives to take climate action and enable enterprises that demonstrate climate leadership to derive a competitive advantage and thrive sustainably.





## **>> 03**

# **UNDERSTANDING CLIMATE CONTRIBUTIONS**

**In this section we set out what climate contributions are (and what they are not), offer recommendations for features of the approach that can best serve to drive enhanced climate action, both within and beyond company value chains, and highlight key motivations for its adoption by companies looking to implement ambitious climate strategies.**

**The intention of the guidance is to help build general understanding of the approach. We offer constructive suggestions for adopting climate contributions in an effective manner which can serve several climate-related goals. And we set out a number of compelling arguments how climate contributions can help foster more resilient companies ready to thrive as we accelerate on the journey to decarbonise the global economy. The scope of this document focuses on headline structural recommendations for key components of the climate contribution approach that are, for the most part, generally applicable to a broad range of companies, irrespective of their size, sectoral focus or emissions intensity. It does not, however, extend to providing a detailed, step-by-step implementation guide, which would require much greater length and more comprehensive consideration of companies' individual circumstances.**

## 3.1 DEFINING CLIMATE CONTRIBUTIONS

Climate contributions reflect finance provided by an organisation to support climate action beyond its own value chain, without claiming to offset, or neutralise, any actual emissions. They represent a financial commitment that is a **complement** – and in **no way an alternative** – to directly reducing one's own climate footprint.

A critical feature of climate contributions is that they are channelled to support ambitious climate action, which contributes to global efforts to urgently decarbonise our economies and stay within the temperature limit goals set out in the Paris Agreement. They do not contribute to a company's individual efforts to decarbonise its own value chain. Companies, or other entities, making climate contributions forgo any claim of ownership of the impact resulting from their investments. This is distinct from the theoretical foundation of offsetting climate impacts, where carbon credit buyers typically retire certificates they have purchased, claiming full ownership of the associated climate benefits and using this as a tool to assert that some, or all, of their emissions are neutralised. Climate contributions enable and facilitate collective efforts to tackle the global challenge posed by climate change and in no way entitle the provider to claim its emissions are offset. We further discuss limitations with offsetting and appropriate claims in → **Section 4** and → **Section 5** below.

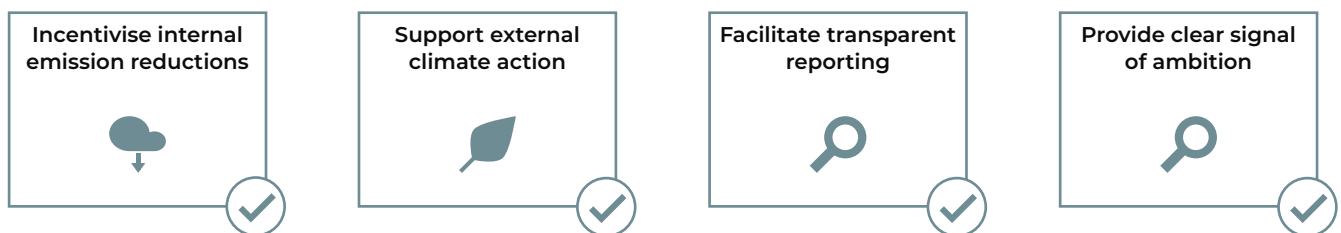
Climate contributions represent a means of taking responsibility for climate impacts on the path to fully decarbonising a company's activities. Whilst every effort is needed to cut emissions as fast as possible, the reality is that a zero emissions economy is not feasible today. The scale of the transformational challenge to get there is immense. Yet all emissions released today, and in the future, contribute to the global stock of greenhouse gases, and are driving damaging impacts to the global climate. Economists refer to these as external costs, or 'externalities', because the negative effects are typically not borne by those that created them. Responsible companies should acknowledge their role as a source of these damages and can use climate contributions as a tool to have a positive effect on society. As such the volume of climate contributions should be tied to a company's climate footprint. A company responsible for causing greater damage should provide higher contributions. We discuss recommended features of the climate contribution approach in → **Section 3.2** below.

Climate contributions should channel finance to projects which align with prevailing scientific consensus on the need to reach global net zero carbon dioxide emissions by 2050, and net negative emissions thereafter, to prevent the most

catastrophic impacts of climate change. Effective climate contributions therefore need to fund impactful initiatives in a manner which incentivises – and avoids disincentivising – collective efforts to promote ambitious climate action. They represent a complement to both a company's own efforts to reduce its emissions as well as the efforts of others, and not an alternative.

## 3.2 RECOMMENDED FEATURES OF A CLIMATE CONTRIBUTION APPROACH

Contributions provided by companies in support of ambitious climate action can, in principle, take a wide range of forms. We set out a selection of recommendations here to structure a climate contribution approach which can serve companies as a tool to deliver on a number of key features of a responsible climate framework (**see → Section 2**). In particular, a well-designed approach can incentivise internal emission reductions, support climate action beyond a company's own value chain, facilitate transparent reporting of a company's climate footprint and provide a clear signal to external stakeholders on its level of ambition.



Individual companies may have valid reasons to deviate from precisely following all of the recommendations we set out in this section in structuring their own climate contribution approach. Our guidance is intended to represent a set of steps that, if adopted in full, would relatively unambiguously demonstrate climate leadership. If electing for adjustments to the recommended approach, companies should offer transparent explanation and, in general, aim to link their choice of strategy to how it best enables the core objectives of a responsible climate framework.

## 3.2.1 RAISING THE FUNDS


### ADOPT A CARBON FEE AS THE MAIN INSTRUMENT





**Setting a carbon fee incentivises own emission reductions and provides a clear indication of a company's level of climate ambition.**

Companies need to raise funding in order to make climate contributions. A carbon fee, applied to a company's full climate footprint at an appropriately high price level, is an effective instrument to raise funding as well as serve a number of complementary objectives. Companies can implement a carbon fee by multiplying their full value chain emissions – converted, where appropriate, into carbon dioxide equivalent units – over a defined period of time (e.g. one year) by a price per tonne. This total is then allocated to fund climate contributions. For example, if a company's full value chain emissions in 2025 are 500 tonnes of carbon dioxide and it applies a fee of USD 200 per tonne, it would allocate USD 100,000 in the form of climate contributions for its emissions in that year.

Applying a carbon price to a company's climate footprint, in the form of an explicit fee, facilitates a number of critical elements of the responsible climate framework, set out in → **Section 2** above:

 **Incentivises a company to prioritise reducing its own emissions.** Through establishing a carbon fee, a company automatically creates an incentive for it to implement all measures to cut emissions throughout its value chain that are cheaper, per tonne of carbon dioxide reduced, than the level of the price. A carbon fee can therefore serve to internalise the cost of emissions and ensure these costs are incorporated into a company's decision-making on day-to-day operations as well as its investments.

 **Provides a tool for a company to take responsibility for the impacts it causes.** A carbon fee directly links the volume of a company's climate footprint to the volume of funding made available for climate contributions. A company responsible for a larger volume of emissions provides, for the same price level, a proportionately larger financial contribution to supporting climate action.

 **Offers a transparent and unambiguous measure of a company's level of ambition.** A carbon fee provides a clear signal to both internal stakeholders – such as employees and shareholders – as well as external stakeholders – such as consumers or regulators – on how serious a company is about taking action to cut its emissions. It is also expressed in a way which facilitates comparison between different companies and can demonstrate the alignment of a com-

pany's business model with global climate strategies. Companies that are able to implement relatively high carbon fees to their full value chain emissions are likely to operate business models that are structurally more robust to consumer, shareholder and government-led interventions to drive down emissions.



## **IMPLEMENT HIGHER PRICE LEVELS TO STIMULATE GREATER CLIMATE AMBITION**

**Responsible companies should price their emissions at a level of at least USD 100-250 per tonne and rising over time.**

Identifying an appropriate carbon price level is a critical part of the climate contribution approach and will have a major influence on its overall effectiveness at both driving internal climate action within a company's value chain, as well as stimulating increased ambition elsewhere.

One metric to inform the level of the price is the social cost of carbon. This is a measure of the net damages imposed on society over time from emitting one tonne of carbon dioxide equivalent units (tCO<sub>2</sub>e). As we noted in section 2, estimates of the social cost of carbon are used to inform policy making in a number of countries. In Germany, the Federal Environment Agency currently recommends a social cost of carbon of EUR 237 per tCO<sub>2</sub> in 2022, increasing to EUR 286 in 2050, which is used to inform certain policy decisions. Government agencies in the United States use a central figure of USD 51 per tCO<sub>2</sub>, with a proposal tabled by the EPA to materially raise this to USD 190 per tCO<sub>2</sub>.

Another way of identifying an appropriate carbon price is to decide on a global temperature limit, or emissions trajectory – such as the headline target of the Paris Agreement – and derive an estimate of the carbon price needed to achieve that goal. In 2017 a 'High-level Commission on Carbon Prices' identified the need for a carbon price of USD 50-100 per tCO<sub>2</sub>e by 2030, and rising thereafter, along with a wider policy package of measures, to avoid warming of 2°C above pre-industrial levels (Carbon Pricing Leadership Coalition, 2017). In the International Panel on Climate Change's Special Report on Global Warming of 1.5°C, carbon prices for scenarios aligned with limiting global temperature rise to 1.5°C, or below 2°C, are on the order of USD 90-220 per tCO<sub>2</sub>e by 2030 (Rogelj et al., 2018). The International Monetary Fund recommends a global average carbon price of at least USD 75 per tCO<sub>2</sub>e by 2030 (Parry et al., 2021). And a poll of 30 climate economists by the news agency Reuters, prior to COP26 in Glasgow in late 2021, found that these experts recommended carbon prices of USD 50-250 per tCO<sub>2</sub>e to fully decarbonise our economies by mid-century, with over half (median value) suggesting a level at, or above, USD 100 per tCO<sub>2</sub>e (Bhat, 2021).

We recommend that companies adopt a carbon fee of at least USD 100-250 per tCO<sub>2</sub>e, with a clear plan to raise this level over time and in response to emerging new evidence. Whilst there is no definitive answer on what a suitable carbon fee level should be, responsible companies should aim to price their emissions around, or above, the more ambitious end of the ranges available in the literature. The evidence indicates global average carbon pricing should be at least around the level of USD 100 per tCO<sub>2</sub>e to facilitate a transition to net zero carbon emissions by 2050 and some national government agencies recommend valuing the cost of social damages in the order of USD 200-250 per tCO<sub>2</sub>e.

## ENSURE COMPREHENSIVE COVERAGE OF CLIMATE FOOTPRINT



**Companies should apply the same carbon fee to activities throughout their full value chain, including all emission scopes.**

An ambitious climate strategy should cover the full extent of a company's greenhouse gas emissions and any wider climate forcers, without differentiating their treatment. Complete coverage, verified independently, is the most robust approach to ensuring a clear and consistent incentive to cutting the breadth of a company's value chain emissions.

Today many companies differentiate both how they report, as well as take responsibility for, their emissions according to scope definitions. For example, a number of organisations only disclose part of their scope 3 emissions (such as business travel), or only propose to take some form of responsibility for scope 1 and 2 emissions. Limited data availability is often one explanation for incomplete coverage. However, others also argue that the responsibility for certain scopes of emissions is typically shared between multiple organisations: one company's scope 1 emissions are commonly also another company's scope 3 emissions. Whilst there are indeed overlaps, unravelling the complex interaction of company emission scopes through entire value chains is in many cases extremely challenging, or impossible. Ultimately, each company should bear full responsibility for emissions throughout its entire value chain as they are, by definition, intrinsically linked to the value the company derives from its operations.

In the case a company is able to clearly identify instances that emissions within its value chain are already subject to a similarly ambitious climate contribution approach, it may elect to exclude these emissions from its own commitment. For example, a grocery retailer may engage its suppliers and encourage (or even require) them to implement a climate contribution approach to their full value chain emissions at a certain fee level. In this instance the retailer could justify limiting the scope of its own approach to its climate footprint that is outside of the coverage of similar mechanisms adopted by their suppliers. It should, however, transparently report its reasons and regularly furnish updated

evidence, including via independent verification, on how these emissions are addressed elsewhere. And, irrespective of the coverage of their climate contribution approach, companies should always fully disclose their complete value chain emissions as per the steps set out in → **Section 2** above.

In the context of the climate crisis and the widespread absence of both sufficient climate regulation and voluntary initiatives to take appropriate responsibility for climate impacts, we recommend all companies apply a carbon fee to their full value chain emissions. This is the only approach which allows companies to unambiguously take responsibility for their climate impacts. With widespread adoption of the climate contribution approach, it may result in multiple companies applying a fee to the same emissions. However, such widespread adoption is not a reality today and given the enormous gap at a global level between current emissions and the goals of the Paris Agreement, applying a fee to the same unit of emission more than once is a minor concern, relative to not pricing it at all.

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In summary, we recommend applying a carbon fee at the level of at least USD 100-250 per tonne of carbon dioxide equivalent units to a company's full value chain emissions as a constructive tool to raising funding for climate contributions. This instrument – along with supporting information on its implementation – offers a clear statement to consumers, shareholders and regulators that a company will cut its own emissions at least where the mitigation cost is below this level. It provides a direct incentive to ensure company decision-makers prioritise delivering internal reductions.

Other mechanisms to raise funds for climate contributions – such as earmarking a share of company profits or tying the scale of contributions to carbon credit market prices – tend to have limitations in terms of transparency, or the price signal they provide to incentivise ambitious climate action. We further discuss selected alternative options in the → **FAQs** accompanying this guide.



## 3.2.2 SPENDING THE FUNDS

Climate contributions support global efforts to urgently tackle climate change by investing in a range of activities that have the potential to yield significant progress in decarbonising our economies. These can include projects that reduce greenhouse gas emissions or remove carbon from the atmosphere, research and development of inaccessible technologies needed to sustain economic prosperity without relying on fossil fuels, or advocacy for strong climate regulation.

The headline goal of channelling any form of climate finance is to achieve the highest possible impact with the funds available. Within an overarching climate strategy these impacts should focus on climate protection – limiting or reducing the stock of greenhouse gases in the atmosphere – but may also seek to deliver further sustainable development benefits (and avoid driving any negative outcomes). Identifying the most effective use of climate contributions is not an easy task. Where money is best spent depends on a wide range of factors and will inevitably change over time. In this guidance we do not offer a definitive list of projects or activities to achieve the highest climate impact for each dollar invested, but instead set out a number of critical principles for companies, and intermediaries advising or acting on their behalf, to consider when deciding how to spend the funds raised within a climate contribution approach.

### **FOCUS ON TRANSFORMATIVE SYSTEM CHANGE TO DELIVER AMBITIOUS, SUSTAINABLE OUTCOMES**



In order to effectively combat climate change, it is essential to recognise that system change is necessary and to start working on the most challenging decarbonisation elements right away. This can involve supporting a rapid transition away from fossil fuels to renewable forms of energy, implementing pioneering energy-efficient technologies, transforming transportation systems, and more broadly rethinking what we produce and how, among other things.

One critical aspect of providing climate finance is identifying ambitious, long-term, sustainable initiatives. Supporting incremental changes, or perpetuating business models that are incompatible with fully decarbonising our economies in the coming two-to-three decades, will have limited impact and could delay progress. For example, investing in battery storage and grid connections to help deliver reliable, affordable renewable energy supply, can help avoid locking-in temporary solutions that could undermine the climate crisis in the long run.



## **AVOID DISPLACING EXISTING FINANCE, OR DISINCENTIVISING GOVERNMENT REGULATION, TO ENSURE THAT THE FUNDING UNAMBIGUOUSLY TARGETS TRULY INACCESSIBLE CLIMATE ACTION**

Effective use of climate contributions should avoid displacing the finance of other private or public actors and ensure that it does not create perverse incentives for governments to weaken their pledges or regulations (Warnecke et al., 2018; Fearnough et al., 2020). Finance should be ‘additional’ in that it represents funding climate initiatives that would not otherwise happen. And ideally it should flow to activities in countries where governments demonstrate they are serious about implementing ambitious climate policy that is commensurate with their resources. As such, climate contributions from companies can complement, and reinforce, national efforts to decarbonise.

To have the best chance of ensuring that finance is channelled to initiatives that neither displace existing finance streams, nor encourage governments to delay climate regulation, companies can focus on identifying projects that represent so-called ‘high-hanging fruit’. These represent investments in climate action that are currently inaccessible to either governments, or the private sector, typically due to their relatively high cost, or risk. For example, channelling contributions to projects located in developing countries, and in particular, least developed countries, can raise the likelihood that the investments go beyond what governments can realistically deliver today with their own resources. Contrastingly, climate contributions should generally avoid financing climate action in advanced economies, where governments already have the means to use their extensive own resources.

Effective use of funds should focus on identifying and supporting nascent technologies that have limited uptake to date and are perceived as too risky for commercial investors. In some countries this may include catalysing investments in renewable energy to help kick-start scaling up their roll-out, reducing capital costs and setting up the building blocks for growing domestic expertise. Whereas in other countries that are already further progressed in transitioning their energy systems, this could focus on more challenging areas, such as electrifying heavy-duty trucks to deliver freight, with potential spill over benefits for lowering global costs and raising adoption levels.

We set out further insights into ‘high-hanging fruits’ in → **Box 2** with greater detail in a separate report: The evolution of voluntary climate finance to the high hanging fruit of mitigation potential. The IEA’s Clean Energy Technology Guide also provides a useful, updated overview of technologies to cut emissions across different sectors, their importance for decarbonising the global economy and their state of readiness for deployment (IEA, 2022).

**Box 2****The evolution of voluntary climate finance to the high-hanging fruit of mitigation potential**

**The high-hanging fruit of mitigation potential refers to the technologies and measures to decarbonise emission sources that remain otherwise entirely inaccessible to host country governments in the near- and medium-term future, on account of extraordinary costs or other insurmountable barriers that are challenging to overcome.** High hanging fruit mitigation projects can support global ambition raising through the identification and implementation of solutions for emission sources that are the hardest to abate.

High-hanging fruit projects may represent the only credible solution to substantiate offsetting claims by ensuring that overall climate change mitigation impact is enhanced, rather than compromised. The global governance framework of the Paris Agreement represents a different context from its predecessor the Kyoto Protocol, and requires a reconsideration of the outdated concept of 'additionality'. Projects should be sufficiently ambitious that they avoid presenting any conflict with the host country's own ambition. Otherwise, the prospect of carbon credit revenues may present a perverse incentive for countries to limit the ambition of the climate change mitigation targets they commit to. The costs of offsetting must also be high enough to send a signal to the buyer that avoids distraction and delay from cutting its own emissions. Buyers should not turn to carbon credits as a low-cost substitute to its own decarbonisation efforts.

Climate contributions with no offsetting claims may be the most appropriate and constructive channel for financial support to some high-hanging fruit mitigation projects. By their nature, some high-hanging fruit technologies and measures may not feasibly be implemented under carbon crediting mechanisms as they are still in earlier stages of development or entail significant risks. Since climate contributions are not used to justify offsetting claims, support provided through this means can reach a broader range of project types, as it is not dependent on the quantification of outcomes in terms of emission reduction units. High-hanging fruit projects represent a very attractive option for ambitious support providers who are interested to be at the forefront of innovation, channelling voluntary finance to areas that are otherwise overlooked by the limitations of crediting mechanisms.

Section B of the report [The evolution of voluntary climate finance to the high-hanging fruit of mitigation potential](#) (Day, et al., 2023b) provides indicative examples of technologies and measures that would constitute high-hanging fruits, including technologies for heating in extreme climates, electrification of heavy duty transport in emerging economies, and emerging measures for arable agriculture.

It is highly challenging to identify high-hanging fruit projects today. A pipeline of projects is not readily available and will require new interventions to develop. Given the limited readiness of established crediting markets to present a compelling project pipeline, companies that are interested to support high-hanging fruit projects to demonstrate their climate leadership will need to play a driving role, by directly identifying projects, or pooling resources with others by contributing to initiatives that seek to do so.

**Note:** This Box is adapted from [The evolution of voluntary climate finance to the high-hanging fruit of mitigation potential](#) (Day, et al., 2023b).

## **CLIMATE CONTRIBUTIONS CAN REFLECT A WIDER POOL OF CRITICAL INVESTMENTS THAN THOSE SUITABLE TO CARBON CREDITING**

Not all climate contributions will necessarily yield carbon reductions that are straightforward to measure. A key advantage of the climate contribution approach is that it gives companies the flexibility to channel finance to activities that are not suited to carbon crediting because there is no associated claim of ownership for the outcome. This could include initiatives where the impact is difficult to quantify in terms of emissions reduced, where there is a risk that the storage of carbon is not permanent, or simply where riskier new technologies fail or are unable to successfully deliver at scale.

**Research and development** is essential to explore new technologies and approaches, even if ultimately in some cases their success proves limited. For example, piloting the use of heat pumps in extremely cold climates, or innovative cooling systems in cities exposed to increasingly prolonged heat waves, can yield critical insights into developing our future energy systems, but it is important to continue researching, testing and further developing these approaches to determine their effectiveness. Climate contributions can fill investment gaps in riskier climate mitigation measures to better understand their potential and showcase technologies that can mature through their uptake into more commercially viable investment opportunities.

**Protecting and restoring the natural environment** is a critical component of limiting global warming that remains vastly underfunded. Natural ecosystems, such as forests and wetlands, absorb and store large volumes of carbon dioxide. Their health plays an essential role in all global decarbonisation scenarios. Whilst a number of carbon crediting standards today issue credits to initiatives aimed at both reducing carbon emissions and increasing the storage of carbon in different natural ecosystems, these are not suited to offsetting actual emissions that will remain in the atmosphere for centuries to millennia. The main reason for this is that the carbon savings from protecting and restoring the natural environment present material risks of reversal (i.e. they are not necessarily permanent), for example through increasing impacts linked to global warming such as forest fires, droughts, pests or changing the use of land over time. This is the case irrespective of the funding instrument. However, climate contributions can offer a valuable source of finance to promote natural storage of carbon without the non-permanent risks and associated quantification challenges undermining the overall approach.

In addition to providing financial support towards capital and land, there are other important ways to fight climate change that climate contributions could support. **Advocacy and awareness campaigns** can help bring attention to the issue and promote action at the individual, community, and government levels.

**Encouraging behaviour change**, such as reducing energy consumption, using public transportation, or altering diets, can also be a crucial part of the solution. For example, promoting ideas to reduce livestock dependence by developing protein-based meat substitutes and engaging people to adjust the food they eat can help cut food system emissions. These investments are extremely challenging to quantify explicitly in terms of their climate impact. However, targeted, informed investments can help drive the societal and system transformation needed to address decarbonisation barriers.

## **CARBON CREDITS OFFER AN ESTABLISHED ROUTE FOR THOSE SEEKING QUANTIFIABLE IMPACTS, ALTHOUGH ARE LESS SUITED TO SUPPORT TECHNOLOGIES AND MEASURES WITH HIGHER RISKS AND UNCERTAINTIES**

Today, carbon credits are a widely used mechanism to channel funds towards climate-friendly activities. These certificates offer a degree of reassurance that the funds are channelled to activities which third parties have measured and verified, often according to methodologies laid out by standard-setting bodies with varying degrees of robustness. Carbon credits generally reflect activities that are suited to generate quantifiable climate outcomes, for example because technologies are more mature and better understood. They can provide a straightforward way for companies to invest their climate contributions, particularly those with limited resources and expertise to identify suitable initiatives to fund. However, due diligence is still critical as today's carbon credit offerings are highly varied in terms of their likely overall impact on the climate, with many units failing to meet the fundamental requirements that underpin a high-quality credit, e.g. see the ratings of the Carbon Credit Quality Initiative which demonstrate issues with all types of carbon credits covered by its assessment (Carbon Credit Quality Initiative, 2022).

Whilst the retirement of carbon credits represents a potential vehicle for climate contributions, companies should not use them to substantiate any claim which implies that their actual emissions are offset. Under the climate contribution approach, climate contributions are a complement to reducing one's own emissions and in no way an alternative. We further discuss important limitations of carbon credits, and more broadly using them for offsetting, in → **Section 4**.

## **CHANNEL CLIMATE CONTRIBUTIONS TO ACTIVITIES BEYOND THE VALUE CHAIN AS A COMPLEMENT TO DRIVING WITHIN VALUE CHAIN REDUCTIONS**

Climate contributions represent a complement to both a company's own efforts to reduce its emissions as well as the efforts of others, and not an alternative. As such the contributions should be additional to a company's commitment to cut emissions throughout its own value chain.

In theory it may be similarly effective to channel climate contributions to particularly inaccessible, additional mitigation within a company's own value chain as outside of it (in other companies' value chains). However, this option would introduce a perverse incentive for companies to spend the funds on activities that they should implement anyway, undermining the overall climate impact. And crucially, it is likely impossible that external stakeholders, such as consumers, regulators or other observers, would have access to sufficient information to determine whether or not any use of climate contributions within a company's own value chain were truly additional to investments it would anyway need to make given the carbon fee price signal.

We recommend channelling finance beyond the value chain to improve transparency, ensure an effective price signal and allow observers to scrutinise the effectiveness of the investments. Any alternative would, at best, introduce ambiguity and uncertainty on the overall legitimacy of the approach. At worst, it could undermine the approach entirely.

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Ultimately, a comprehensive approach that includes a range of strategies is necessary to effectively address the climate crisis. Companies should monitor the impact of their funding, adjust over time and share learnings for others.

However, one of the challenges of identifying how to spend the funds from climate contributions is that today there is a limited offering of truly ambitious initiatives and projects by third-party intermediaries. This presents a risk that the choice of investments made by companies may not be the most effective at mitigating climate change. To address this challenge, it is essential for companies to perform their own due diligence and carefully vet potential investments. This could involve engaging with stakeholders, conducting site visits, and working with independent evaluators to ensure that investments are aligned with

ambitious climate objectives. The development of new funds, set up by project developers and other intermediaries, which focus on effective disbursement of climate contributions, outside of existing carbon crediting structures, would also offer a valuable tool for companies to pool their resources. Milkywire's Climate transformation fund is an example of a helpful step in this direction (Milkywire, 2023).

In summary, while carbon credits are still perceived as a mechanism for channelling climate finance, they are linked to risks and uncertainties and are not the only option available. Companies should consider a range of activities and initiatives to invest in, and perform due diligence to ensure that their investments are effective in mitigating climate change. By taking a comprehensive approach to climate finance, companies can play a critical role in addressing one of the most pressing challenges of our time.





### **3.3 VALUE PROPOSITION OF CLIMATE CONTRIBUTION APPROACH**

The climate contribution approach offers companies a powerful tool to decarbonise their own value chain, take responsibility for the emissions they help create, and provide their stakeholders – including customers, suppliers, investors and regulators – with a transparent, easy-to-understand metric of their climate ambitions. It provides an effective mechanism for preserving and maintaining long-term value, ensuring a competitive advantage amidst the current global climate emergency, both in terms of product offering to consumers as well as to investors.

The benefits of the climate contribution model accrue to the companies which adopt it at the same time as aligning with national, and global, efforts to protect the climate. For the climate, the implications of companies implementing this approach can be immediate and are unlikely to present material trade-offs. For companies, the advantages of taking up climate contributions are likely to vary by sector or geography and may take time to materialise. The approach explicitly requires companies to raise and channel funds to climate action that they may not otherwise have done, presenting a short-term financial cost. However, these investments, and the internal incentives created by the carbon price signal, can present important opportunities for companies to sustainably capture and retain value in a fast evolving commercial and regulatory environment.

#### **CAPTURE MEDIUM-TO-LONG TERM VALUE THROUGH CLIMATE-COMPATIBLE BUSINESS ACTIVITIES**

Through establishing a clear internal investment signal, adopting the climate contribution approach can reorient a company's strategies to capture medium-to-long term value through climate-compatible business activities. This limits risks such as losing value from stranded assets, or misaligned strategic focus, and can present important opportunities to profit from changing consumer preferences, which attach increasing value to goods and services with lower climate footprints. Furthermore, this approach can serve as a tool to help prepare companies for forthcoming regulatory interventions, such as new and increasingly ambitious climate policies. As climate-related regulations ramp up over time, they will impose an increasing burden on companies that are making slow progress on their decarbonisation journeys. Overall, implementing an ambitious level of carbon fee across a company's value chain emissions can help build the resilience to future market and regulatory developments that underpins a sustainable business model.

## **ENHANCE BRAND AND PROTECT AGAINST REPUTATIONAL, LEGAL AND COMMERCIAL RISK**

Adopting a climate contribution approach allows companies to transparently acknowledge responsibility for their actual emissions and to take positive action to address them. This can improve their brand and protect against reputational and possible legal or commercial risk. Companies are coming under increasing scrutiny to present credible climate strategies, with the actions to match, that are commensurate with the scale of the challenge underscored by the climate emergency. Detailed evaluation of the integrity of climate pledges set out by companies touting themselves as climate leaders has shown that many are in fact misleading their stakeholders and relying on unsubstantiated plans to offset large chunks of their climate footprint (Day et al., 2022; Day, et al., 2023a). Legal challenges to corporate marketing of climate credentials are also on the rise with formal complaints raised against the likes of the airline KLM in the Netherlands and SK Lubricants in South Korea, amongst others. And regulators are starting to legislate to protect consumers from inaccurate or misleading information. For example, the European Union recently set out its proposal for a Directive on Green Claims, which it would enforce through consumer protection law (European Commission, 2023).

The climate contribution approach offers a mechanism for companies to take a novel approach in which they can advertise their climate leading credentials through an unambiguous and transparent signal of their level of ambition. Through reporting their full climate impact, applying a high carbon fee and channelling funds to effective action in support of global climate goals, companies can build their brand and will limit the opportunities to mislead their stakeholders, which could otherwise undermine their overall climate impact and lead to legal or commercial risk.

The climate contribution approach does not offer the magical simplicity of a silver bullet for companies to wipe-off emissions from their balance sheet and absolve themselves of responsibility. However, it does offer a number of strengths for building resilient, future-oriented businesses that can thrive in an increasingly carbon-constrained global economy. Many of these strengths are either missing, or materially undermined, where companies adopt an approach in which they claim to offset their actual emissions. Given the prevalence of the offsetting model, we discuss a number of its key limitations in the following section.

**>> 04**

**LIMITATIONS WITH  
OFFSETTING**

## 4.1 THE CONCEPT OF OFFSETTING

Offsetting is a theoretical concept. It is currently adopted widely by companies to substantiate claims about their climate footprint today, as well as relied on as a tool to meet future climate pledges (Day, et al., 2023a). The concept uses the purchase and retirement of a carbon credit – issued to a project judged to reduce emissions relative to a counterfactual scenario without the investment – to neutralise an entity’s actual emissions that were released into the atmosphere. An offset claim effectively advertises that the negative impact on the climate of certain emissions is balanced out by the reduction in emissions elsewhere, such that the overall effect is the same as if the emissions were never released in the first place. Offsetting is used to justify claims such as “carbon - ” or “climate neutral”, “net zero”, and the like. However, the theory underlying the concept no longer holds up and offsetting does not align with the goals of the Paris Agreement. Whilst the premise may have offered some partial successes in the past, using carbon credits to offset emissions elsewhere – effectively a zero-sum transfer from one place to another – is not enough to address the urgent need for decarbonisation.

An increasing number of companies, covering an ever-larger volume of global emissions, are setting voluntary climate pledges that at least partially recognise the need to eradicate global emissions as quickly as possible. These pledges, and associated claims, are extremely diverse both in their labelling (adopting terms such as “carbon neutral”, “net zero”, “climate positive”, “net negative”, and various other related formulations) as well as their commitment to urgent decarbonisation of the emissions embedded in the company’s value chain (Day, et al., 2023a). A key challenge to interpret the actions and targets of companies lies in how they are delivering on their stated ambition. Claiming to offset actual emissions is a problem because it can mask the true picture of a company’s actions and make it difficult to distinguish their role alongside delivering deep decarbonisation (World Bank, 2022). As the World Bank’s annual report on the ‘State and Trends of Carbon Pricing 2022’ notes, the wide range of corporate climate plans and intended use of carbon credits leads to “cases where companies are over-relying on carbon crediting to meet their climate targets”; “selling “carbon neutral” products or services without accounting for a significant share of emissions”; or making “claims [that] could confuse customers” (World Bank, 2022). In analysing a selection of major global companies for the Corporate Climate Responsibility Monitor we found that companies only commit to cut their own emissions by 36% in their net zero target year, with the remaining 64% either excluded from scope or where there is either an explicit or implicit role for offsetting (Day, et al., 2023a).

It is important to note that purchasing carbon credits is not the same as offsetting, and the distinction between the two is critical (**see our note on terminology in Section 1, → Box 1**). Carbon credits are certificates. Some elect to use them to justify a claim to offset emissions released elsewhere. However, the certificates are equally valid as a tool for entities aiming to channel climate finance, without any offsetting claim. The commoditisation of carbon credits has resulted in a race to focus on supporting the cheapest mitigation, which creates perverse incentives. While we need many tools to tackle the climate challenge, offsetting presents significant risks of undermining global decarbonisation efforts.

## 4.2 DEMAND SIDE: OFFSETTING DIMINISHES INCENTIVES TO CUT EMISSIONS

Offsetting is still widely used by companies as a substitute to reducing their own emissions, despite a relatively broad consensus in the messaging from leading carbon crediting standards and experts that it is not an adequate alternative. The abundance of cheap carbon credits, which are available for as little as USD 2 per tonne of CO<sub>2</sub> (or even lower in some cases), disincentivises businesses from implementing ambitious mitigation plans within their own value chains (Day, et al., 2023a). This carbon price is well below the level required to send a clear investment signal to companies to adopt sustainable business practices.

Offsetting with low-cost credits as an alternative to cutting one's own emissions can directly delay urgently needed climate action. This 'substitution effect' undermines collective efforts to decarbonise. Neutralising own emissions with carbon credits allows organisational activities to continue along a business-as-usual pathway, with the credits effectively serving as a "license to pollute". Companies that opt for offsetting instead of taking steps to address their actual climate footprint risk locking-in carbon intensive infrastructure for years to come. Recent high-profile claims to market carbon neutral fossil fuels provide an example of this trend that received a lot of attention and criticism (Carbon Market Watch, 2021). However, analyses such as the Corporate Climate Responsibility Monitor (Day et al., 2022; Day, et al., 2023a) show that such practices are widespread across leading organisations in a number of industries.

In some instances companies procure higher cost carbon credits and establish strategies that aim to avoid the substitution effect, for example by setting so-called "science-aligned" or "-based" targets to cut their own value chain emissions. However, offsetting still presents material trade-offs in terms of potential climate impact, to the same actions without making an offset claim. Through

offsetting, regardless of the circumstances, a company claims to neutralise parts (or all) of their climate footprint, effectively erasing these emissions from their carbon inventories. This hides the true climate impact of their business activities, making it difficult for consumers, clients, stakeholders, and potential investors to estimate the real climate impact of a product or service.

Without providing full transparency on the volume of emissions reduced and the amount offset, any claims of “carbon” / “climate neutrality” or “net zero” are potentially misleading. The Corporate Climate Responsibility Monitor 2023 sets out an analysis of the climate pledges of 24 major corporations and found that their net-zero claims only commit to a combined emission reduction of 36%, showcasing how difficult the use of offsetting makes it to distinguish between true climate ambition and greenwashing (Day, et al., 2023a). These neutrality claims create a false impression that a product or service has no negative impact on the climate, thereby encouraging the continued proliferation of carbon intense products and services. Offsetting-based marketing claims, by definition, aim to attract customers and investors as well as ward off regulators. Their central objective is to send a signal to increase demand for their products, to reach new investors or maintain existing ones, or to encourage regulators to delay policy interventions, for companies that continue to rely on carbon-intensive operations.

### **4.3 SUPPLY SIDE: CARBON CREDITS ARE NOT A PERFECT COUNTERBALANCE**

The majority of carbon credits retired today are classified as “forestry and land use” projects, which either aim to protect existing biological carbon dioxide storage, or enhance its removal from the atmosphere. A large share represent certificates for activities that purport to either reduce carbon released from forests, or increase the absorption and storage of carbon in natural habitats (Donofrio et al., 2022). The main problems with carbon credits, and especially with preserving or enhancing biological carbon dioxide removals, relate to issues around fundamental criteria that underpin their environment integrity, including concepts such as additionality, permanence, double claiming, and resource scarcity. Inherent uncertainties in carbon crediting approaches make it impossible to guarantee that each credit equals a tonne of avoided or removed emissions. Carbon credits therefore do not serve as an effective substitute for reducing actual emissions.

The environmental integrity of a carbon credit reflects the extent to which the certificate offers a guarantee that certain fundamental criteria are met. Namely, high-quality carbon credits should ensure that the emission reductions they reflect are accurately and completely measured against an appropriate baseline of what would have happened in the absence of the revenues from the sale of credits. A number of methods exist for determining this 'additionality', but all suffer to varying degrees from the lack of perfect foresight (the counterfactual of what would have otherwise happened is always uncertain), the need for a certain subjective judgement, and in some cases, limited data availability. The requirement to justify that an investment would not have happened without carbon credit revenues can also create a perverse incentive for countries to weaken (or limit strengthening) the ambition of their national targets (Fearneough et al., 2020).

The lack of permanence in the storage of carbon, especially for credits from biological carbon dioxide removals is another critical risk that limits the appropriateness of carbon credits for offsetting. Again, we cannot determine with certainty how long carbon is stored in natural ecosystems, such as forests and wetlands. When carbon dioxide is released into the atmosphere it remains there for centuries to millennia. Safeguards intended to ensure against this risk for carbon credits can only offer guarantees for a matter of decades at best. Even these rely on a number of critical uncertainties, such as whether the crediting standard, the project developer and the credit buyer continue to operate, or whether if they did, they would truly be held accountable for the mis-founded claims they had made a number of years, or even decades, in the past.

Other uncertainties that impact the environmental integrity of offsetting claims using carbon credits include possibilities that emission reductions reflected in the carbon credits were simply displaced somewhere else, so-called 'leakage', or if they were counted more than once by different actors, for example by a country in its reporting against national targets as well as a company's marketing materials. And many future commitments to offset emissions also appear founded on unrealistic assumptions about the availability of options to remove carbon in the future. Our recent study investigating the climate pledges of 24 major companies estimated that if all companies were to implement similar offsetting strategies (compared to those analysed), the demand for biological carbon dioxide removals would exceed the technical limits of the planet's natural resources by two to four times (Day, et al., 2023a).

The overall quality of today's carbon credit supply is weak and does not reflect the state of the climate emergency and the global goals of the Paris Agreement, in which additional climate action needs to target unambiguously inaccessible measures to cut emissions. A number of initiatives have sprung up in recent years aiming to shed greater light on the integrity of carbon credits. These make

**2**  
For example, the Taskforce for Scaling the Voluntary Carbon Market (a private sector initiative set up in 2021 by a number of large companies and financial institutions); the Integrity Council for Voluntary Carbon Markets (an offshoot of the Taskforce aiming to identify criteria for improving the quality of carbon credits); public and privately funded credit scoring initiatives such as the Carbon Credit Quality Initiative, Sylvera, or Calyx; or the Voluntary Carbon Market Integrity Initiative (a multistakeholder platform developing guidance to companies related to the use of voluntary carbon markets for “net-zero” claims).

proposals to improve the quality of credits and scale their offering through commoditisation.<sup>2</sup> However, while such efforts may well raise the bar for carbon credits, they are unlikely to address the underlying inherent uncertainties that make credits inappropriate for offsetting. Recent developments underline this issue. The American Carbon Registry – a crediting standard based in the United States – made an assessment that “no crediting programmes or credits in the market today will meet the current proposed ICVCM [Integrity Council for the Voluntary Carbon Market] threshold” for their Core Carbon Principles (American Carbon Registry, 2022). Analysis into the quality of credits issued by the largest carbon crediting standard, Verra, found that 90% of their supplied rainforest credits failed to deliver the promised mitigation (Patrick Greenfield, 2023). An investigative report by Bloomberg Green identified that credits sold to a number of large companies by the Nature Conservancy were attributed to protecting land that was in little to no danger of deforestation (Elgin, 2020). And there is a growing body of similar findings, exposed by researchers and journalists, that call into question the legitimacy of certified emission reductions issued as carbon credits for the purpose of offsetting.

## **4.4 PUBLIC SCRUTINY AND REGULATORY ACTION ARE ON THE RISE**

Media coverage highlighting the controversies around offsetting claims is increasing, as more and more evidence suggests that a carbon credit cannot guarantee a permanent reduction or avoidance of one tonne of CO<sub>2</sub> (Patrick Greenfield, 2023). And offsetting can also expose a company to legal as well as reputational risk. Over the past years climate change litigation cases against corporations and governments have surged, with cases filed between 2020 and 2022 compromising approximately 25% of all global climate litigation cases to-date. Misleading advertisement through neutrality or net-zero claims is the basis for about 20% of all climate change litigation cases against corporations (Sabin Center for Climate Change Law, 2023). Through these cases there is emerging evidence that companies are withdrawing marketing materials that are underpinned by the concept of offsetting. For example, legal action in German courts has led to major brands, including TotalEnergies, Beiersdorf and DM, removing their climate neutral advertising claims (Carbon Pulse, 2023).

Regulators are also taking steps to crack down on misleading claims, with the EU and the UK leading the way with concerted policies to limit greenwashing. The EU’s proposed Directive on Green Claims would require companies to



transparently disclose what part of their claims rely on offsetting, and sets out conditions that carbon credits used for offsetting would need to meet (European Commission, 2023). The UK's Advertising Standards Authority updated its guidance on claims, with a particular focus on banning unqualified carbon neutral and net zero claims as well as requiring marketers to provide information on if and how offsetting plays a role in substantiating any claims (CAP News, 2023). There is therefore increasing likelihood that companies that rely on offsetting to either fulfil their climate pledges or back up marketing campaigns may face legal challenges if the claims are found inaccurate or misleading.

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In summary, offsetting has become a common practice in major companies' sustainability strategies to reduce their climate footprint, despite major flaws in the applicability of the logic today, in the midst of the climate crisis. Due to the issues around uncertainties in environmental integrity, one carbon credit cannot offer a robust guarantee to represent the permanent removal or avoidance of one tonne of CO<sub>2</sub>. Offsetting is not a substitute for actual emission reductions. Thus, neutrality claims can mislead consumers, investors, and regulators, hiding the true climate impact of products or services. This in turn- risks delaying climate action and puts a company at reputational, or even legal, risk.

In light of these challenges, it is crucial to recognise that currently available carbon credits cannot deliver the level of emission reductions required to address climate change, particularly if they are used for offsetting. Instead, a more comprehensive approach is needed that combines the continuous finance flow with incentives to reduce own emissions and invest in sustainable business practices. The climate contribution approach offers a more effective avenue to stimulate emission reduction activities both within a company's value chain as well as beyond it, avoiding many of the pitfalls and trade-offs associated with offsetting.

**>> 05**

**APPROPRIATE CLIMATE-RELATED CLAIMS**

## 5.1 IMPORTANCE OF CLIMATE-RELATED CLAIMS

A climate-related claim made by a company refers to a statement, communication or representation that implies or suggests how the company (or one of its products, services or brands) is addressing its climate impact. This can range from as simple as a “climate neutral” label, to a more comprehensive annual sustainability report by the company which details its impacts and actions in relation to climate issues. Climate-related claims are often used by companies as a marketing tool to defer regulation or attract environmentally conscious consumers and investors.

Climate-related claims can be used in various ways, such as:

- **Marketing and advertising:** Companies use climate-related claims in their marketing and advertising campaigns to promote their products or services as environmentally friendly or sustainable. For example, a company may claim that its product is made from recycled materials, uses renewable energy sources or has a lower climate footprint compared to other similar products.
- **Corporate reporting:** Companies use climate-related claims in their sustainability or corporate social responsibility reports to demonstrate their commitment to addressing climate change and reducing their environmental impact. These reports are used to communicate with stakeholders, including investors, customers, and regulators.
- **Product labelling and certifications:** Companies use climate-related claims in product labelling or third-party certifications, to demonstrate that their products or services meet certain environmental standards or criteria.

Through detailing company actions, achievements or aspirations, claims aim to promote and to differentiate products or services from those of competitors. The terminology and general language of claims is critical as it influences how different stakeholders are influenced by corporate marketing. If claims related to climate credentials are inaccurate, or misleading, this can undermine efforts to cut emissions (Fearnough et al., 2020). For example, if a company exaggerates the impact of its activities on the climate, this may cause well-intentioned customers to increase their demand for products towards those with a higher climate footprint, or investors to shift their capital towards companies with weaker decarbonisation plans. Regulators could also limit the ambitions of their climate policies if they are led to believe that certain high-profile companies have a lower impact on the climate than they do in reality.

Airlines touting their flights as “carbon neutral” provides a salient example of the importance of climate-related claims. This marketing claim encourages potential customers to fly more than they otherwise would. Some travellers may also interpret the claim to imply that the climate impact of taking up such an offer is lower than alternatives, such as using a train to get to the same destination. The reality is that flying is far more harmful to the climate than alternative transport modes, or staying at home, and the impacts from flying extend beyond just the carbon dioxide emissions referred to in the label.

In general, the full climate impacts of company activities are complex to understand and likely impossible to digest into short headline soundbites. A survey by the German Federation of German Consumer Organisations found out that only ten percent of respondents could correctly classify the connection between “climate neutrality” and offsetting and that the majority incorrectly assume that “climate neutral” is synonymous with “fewer greenhouse gas emissions” (Verbraucherzentrale NRW, 2022). And the Netherlands Authority for Consumers and Markets found, via a survey, that terms such as ‘carbon-neutral’ are not properly understood, with less than half of consumers identifying a difference between delivering actual emission reductions and offsetting (Authority for Consumers & Markets, 2022). Consumer protection agencies are actively engaging in the topic and considering tightening regulation to police misleading claims, with one prominent example the European Union’s proposal for a Directive on Green Claims (European Commission, 2023). And at least certain companies, including the airline EasyJet, have shifted their strategy away from marketing initiatives, such as claiming they are “carbon neutral”, that rely on offsetting (Sandle, 2022).

## 5.2 CHARACTERISTICS OF APPROPRIATE CLAIMS

Credible climate-related claims should be honest, complete and avoid misleading relevant stakeholders. As per the responsible climate framework set out in → **Section 2**, it is important that claims are transparent and therefore allow independent scrutiny and verification. A number of different organisations have set out guidelines for what climate, and broader environmental, claims should look like, particularly in the context of tackling ‘greenwashing’; the practice of exaggerating a company’s environmental credentials. Based on these guides, the following points highlight key headline characteristics of appropriate claims (Federal Trade Commission, no date; OECD, 2011; The European Consumer Organisation, 2020; Competition & Markets Authority, 2021; ISO Standard, 2021; Gold Standard, 2022):

- A** **Clear and understandable:** The claim should be presented in clear and understandable language that consumers can easily comprehend. Technical jargon or vague language can create confusion and reduce the credibility of the claim.
- B** **Specificity:** The claim should be specific and quantifiable, such as the percentage of reduction in greenhouse gas emissions or the amount of renewable energy used. Specificity makes the claim more credible and allows consumers to make informed decisions to compare different options.
- C** **Evidence-based:** The claim should be supported by robust and verifiable evidence, such as scientific data, third-party certifications, or independent audits. Companies should provide evidence to back up their claims and be transparent about their methods of measurement, including potential limitations.
- D** **Up-to-date:** The claim should reflect the most up-to-date information and best practices. As scientific knowledge and environmental standards evolve, companies should update their claims accordingly and remove historic claims.
- E** **Contextualised and complete:** The claim should be placed in the context of the company's full value chain climate impact and associated strategy. Claims should not rely on partial information or hide details that could alter the interpretation of the messaging.
- F** **Relevant:** The claim should be relevant to the company, product or service marketed. Claims that are not relevant or are only tangentially related to the product or service may be seen as "greenwashing" and undermine the credibility of the company.
- G** **Independent verification:** Claims that have been verified by a third-party, such as a recognised certification body or auditor, can offer greater credibility than claims that are self-declared by a company. Verifiers should be truly independent, without financial, or other interests in the outcome of their assessment.

## **RESPONSIBLE COMPANIES CAN HIGHLIGHT THEIR OWN ACTIONS AND GENERAL SUPPORT TO GLOBAL DECARBONISATION EFFORTS**

Under the climate contribution approach companies can market their credentials both in terms of the actions they are taking to cut their own emissions, as well as the contributions they are making towards climate action beyond their value chain. As per the recommended guidance above, these should be truthful, complete and clear to their potential audience.

Companies that adopt the climate contribution approach may develop materials to showcase their climate credentials, both internally, as well as externally, which refer to the level of the carbon fee they apply and its coverage, as a signal of their level of ambition. And they can describe how their climate contributions are channelled to particular initiatives which, for example, may support a country or sector on its decarbonisation pathway, or which breakdown barriers to widespread uptake of a particular technology.

In general narrative-based claims that are discursive and presented with relevant context are likely to be more credible and avoid misleading customers, investors or regulators in a way which might undermine progress in tackling climate change. In particular, companies should strive to avoid ambiguity in the interpretations of their claims.

## **AVOIDING INCOMPLETE CLAIMS AND ANY INFERENCE OF OFFSETTING IS CRITICAL TO THE CLIMATE CONTRIBUTION APPROACH**

In contrast, companies should steer clear of making short, incomplete, headline claims. These are unlikely to meet the general guidance for credible claims set out above. Today, many companies advertise themselves and their products in a manner which implies they are solving climate change, or absolved of any responsibility for the impacts their activities create. This is not in-line with how responsible companies should use the climate contribution model. Critically, companies adopting the approach should not make claims which imply any of their emissions are offset either now, or in the future. Claims such as “carbon-” or “climate neutral”, “climate positive”, “carbon negative”, or “net-zero” emissions, amongst other related terms, all imply that actual emissions released into the atmosphere are somehow neutralised, through the concept of offsetting. These are not part of the responsible climate framework we set out in this guide.

## >> 06

# OTHER RESOURCES

There are a number of other resources which offer valuable insights into climate contributions, both in terms of the rationale for the approach, as well as practical considerations for implementing it. The concept of climate contributions is not new and exists in related forms under labels as overarching as ‘climate finance’, or the practice of using carbon credits to channel ‘results-based finance’. However, since the Paris Agreement was inked in 2015, a number of researchers and organisations involved in carbon credit markets identified that the prevailing use of carbon credits to offset emissions by countries or companies was not aligned with the new global governance of climate change. Our guidance builds on a body of work published in recent years, whilst aiming to fill certain gaps and offer concrete recommendations for ambitious companies looking to take responsibility for their climate impacts.

We set out a list of relevant resources published by early 2023 below, along with a brief description of their relevance to the climate contribution approach. This list is not exhaustive, and inevitably will quickly become outdated. However, in the interim it may serve as a helpful pointer to additional information for those interested.

- **Carbone 4, Net Zero Initiative**: Guidelines explaining the flaws in the concept of climate neutrality at the corporate level and setting out recommendations for a paradigm shift from offsetting to contributing to climate action.
- **Carbon gap, Bridging the corporate ambition gap**: Report analysing different approaches for scaling corporate funding for carbon removal and wider climate action through contributions, without offsetting.
- **Corporate Climate Responsibility Monitor 2022 and 2023**: Analysis of major companies' climate pledges, highlighting the large reliance on misleading offsetting approaches to meet current and future corporate climate targets.
- **Future role for voluntary carbon markets in the Paris era**: Research report examining the relative merits of different models for voluntary carbon markets, which identifies climate contributions as the most viable approach in the long term to support national climate action.
- **Giving Green, How to think beyond Net Zero**: Guidance to companies offering an explanation of the limitations of conventional offsetting and providing a number of recommendations for how companies can channel climate finance to deliver impact.
- **Gold Standard, A New Paradigm for Voluntary Climate Action**: Policy brief setting out a new direction for voluntary climate action in the wake of the Paris Agreement, reframing offsetting and recommending a shift to “reduce within, finance beyond”.
- **Gold Standard, Claims guidelines**: Guidelines to assist in communicating accurate and appropriate information for claims related to carbon credits and renewable energy certificates, which presents “impact claims” (similar concept to climate contributions) as an alternative to “offsetting claims”.
- **Gold Standard & CDP, Defining a corporate climate finance commitment**: Guide for companies to finance the global transition to a zero-carbon, resilient economy which advocates pricing emissions at the level of the social cost of carbon and channelling finance either via carbon credits or alternative instruments.
- **Grantham Research Institute, Living with uncertainty in carbon markets**: Blog highlighting how the varied uncertainties inherent to the quality of carbon credits make them unsuitable as an offsetting tool.



- **Milkywire, Climate transformation fund**: Example of a fund set up to channel climate contributions without facilitating any offsetting.
- **Nordic dialogue on voluntary compensation**: Multistakeholder initiative that developed guidance on the use of voluntary carbon markets amongst Nordic countries, including using carbon credits as a vehicle for climate contributions (without offsetting).
- **NewClimate Institute, Climate Responsibility approach**: Sets out an approach to taking responsibility for emissions, following the key principles of the climate contribution guidance set out here.
- **Sweep, From offsetting practices to contributions**: White paper advocating a strategic shift for companies to use carbon credits to contribute to climate action, instead of for offsetting.
- **WWF & BCG, Beyond Science-based Targets: A Blueprint for Corporate Action on Climate and Nature**: Sets out a blueprint for corporate strategies to mitigate climate change and protect nature, which endorses a move away from offsetting towards the climate contribution approach, by recommending companies to make financial commitments for climate and nature impact, derived from pricing their remaining emissions.
- **WWF Switzerland & WWF Germany, Corporate climate strategies in the era of the Paris Agreement and the (new) role of «compensation» projects**: A proposal to make corporate climate strategies “fit for Paris”, explaining how historic approaches to compensate for emissions are no longer suitable, and advocating for companies to raise funding through a carbon fee and finance climate action beyond their value chain.

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