



Beyond Science-Based Targets:

A BLUEPRINT FOR CORPORATE ACTION ON CLIMATE AND NATURE

December 2020

Primary Authors:

WWF: Brad Schallert, Martha Stevenson, Chris Weber, Alex Farsan

BCG: Jesper Nielsen, Paulina Ponce de León, Nicholas Collins

Key Contributors:

WWF: Josefina Brana-Varela, Tim Juliani, Mark Griffiths, Christa Anderson, Lloyd Gamble, Evan Carlson, Mandy Jean Woods

BCG: Michel Frédeau

Acknowledgements:

WWF: Milan Kooijman, Johanna Myrman, Vanessa Perez Cirera

About WWF

World Wide Fund for Nature (WWF) is an independent conservation organization, with over 30 million followers and a global network active in nearly 100 countries. Our mission is to stop the degradation of the planet's natural environment and to build a future in which people live in harmony with nature, by conserving the world's biological diversity, ensuring that the use of renewable natural resources is sustainable and promoting the reduction of pollution and wasteful consumption.

Find out more at panda.org/

About Boston Consulting Group

Boston Consulting Group partners with leaders in business and society to tackle their most important challenges and capture their greatest opportunities. BCG was the pioneer in business strategy when it was founded in 1963. Today, we help clients with total transformation—inspiring complex change, enabling organizations to grow, building competitive advantage, and driving bottom-line impact.

To succeed, organizations must blend digital and human capabilities. Our diverse, global teams bring deep industry and functional expertise and a range of perspectives to spark change. BCG delivers solutions through leading-edge management consulting along with technology and design, corporate and digital ventures—and business purpose. We work in a uniquely collaborative model across the firm and throughout all levels of the client organization, generating results that allow our clients to thrive.

Find out more at bcg.com

Publication date: December 2020

Editor: Edward Baker

Design: tightship.co.za

Copyright © 2020 World Wide Fund For Nature (formerly World Wildlife Fund), Gland, Switzerland and Boston Consulting Group. Any reproduction in full or in part must mention the title and credit the above-mentioned publishers as copyright owners.

WWF International,

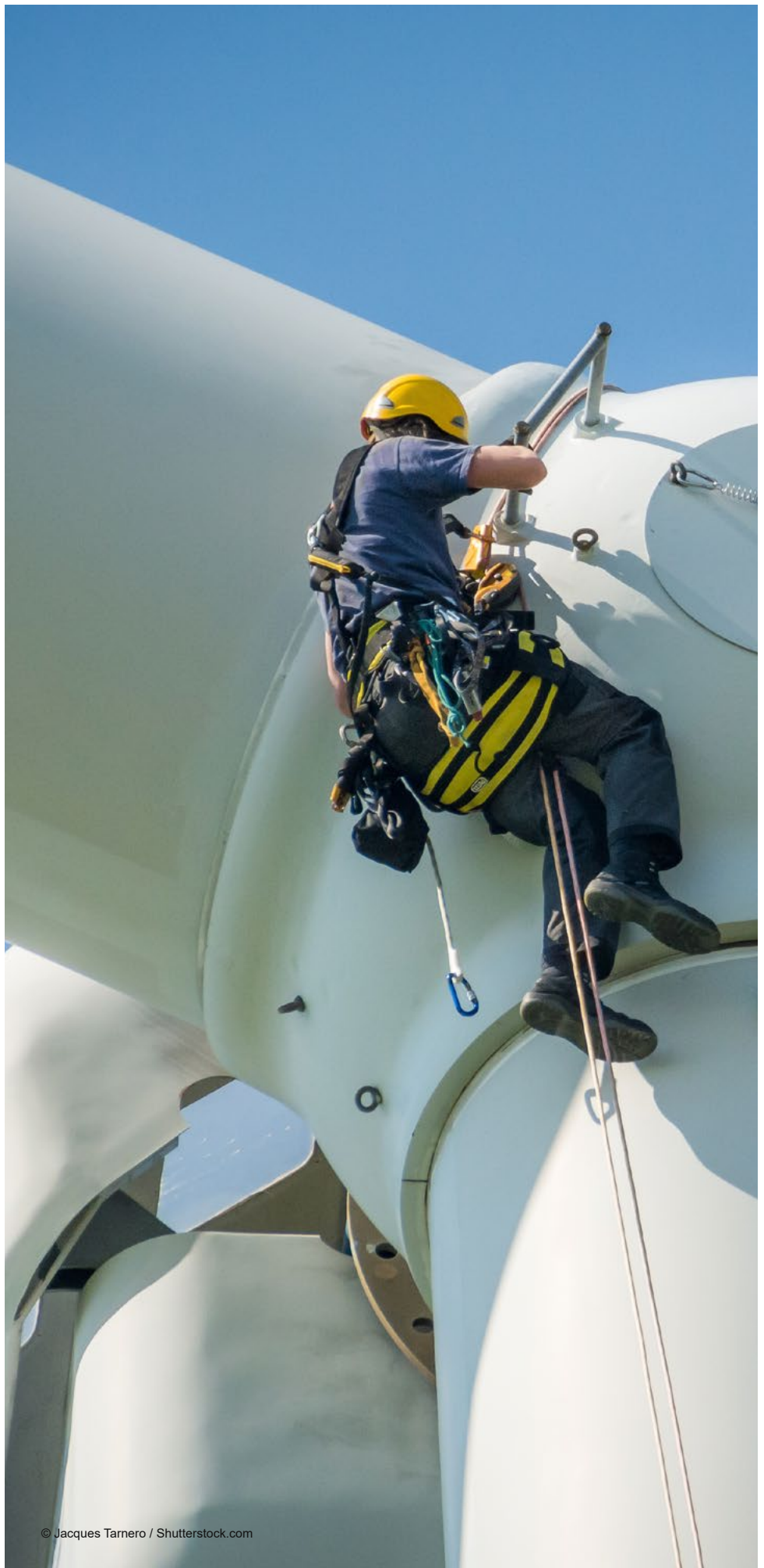
Rue Mauverney 28,
1196 Gland,
Switzerland
Tel. +41 22 364 9111

Boston Consulting Group

200 Pier 4 Boulevard
Boston,
Massachusetts 02210
United States
Tel. +1 617 973 1200

For enquiries: CorporateClimateBlueprint@wwfint.org

Cover photography: © Voyata / Shutterstock.com



© Jacques Tamero / Shutterstock.com



Contents

- INTRODUCTION 4
- CORE RATIONALE FOR A NEW BLUEPRINT 5
- THE CORPORATE CLIMATE MITIGATION BLUEPRINT 6
 - 1. ACCOUNT AND DISCLOSE EMISSIONS 8
 - 2. REDUCE VALUE CHAIN EMISSIONS, IN LINE WITH A SCIENCE-BASED TARGET PATHWAY 8
 - 3. QUANTIFY A FINANCIAL COMMITMENT BY PRICING REMAINING EMISSIONS 9
 - 4. INVEST THE FINANCIAL COMMITMENT FOR CLIMATE AND NATURE IMPACT 10
- MAXIMIZING VALUE ACROSS BUSINESS GOALS AND CO-BENEFITS 12
- ADDITIONAL ELEMENTS OF CORPORATE CLIMATE STRATEGY 13
- NEXT STEPS 14
- ANNEX 1: ALIGNING WITH NET-ZERO TARGETS 16
- ANNEX 2: CONSIDERATIONS FOR NATURE BASED SOLUTIONS 17
- ANNEX 3: DIMENSIONS OF CARBON CREDIT QUALITY 18

INTRODUCTION

Every day, more companies large and small are proudly announcing their voluntary commitment to climate action.

Many are promising significant reductions in their greenhouse gas emissions, greater transparency into their carbon footprints, plans to become net-zero by or before 2050, and other climate goals. In parallel, there is increasing interest in investing in nature-based solutions as a key pillar for climate ambition. This momentum is driven by companies' determination to play their part in stopping global climate change, as well as an understanding of the competitive advantages to be gained.

Yet even companies with the best intentions face considerable hurdles when setting climate goals, crafting climate strategies, and communicating them to the public. Because these voluntary initiatives are taking place in an emerging and fast-evolving field, companies often struggle to translate scientific consensus and knowledge (e.g., IPCC reports¹), as well as government commitments (e.g., Paris Agreement), into meaningful corporate climate strategies and actions. Inconsistent corporate claims about climate action (e.g., net-zero, carbon positive, carbon negative, climate neutral, etc.) only add to the noise and confusion, — while raising doubts among stakeholders as to the credibility of individual companies' climate strategies.² The risk of being accused of 'greenwashing' is ever-present, as is uncertainty as to whether specific corporate actions are truly advancing climate goals, nature goals, both, or neither.

This paper introduces the *Corporate Climate Mitigation Blueprint* in hopes of cutting through the noise and focusing on the actions that can underpin a truly effective corporate strategy for mitigating the effects of climate change and protecting nature.

This Blueprint is framed in the context of broader corporate climate efforts, and thus also highlights three additional critical elements which must be done in parallel—advocating for climate policy such as carbon pricing and sector-specific incentives, collaborating with peers to achieve lasting climate progress, and improving company and ecosystem resilience in the face of global warming.



© Jean-Marie Hullot / Flickr

Companies that successfully integrate an effective climate response into their core business strategy will be able to generate value. We're seeing corporate leaders respond to the climate challenge in a way that helps reduce costs, grow their business or capture price premiums, as well as maintain or extend their license to operate. Investors increasingly favor and value clear action on climate change — they recognize that companies are building competitive advantage and long-term resilience. By implementing the actions recommended in this Blueprint, companies will not only truly advance their climate and nature goals. They'll become part of the solution, delivering value for all — investors and society — as we work to secure a net-zero world.

We must, however, keep in mind that this Blueprint is only a piece of corporate sustainability strategies, which must encompass all environmental impacts from companies and avenues for leadership on key elements such as water, biodiversity, and ecosystem conversion and degradation. Guidance as to how companies can complement their climate strategies with broader nature strategies can be found in the Science Based Targets Network's [Initial Guidance for Business](#) and through other leading platforms in the matter such as the [Business for Nature](#) coalition, amongst others.

1 An element of confusion has been interpretation of pathways from IPCC's [Special Report on 1.5](#). [Figure 2.5](#) from this report clearly reflects that all viable 1.5°C pathways (across SSP 1, 2 & 5) require deep emissions reductions. They all also require negative emissions (i.e., removals), but not until the 2040 time frame. Often interpretation will jump to needing to start land removals now — as trees need time to grow — but time is also an important factor for fossil fuel emissions, as all of the pathways reflect that the earlier the fossil fuel emissions are reduced, the fewer removals will be needed later. It is important to look at the full picture of these results and what they will require.

2 Corporate climate claims and future climate commitments vary significantly between companies, both in terminology and meaning. Common examples include Carbon Neutral, Climate Neutral, Net Zero, Climate Positive, Climate Negative, and 100% Green. Key variations behind these claims include: type of pollutants covered (e.g., carbon only vs. Kyoto gases, vs. broader climate and/or nature impacts); extent of value chain coverage (e.g., scope 1 commitments vs. scope 1-3 commitments); timeframe of emissions covered (e.g., annual emissions vs. lifetime company emissions); mitigation levers utilized (e.g., abatement only, abatement + CO2 removal credits only, abatement + any type of credit); and degree of climate/nature positivity (e.g., mitigating more than the company's annual footprint, investing beyond mitigation and supporting other nature, biodiversity or social goals). These variations risk obscuring the true ambition of companies climate strategies, and making it difficult to track progress against goals.

CORE RATIONALE FOR A NEW BLUEPRINT

A new model for corporate climate action is needed for a number of reasons, but they can be boiled down to one key meta-problem—a mismatch between the current solution set available and the scale of the problems they are trying to solve.

Existing ‘Footprint-based’ approaches (e.g., carbon accounting, life cycle assessment) are ‘attributional’ and backward-looking. They focus on the question “what is my company’s responsibility for GHG emissions in the previous year?” This reductionist approach has been—and continues to be—a critical component of corporate accountability. It is the basis for today’s leading corporate climate mitigation standard — the [Science Based Targets Initiative](#) (SBTi) — but it is only one component of what could be a more holistic solution for corporate climate strategies today, where the focus is also about looking forward. In short, the goal posts have moved; companies are no longer being asked about how they plan to take responsibility for last year’s emissions alone, but also their long-term transitions to becoming net-zero businesses, their contribution to securing a net-zero economy writ large, and the appropriate role for nature-based solutions both inside and outside of their value chains.

Another characteristic of footprint-based approaches is a focus on the singular measure of CO₂ equivalents. However, companies rarely report performance based solely on profitability; to maximize shareholder value, they must manage a variety of metrics including nonfinancial ones, and what they prioritize will vary by stage of growth and context. We need similar variety to evaluate and improve corporate climate performance. The focus on companies’ individual CO₂e footprints has incentivized some corporate actions over others. From the desire to offset a company’s remaining emissions came a voluntary carbon market that also measures outcomes in CO₂e units but that in some cases is not simultaneously able to deliver needed environmental and social co-benefits and/or broader systemic change. It’s a reason for why the average quality of carbon credits in the market must improve if it is to be a valid climate solution, and it’s also why companies need to be pursuing new ways of investing in climate and nature that reflect the scale of transformation required to solve the challenges we face.

Redirecting businesses - and our economy – toward a net-zero and ‘nature positive’ future is the challenge of our lifetime: we need \$75 trillion in investments³ to deliver on the Paris Agreement, plus tremendous ingenuity and willingness to change. The response must build on each other’s efforts over a long-time horizon—with companies simultaneously reducing their own operational emissions, decarbonizing their value chain, driving innovation to create future solutions for harder-to-abate emissions and engaging consciously and constructively on how to reach nature positive, including its biodiversity and societal values. Leading companies are already looking to invest in climate strategies that go *beyond* their value chains.

Each of these changes—leaders going beyond value chain boundaries, forward-looking and longer time horizons, and the need for scaled finance—begs for a new model. A new way for companies to move from “I” to “we”, helping to achieve the kind of scale that science tells us is needed to achieve system transitions in land & ecosystems, energy, urban & infrastructure, and industrial systems. A new way to build big-picture innovation for tomorrow’s climate solutions directly into corporate climate strategies. A new way to generate and capture value, while benefiting society and the planet.

The Corporate Climate Mitigation Blueprint discussed in the next section proposes innovative solutions to solve the key challenges companies are struggling with (outlined above) while ensuring robust credibility through a hierarchical set of actions that ensure companies do their part to rapidly decarbonize and build scaled solutions within or outside their value chain. The approach builds on existing practice—ensuring a critical use case for current tools like SBTi targets—but also goes beyond to add new tools and approaches, meeting the new needs of ambitious corporate leadership and science-based system transformation.

3 [The Economic Case for Combating Climate Change](#), BCG Report, 2018



© Jason Houston / WWF-US

THE CORPORATE CLIMATE MITIGATION BLUEPRINT

The Corporate Climate Mitigation Blueprint is a tool configured for companies to craft an action plan for maximizing their climate impact. It can be used both by companies looking to create their first comprehensive climate strategy and by those hoping to upgrade their strategies to stay atop the leaderboard.

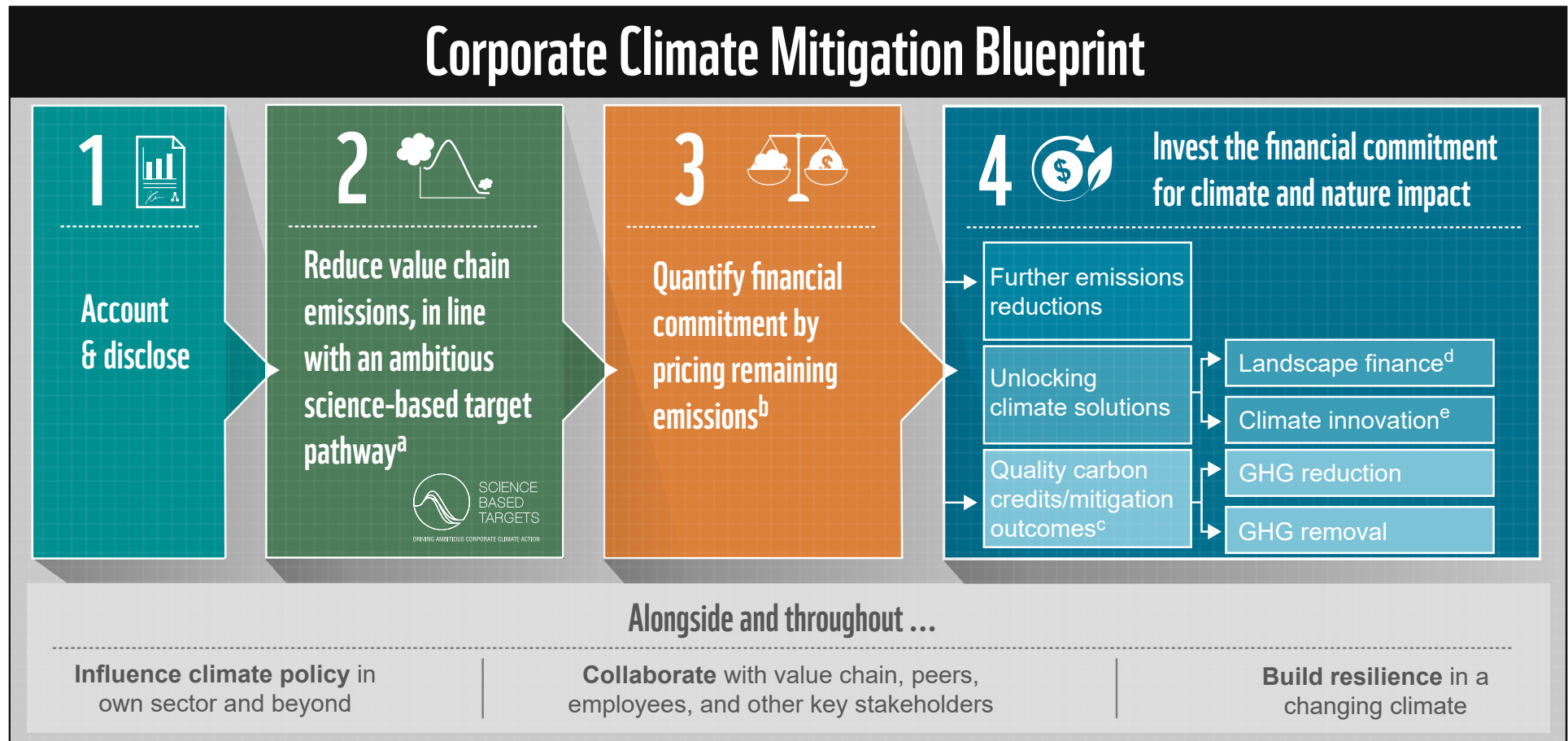
As shown in Figure A, the Blueprint builds on the principles that underpin “the mitigation hierarchy,” a concept widely known and used in the field of sustainability.

We recommend that companies:

- (1) Account and disclose their emissions across the value chain
- (2) Reduce value chain emissions emissions, in line with an ambitious science-based target pathway
- (3) Make a financial commitment that internalizes the external costs of any remaining GHGs, and disclose all assumptions, including the implicit carbon price.
- (4) Invest the financial commitment on a menu of potential high-impact climate and nature actions. Some of these actions might generate quantifiable emission reductions or remove carbon from the atmosphere, while others might unlock the pipeline of future climate solutions. These solutions could include nature-based solutions, new emissions capture technologies, and even business innovation and transformation efforts that can further society’s move toward a net-zero economy.

The following sections lay out each of the four components of the Corporate Climate Mitigation Blueprint in greater detail.

Figure A: The Corporate Climate Mitigation Blueprint and additional critical elements of corporate climate strategy



a. Emissions reductions must be compliant with the Paris Agreement to limit warming to 1.5°C, or at most well-below 2°C, above pre-industrial levels, such as by following a pathway provided by the Science-Based Targets initiative.

b. Companies should disclose assumptions, including the internal carbon price used (even if implicit). Please refer to more detailed guidance on how to size financial commitments in the text.

c. The term “mitigation outcome” refers to any type of ex-post climate mitigation, whether emissions reductions or the removal and sequestration of emissions from the atmosphere. For readability and simplicity the term “carbon credit” is instead used through the document; however, a carbon credit is a subset of the term mitigation outcome. Please refer to Annex 3 regarding the dimensions of carbon credit quality.

d. For example: Projects operating at a landscape or jurisdictional level

e. For example: Technological and R&D innovation, efforts to advance climate business model innovation



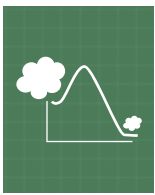
1. ACCOUNT AND DISCLOSE EMISSIONS

Full transparency is critical to companies' efforts to reduce their carbon footprint.

Without an accurate and verified accounting of their GHG emissions across scopes 1, 2, and 3, companies cannot determine their baseline emissions, set reduction targets, or evaluate their progress.

The first step is to use internationally recognized GHG accounting standards, such as the [GHG Protocol](#), to create a full accounting of their carbon footprint. Then

they must transparently and publicly disclose their level of emissions, mitigation targets, and the actions they are taking now and in the future, through their regular corporate reporting mechanisms or through organizations such as [CDP](#). Companies should also disclose their climate-related risks, opportunities, and strategies in line with the recommendations of the [Task Force on Climate-related Financial Disclosures](#) (TCFD) and other best-in-class disclosure frameworks and standards.⁴



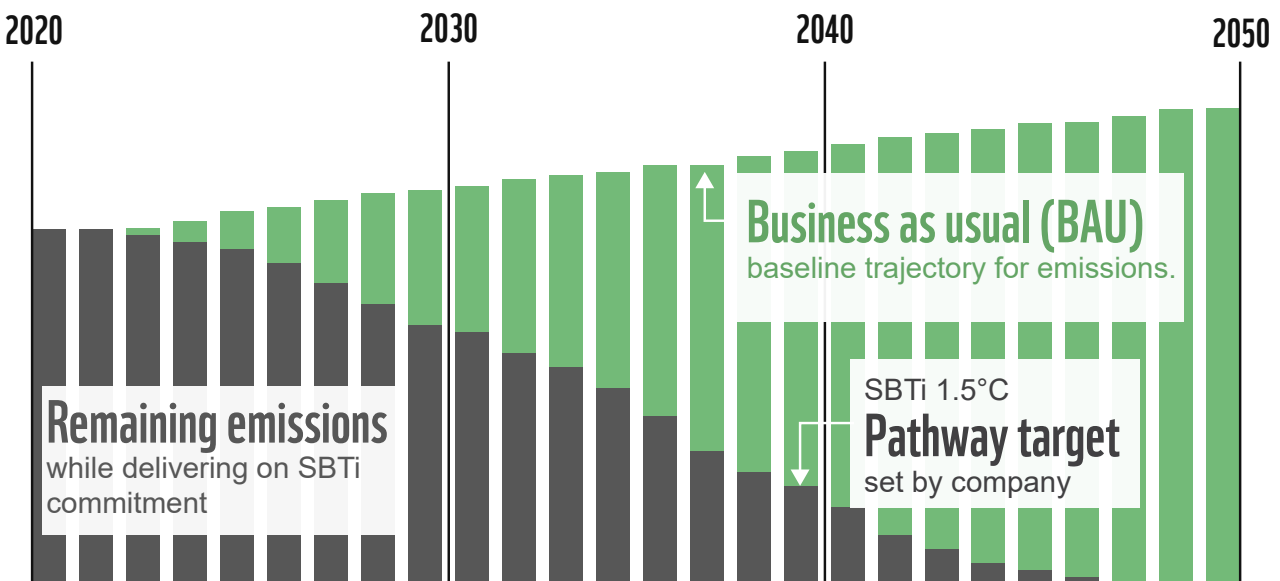
2. REDUCE VALUE CHAIN EMISSIONS, IN LINE WITH A SCIENCE-BASED TARGET PATHWAY

The Paris Agreement requires that we limit global warming to as close to 1.5°C as possible. If we are to meet this goal, we must reduce GHG emissions by around 50% between now and 2030, and reach net-zero globally by the second half of this century, according to the "[Special Report on 1.5°C](#)" from the UN's Intergovernmental Panel on Climate Change.

Companies should therefore begin by mitigating GHG emissions throughout their value chain (see Figure B). As a first step, they should reduce their own emissions where possible, by avoiding emissions-producing activities, and by halting carbon intensive operations, such as deforestation

and land conversion. Then they should lower the carbon intensity of activities—their own and those across their value chain—that cannot be avoided. This could include reducing the use of fossil fuels, improving efficiency, purchasing renewable energy, encouraging upstream suppliers to reduce their own footprints, decreasing land degradation, and reducing the carbon impact of the products and services they sell. To support these efforts, the Science Based Targets initiative (SBTi) provides clear guidance for different corporate sectors on how to develop and set GHG reduction targets that are aligned with the latest climate science.

Figure B. Reducing value chain emissions, in line with an ambitious science-based target pathway⁵



For example, a company sets and delivers on their SBTi 1.5°C target. The gray bars reflect 'remaining emissions' as the company works toward reductions.

⁴ These include [SASB](#), [CDSB](#), the [Integrated Reporting Framework](#), and [GRI](#).

⁵ While companies should ideally be setting 1.5°C-aligned targets under SBTi, the initiative also allows companies to set well-below 2°C targets.

Meeting science-based emissions reduction targets is not just critical from an environmental perspective. Doing so also lowers the significant business and reputational risks faced by businesses as they make the transition to a net-zero business environment. Every company is already facing considerable regulatory, policy, investor and consumer pressure to lower their carbon emissions, and the pressure will only increase in the future. Companies that transform their business now are building competitive advantage compared with those that delay the transition, something that investors increasingly recognize and reward.⁶

As essential as this step is, for many companies it will likely be the most difficult. It requires companies to undergo a major transformation of their operations, their value chains, and their business models. Some companies may not be able to fully complete the transition until their political and regulatory context makes their ability to do so more likely, but most can do more to reduce their emissions today -- and in a way that brings savings and generates value. The need to take action is real, and the rewards are profound, both for the climate and for companies' future competitiveness.

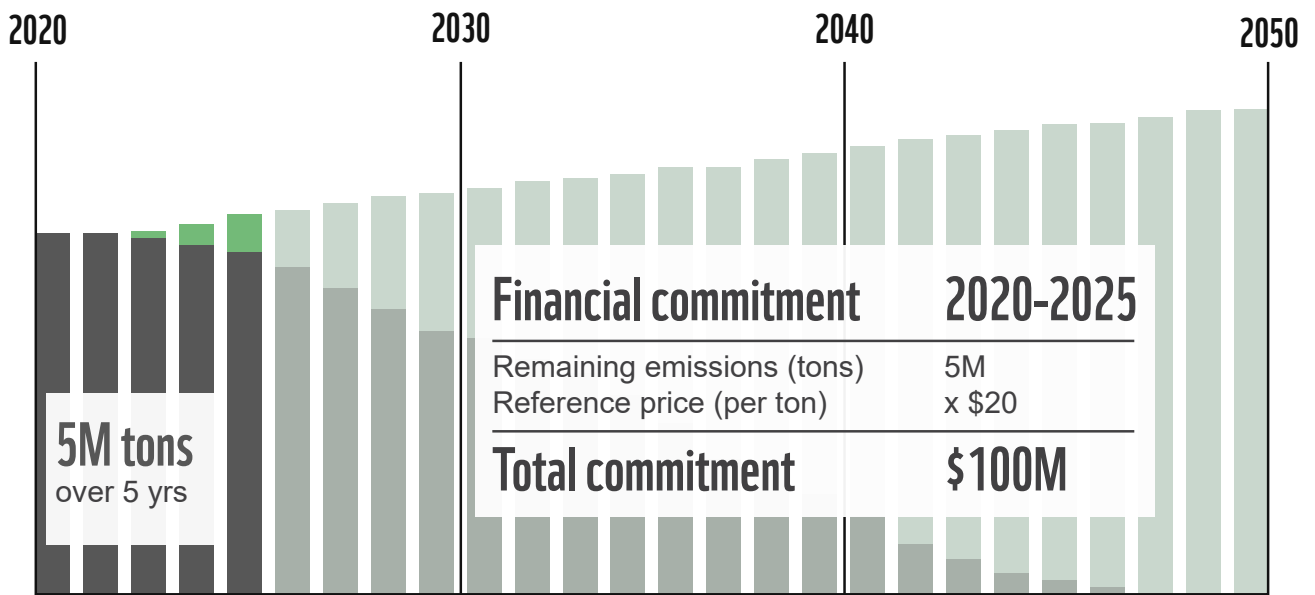


3. QUANTIFY A FINANCIAL COMMITMENT BY PRICING REMAINING EMISSIONS

Companies that reduce emissions across their value chain in line with the Paris Agreement goals will continue to emit GHGs. The third step in the Blueprint encourages companies to quantify a financial commitment to address their

remaining value chain emissions, for example by setting an internal carbon price, and disclose the assumptions used (see Figure C)

Figure C. Quantify a financial commitment by pricing remaining emissions



A sample financial commitment for five years of estimated remaining emissions at \$20/ton. The company discloses the price per ton.

The methods used to determine the size of the financial commitment can vary. Sizing it using an explicit carbon price is just one possible approach, but others could include committing a share of revenue or simply defining a specific investment amount. Regardless of the method, companies should disclose the implicit carbon price on which they are basing their commitment, and how they arrived at that figure.

Some relevant benchmarks include:

- National trading schemes: \$20 per ton of CO₂e (EU ETS, World Bank)⁷
- Companies' internal prices (between \$30 and \$100 per ton of CO₂e)⁸

⁶ *The Net-Zero Challenge: Fast-Forward to Decisive Climate Action.* WEF and BCG report, January 2020

⁷ Calculated as total financial commitment / total annual remaining emissions, in \$/TCO₂e

⁸ Average calculated from company internal carbon price disclosures in the 2017 CDP report "putting a price on carbon" (high end of range used for companies disclosing multiple internal carbon prices)

- Modeled results showing prices compatible with the Paris Agreement’s goals (between \$100 and \$400 per ton of CO₂e by 2030)⁹
- Estimated cost of landscape restoration (between \$10 and more than \$100 per ton of CO₂e)¹⁰

No matter how companies choose to determine the size of their financial commitment, the amount should be high enough to reflect the true social and environmental cost of their emissions.

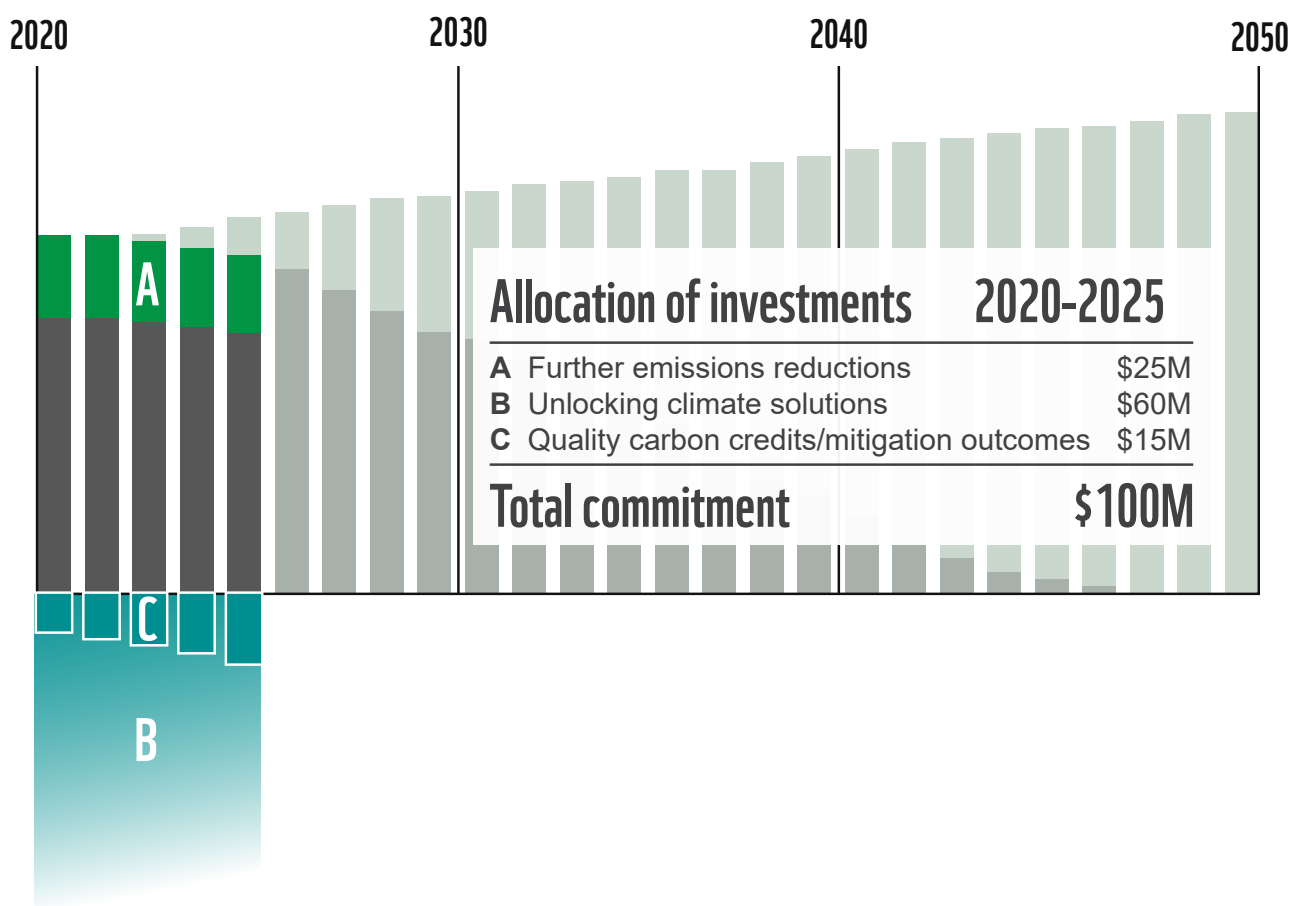


4. INVEST THE FINANCIAL COMMITMENT FOR CLIMATE AND NATURE IMPACT

Making a meaningful financial commitment enables companies to support a broad range of climate actions. The challenge is investing these resources in a way that maximizes

positive impact (see Figure D). With this in mind, there are three equally important mechanisms that companies should consider dedicating their funding to:

Figure D. Invest the financial commitment for climate and nature impact



The company invests its financial commitment in three ways. \$25 million toward further emissions reductions, \$60 million in unlocking climate solutions and \$15 million toward quality carbon credits/mitigation outcomes.

9 IPCC’s SR15 report cites that meeting a 1.5°C scenario will require a carbon price in the \$100-\$400/ton range by 2030, see Figure 2.26

10 See Griscom et al (2017), categories ‘reforestation’, ‘peat restoration’, and ‘coastal restoration’

A. Further emission reductions: If the carbon price used to size a company's financial commitment is higher than the company's marginal abatement cost to continue reducing GHG emissions across its value chain, it should invest to realize these reductions. Examples of such investments include the use of renewable power, alternative fuels and more sustainable raw materials.

B. Unlocking climate solutions: As discussed above, financial commitments freed from the constraints of quantifiable carbon impact can incentivize corporate investment in tomorrow's transformative solutions. Landscape finance and investments in climate innovation offer two critical avenues of action.

- **Landscape finance:** Nature-based solutions implemented at scale can holistically address all the major drivers of deforestation, conversion and land degradation. If done properly, these investments can yield considerable benefits for people, nature and the climate. They need to be embedded in an overall landscape, jurisdictional or national strategy, anchored in robust baseline data, and owned and supported by diverse constituencies who are confident about the benefits the solutions can achieve. Targeted private finance in support of multi-stakeholder platforms that can promote constituency building, strategic planning, mapping, and project development, provides an essential foundation of credibility and sustainability for subsequent investments. For further details on nature-based solutions, please see Annex 2.
- **Climate innovation:** Innovative technologies and new business models are key to sustaining climate mitigation efforts over time, particularly in areas that remain hard to mitigate. Potential areas for investment include new efficiency technologies, material and energy feedstocks, and direct air carbon capture, among others. Some of these innovations could be specific to decarbonization in individual business sectors, while other climate innovations might be applicable more broadly across the economy, such as CO₂ removal technologies. Defining which investments should be categorized as "climate innovation" may be subjective. However, companies should be transparent and, where possible, clarify how these investments will help advance the transition to a low-carbon economy.

C. Quality carbon credits/mitigation outcomes:

Finally, decoupling a financial commitment from a CO₂e metric means that companies can consider investing in high-quality "mitigation outcomes"--emissions reductions or the removals of emissions from the atmosphere. These mitigation outcomes can come in different forms. The most common and understood form is a carbon credit/offset. For the sake of simplicity, this paper uses the term "carbon credits" which are usually freely transferable assets. But companies can also engage in direct bilateral transactions to finance emissions reductions and removals using standardized methodologies and certified by third parties (as most carbon credits are today).

Supporting high-quality projects that reduce or remove GHGs outside of a company's value chain can be a key way to address remaining emissions. But quality matters, as not all carbon credits are created equal.

While companies might be tempted to design a portfolio of carbon credits that encompasses their target CO₂e volume while minimizing costs, they need to ensure their investment is channeled towards projects that deliver long-lasting, quality results, and have no adverse impacts. For example, recent research shows CO₂ emission reductions from voluntary REDD+ projects in the Brazilian Amazon have likely been overstated¹¹. Low-quality¹² credits often claim the same CO₂e impact as high-quality credits, yet they may offer fewer emission reductions or even negatively impact people and nature. While, in general, the price of a carbon credit and its quality are not necessarily correlated, there is evidence that prices of carbon credits from the land sector and many technology development projects are currently too low to deliver long-lasting, quality results. Using a CO₂e metric, by itself, provides little or no incentive to deliver anything beyond a specific volume of carbon credits that may or may not deliver the intended mitigation results.

In assessing the quality of credits, corporate carbon credit buyers should take into account six criteria: robust measurement of mitigation impact, avoiding double counting, addressing non-permanence, alignment with a transition to net-zero, strong governance of the crediting process, and environmental and social co-benefits. For further details on carbon credit quality, please see Annex 3 and the [latest guidance document from WWF, Environmental Defense Fund and Oeko Institute](#).

11 West, T. A. P. et al. (2020). Overstated carbon emission reductions from voluntary REDD+ projects in the Brazilian Amazon. Proceedings of the National Academy of Sciences of the United States of America PNAS September 29, 2020 117 (39) 24188-24194. Available at: <https://www.pnas.org/content/117/39/24188>

12 There are many dimensions of quality to assess carbon credits - more details can be found in WWF, Environmental Defense Fund and Oeko Institut guidance (in development)



© Days Edge Productions / WWF-US

MAXIMIZING VALUE ACROSS BUSINESS GOALS AND CO-BENEFITS

When investing in climate solutions or financing carbon credits, companies may have a positive impact beyond climate by investing in projects that generate broader benefits for nature and society.

Some investments, for example, may deliver on specific development or economic opportunities, create competitive advantage, or enhance efforts to protect biodiversity. In the long run, a more holistic approach to the climate crisis—one that contributes to the well-being of nature and people, and that generates long-term business value—will be more impactful.

The opposite can also be true. Tradeoffs are inevitable when designing solutions for a complex environmental system. Companies should step away from projects that generate low-cost carbon credits by maximizing near-term carbon sequestration, such as monoculture tree planting, or stand-alone forest projects that don't link to the broader landscape. Such projects typically fail to build environmental resilience or integrate into the fabric of the landscape or society to promote long-lasting action. Following the criteria for NBS

investments outlined in Annex 2 will help companies ensure their investments deliver on climate, nature and the social good.

In summary, companies should address their remaining emissions through a financial commitment that internalizes the social cost of their expected impact. This will allow them to support the wide range of activities needed as we transition to a net-zero global economy. The appropriate mix of investment across further reductions, landscape finance, R&D and technology, and the purchase of high-quality credits will likely vary by sector. It is up to each individual company to optimize their financial commitment to maximize their climate impact beyond their science-based targets, and to capture value so that such impact can be sustained and scaled.



ADDITIONAL ELEMENTS OF CORPORATE CLIMATE STRATEGY

Ultimately, addressing climate change is a society- and economy-wide endeavor.

A truly holistic and impactful corporate climate strategy must include not only internal climate actions but also a clear focus on enabling society as a whole to address climate change. Thus, in parallel with the activities described above, we recommend companies take three further strategic steps:

- **Influence policy:** While many companies can act on climate today, government policy remains one of the main barriers to deliver on the Paris commitments. Closing the emissions gap will require significant action from regulators, in addition to the voluntary actions of individual corporations. Climate policy should unlock additional corporate action; through adequate carbon pricing and sector specific incentives, it must level the playing field between companies willing to act voluntarily and those who are not. Companies have a role to play in encouraging such policy and regulatory changes. We recommend that companies follow the [AAA framework](#) for policy engagement, or equivalent, to advocate for policies consistent with achieving net-zero by 2050, aligning trade associations to support these same policies, and allocate advocacy and lobbying spend to organizations that support a constructive climate policy agenda.
- **Collaborate:** Company leaders should work with peers, suppliers and customers across the full value chain as well as with stakeholders from government and civil society, through efforts like the [Renewable Energy Buyers' Alliance](#), [Alliances for Climate Action](#) and [Mission Possible](#), to support broad industry decarbonization efforts. Examples include participating in industry consortia and multi-stakeholder alliances that promote best-practice sharing and collective action, setting standards for supplier engagement with climate mitigation goals, and choosing to work only with customers who are themselves engaged in mitigating their carbon footprint.
- **Build resilience:** As they take action to mitigate GHG emissions, company leaders should be considering how they are contributing to the long-term resilience of ecological systems, society and the company itself. To build “social-ecological resilience” into company actions, decision makers can follow three principles when developing, supporting and implementing strategies: Avoid harming nature; use nature to help people adapt to climate change, and help nature itself to adapt to climate change.

NEXT STEPS

We are encouraged to see that climate continues to be on top of the corporate leadership agenda – this is a tremendous opportunity to transform businesses and our economy in the next decade.

This paper aims to guide companies through this journey. The Blueprint represents an initial effort to structure the corporate behavior and actions that are needed for the transition to a net-zero global economy. It can be complementary to other WWF and partner organization guidance e.g., the Science Based Targets initiative's (SBTi) paper: [Foundations for Science-Based Net-Zero Target Setting in the Corporate Sector](#) and WWF, Environmental Defense Fund and Oeko Institut's [comprehensive guidance](#) for corporate carbon credit buyers. We also recognize complementary efforts to improve availability and integrity within the voluntary market and advance public-private sector efforts to expand Jurisdictional-REDD+ programs.

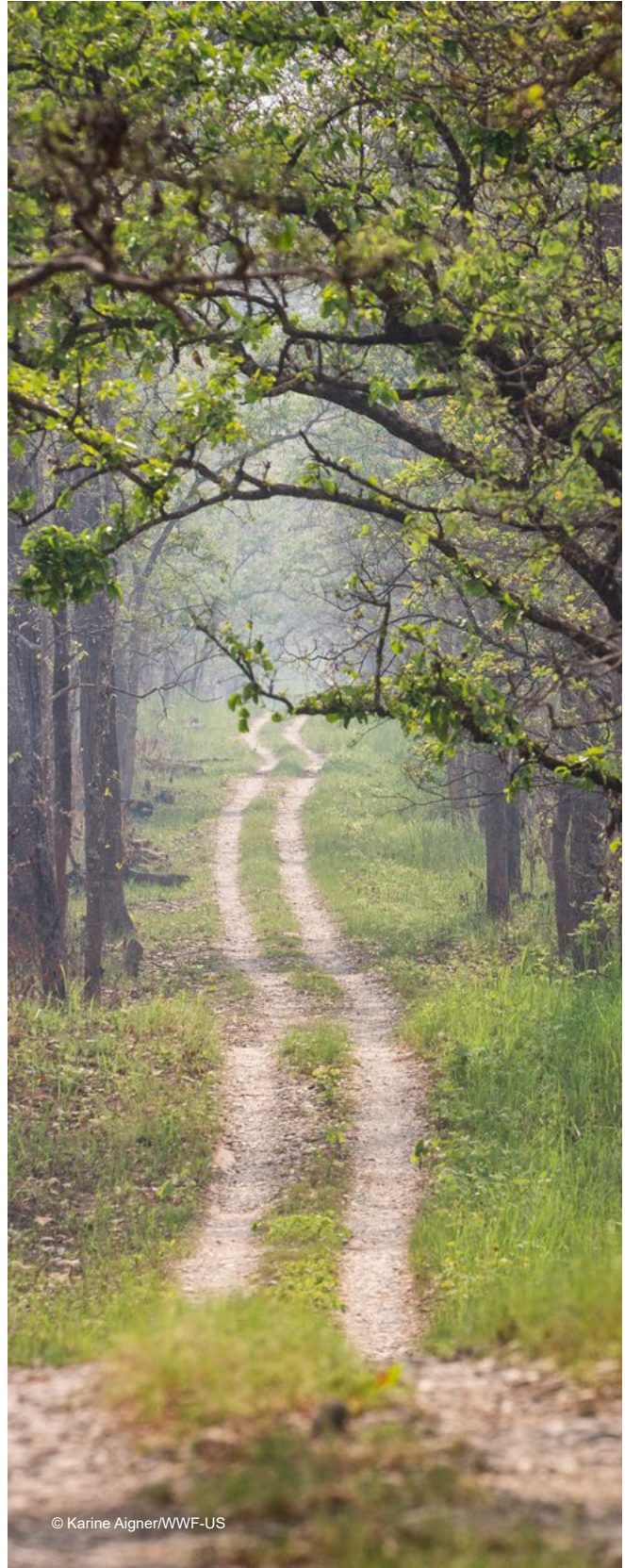
Bringing this Blueprint to life will require companies to transform their operating models in such a way that they can continue to generate business value while decoupling their activities from today's negative environmental and climate impacts.

We recognize that this is an undertaking like no other. Tackling the climate crisis will require a journey of innovation, continuous improvement and learning for all stakeholders. In this light, we acknowledge the need for further consultation and guidance to complement our overarching framework. Key topics to address in future work include:

- Understanding how corporate climate strategy claims map to this Corporate Climate Mitigation Blueprint (e.g., net-zero, climate positive, etc);
- Providing additional specific guidance on how to quantify a financial commitment relative to a company's impact and financial means;
- Developing detailed guidance on the selection and procurement of Nature-Based Solutions with a focus on landscape/seascape level projects; and
- Creating approaches for prioritizing investments in system transformation and R&D.

The Corporate Climate Mitigation Blueprint represents a first effort by WWF and BCG to structure the different corporate behaviors and actions that are needed to transition ultimately to a zero-carbon economy, while protecting and enhancing nature and supporting human livelihoods, at scale and with urgency.

We look forward to partnering with companies on this journey and to working through the details of how this Blueprint can be applied to each company's specific sector and context.



© Karine Aigner/WWF-US



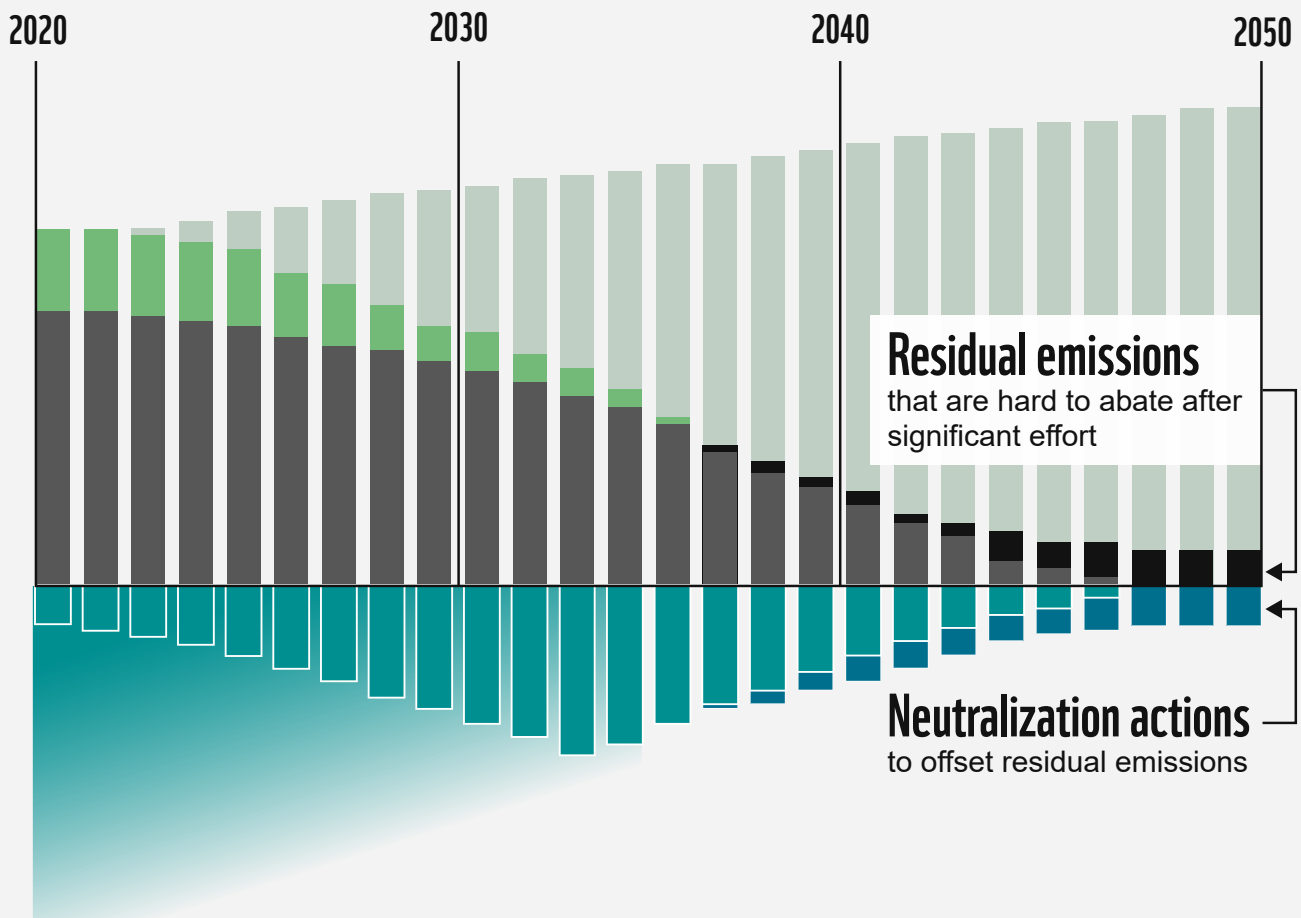
ANNEX 1: ALIGNING WITH NET-ZERO TARGETS

The Paris Agreement itself calls global net-zero emissions: “a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases in the second half of this century” Soon after the Paris Agreement was approved by countries in 2015, individual companies began setting their own net-zero goals, and the trend has only been accelerating. In greater and greater numbers, companies are committing to net-zero targets, usually by 2050, but some even earlier. In the simplest terms, net zero targets require companies to reduce their emissions and then neutralize their residual emissions through approaches that remove and sequester carbon from the atmosphere.

While net-zero targets have proved valuable these past years in inspiring companies to take action on climate, they can incentivize companies to set a narrow focus on carbon removals at the expense of following the “mitigation hierarchy.”

The Corporate Climate Mitigation Blueprint can help a company make sure it is reflecting the mitigation hierarchy on the pathway to net-zero by prioritizing decarbonization and reducing emissions first, instead of immediately jumping to carbon removals. For more information on net zero, see the Science Based Targets initiative’s [Foundations for Science-Based Net-Zero Target Setting in the Corporate Sector](#).

Annex Figure 1: Aligning with SBTi Net Zero: Neutralize Residual Emissions



After a company reduces everything it can through emissions reductions (Step 2), it may have residual and/or hard-to-abate emissions toward the end of its journey to Net-zero. The SBTi Net-zero guidance recommends that these emissions be neutralized through carbon dioxide removals (CDR) that can be secured for 100+ years.

ANNEX 2: CONSIDERATIONS FOR NATURE BASED SOLUTIONS INVESTMENTS

Nature-based solutions (NBSs) for climate are designed to harness the power of nature to reduce greenhouse gas emissions and help us adapt to the impacts of climate change. They are win-win solutions that involve protecting, restoring and sustainably managing ecosystems to address society's challenges and promote human well-being. Forests are probably the most well-known venue for NBSs, but there are many more, including peatlands, mangroves, wetlands, savannahs, coral reefs and other landscapes/seascapes.

When designed properly, NBSs can deliver on multiple desirable outcomes, integrating climate, nature and societal goals. Toward this end, we offer three criteria when considering investments in NBS.

Investments should benefit both climate and nature

- Investments should be guided using the mitigation hierarchy. To benefit the climate, companies should first reduce their emissions within and adjacent to their value chain, before compensating for remaining emissions. To benefit nature, companies should make sure their supply chains include no deforestation or land conversion, prior to investing in compensatory activities. Overall, we recommend that finance be directed toward interventions that reduce impact on climate and nature first, before investing in restoration.
- Interventions should be part of a broader landscape/seascape action plan. They should achieve multiple outcomes across nature and climate, including the promotion of nature's contributions to people. Interventions should be designed to anticipate future climate changes, such as changes in precipitation and temperature, increases in severe weather, fires, pests, and diseases, and changing migration patterns.

Investments should benefit people

- Interventions should promote improvements in human well-being, including livelihoods, quality of life, and food security and energy access, particularly for the most vulnerable people and communities.
- Interventions should ensure that benefits are distributed fairly, and human rights are respected and strengthened.
- Interventions should put in place appropriate safeguards to limit unintended social or environmental outcomes, following [WWF's Environmental and Social Safeguards Framework](#).

Investments should support inclusive and credible governance processes

- Interventions should be supportive of and aligned with national and regional commitments to United Nations conventions, such as country-specific Nationally Determined Contributions (NDCs) and National Biodiversity Strategies & Action Plans (NBSAPs). Additionally, any emissions and removals estimates should use/align with nationally approved reference levels.
- Interventions should be locally "owned," supported by and implemented with a shared vision of success. Best practice includes decision-making across inclusive, transparent and multi-stakeholder lines that takes into account the needs of diverse actors.
- Interventions and related activities should be planned with government involvement and leadership, with the goal of improving governance.
- Interventions (and related activities) should include monitoring and verification of key metrics and allow for learning and adaptive management.
- Investments should leverage public finance and markets, where possible, to augment positive outcomes.

To illustrate these principles, specific examples of such projects include:

- Improving land tenure for indigenous people and local communities, as in [San Martin and Ucayali, Peru](#).
- [Public-private initiatives](#) for improved land policies and planning in Malaysia, via jurisdictional approaches to zero deforestation.
- [Supporting farmers in Colombia with better growing practices](#) so that they can maximize yields and minimize conversion of forests.

ANNEX 3: DIMENSIONS OF CARBON CREDIT QUALITY

WWF, Environmental Defense Fund and Oeko Institut are developing the “Carbon Credit Guidance for Buyers,” an upcoming guide for release in 2021 to help buyers of carbon credits navigate the complicated landscape of the carbon market and identify high-quality carbon credits. Factors determining the quality of a carbon credit include:

- **Ensuring the GHG emissions impact of the credit-supported activity.** Projects should be chosen that would not have taken place without the demand from potential buyers in the carbon market. The quantification of the emissions reductions or removals from the project should be conservatively measured, robustly monitored. Emissions or removals occurring outside a project boundary (i.e. leakage) must be considered in the calculation of impact for the project.
- **Avoiding double counting of reductions and removals.** Buyers should make sure that emission reductions and removals are not used more than once to achieve climate targets or goals. Avoid double issuance, double use and double claiming against country-level nationally determined contributions (NDCs) and domestic emission trading systems will require careful oversight and control.
- **Addressing non-permanence.** Buyers should avoid credits in support of projects where the emission reductions or removals are later reversed, by monitoring the risk of reversal and insuring against it through the use of reversal buffer pools, for example.
- **Facilitating the transition towards global net-zero emissions.** Carbon credit project should facilitate the transition towards achieving global net-zero greenhouse gas emissions, rather than delaying or impeding the transition. This criterion simply assesses whether the project itself uses a technology type or practice that will be transformational.
- **Strengthening the institutional arrangements and processes of the crediting program.** Carbon crediting programs should be structured and governed to provide confidence that carbon credits are of “high quality. In addition to overall program governance, robust third-party auditing, transparency and stakeholder consultation are essential.
- **Enhancing positive and preventing negative environmental and social impacts.** Projects should generate benefits beyond reducing GHG emissions, such as reducing air pollution, supporting poorer communities, and contributing to improved adaptation and resilience--while avoiding any adverse environmental or social impacts on local stakeholders and communities.

For additional detail on these quality dimensions, please read [the full criteria paper](#). This paper represents the first phase of the project to develop the Carbon Credit Guidance for Buyers.



© Dina Ramgoobeen / Adaptation Fund / Flickr



Working to sustain the natural world for the benefit of people and wildlife.

together possible.. panda.org



Unlocking the Potential of Those Who Advance the World

bcg.com