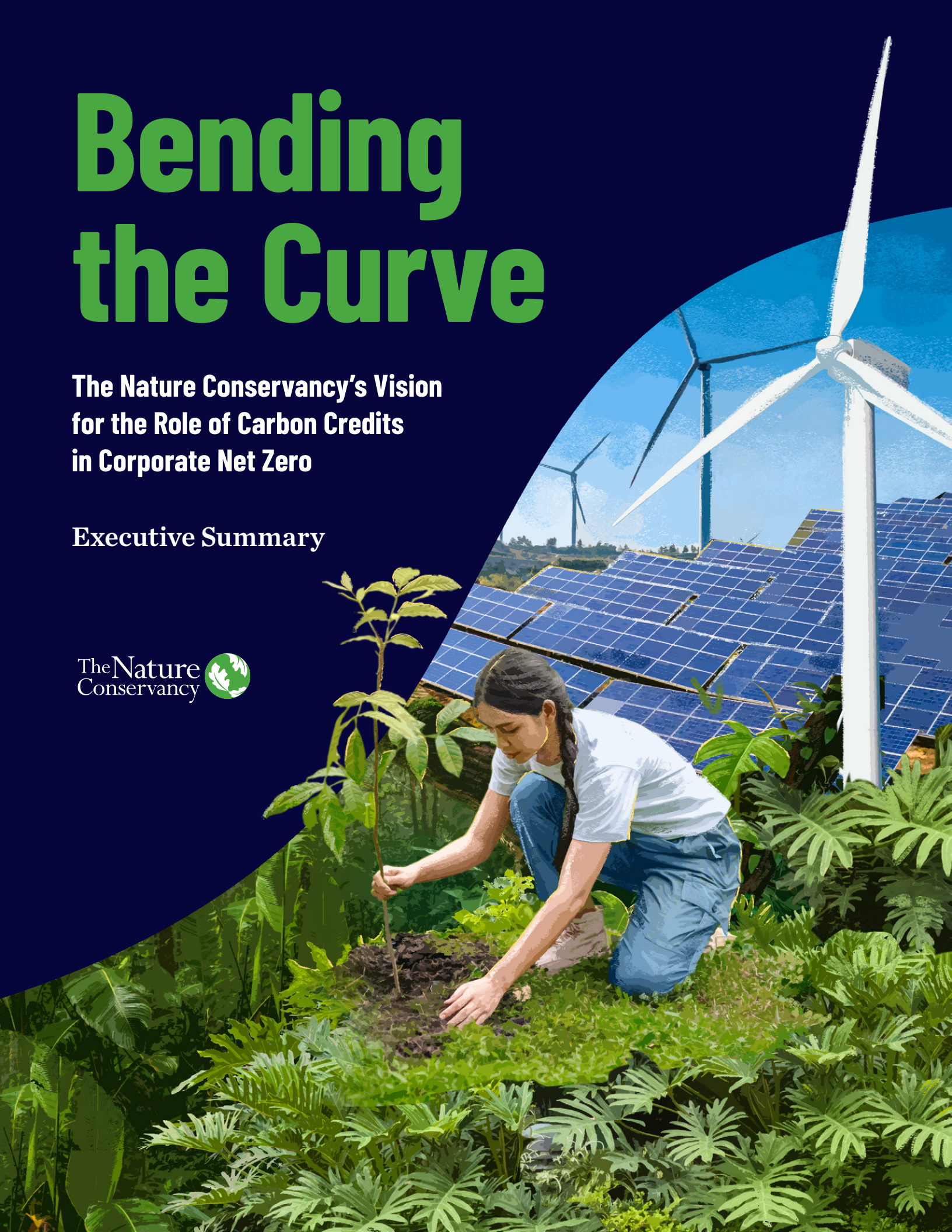


Bending the Curve

**The Nature Conservancy's Vision
for the Role of Carbon Credits
in Corporate Net Zero**

Executive Summary

The Nature
Conservancy



Meeting the Paris Agreement goals is urgent and requires leveraging all available climate solutions. Companies play a crucial role in the transition to Net Zero. In addition to reducing their own emissions, companies' investments in high-integrity carbon credits can be a powerful tool for reducing emissions when used within specific guardrails. In this paper, The Nature Conservancy (TNC) presents our vision for the role of carbon credits in corporates' journey to Net Zero in the hopes of opening the conversation around the optimal role of credits in corporate climate action.

Voluntary standards and frameworks for corporate climate action, especially those offered by the Science Based Targets initiative (SBTi) and Greenhouse Gas Protocol (GHGP), have set a path for companies to take science-based action to reduce their emissions. In short, these frameworks instruct companies to:

- Measure emissions
- Set a target to reduce emissions along a science-based trajectory that aligns with global climate goals
- Take action to reduce emissions through direct interventions within the value chain.

The role of carbon credits in this net-zero framework, as defined by SBTi, is limited: Once a company has reduced all but its residual emissions (by no later than 2050), companies can use carbon removal credits to neutralize the remaining emissions. In the meantime, companies may optionally use carbon credits (reduction or removal) to contribute to mitigation outside their value chains if they are already on track to meet their targets.^{a,1} These requirements reflect SBTi's application of the mitigation hierarchy, which

directs companies to prioritize^b reductions as much as possible, then neutralize the remaining impact.

Since 2021, when SBTi's Corporate Net Zero Standard was released, there has been an incredible outpouring of commitments — the number of Fortune 2000 companies with net-zero targets has grown 175% in the last four years, according to the Net Zero Stocktake 2024.² However, as short-term target deadlines near, **concerns are emerging about companies' abilities to follow through on those commitments using direct within-value-chain abatement alone.** According to an SBTi-conducted survey of companies that committed to set SBTi targets between 2019 and 2021, 29% ultimately failed to set a target within the mandated two-year timeframe, including many high emitters.³ In a separate survey, 93% of corporate executives faced critical challenges reaching their Scope 3 goals.⁴ Those challenges are materializing already. Early results on progress towards targets show that only 16% of Fortune 2000 companies are on track to reach net zero in their operations by 2050.⁵ Moreover, many more companies remain on the sidelines — over 40% of Fortune 2000 companies still lack an emission reduction or net-zero equivalent target.⁶

a As of this writing, SBTi is in the process of revising its Corporate Net Zero Standard. This report summarizes the guidance in Version 1 of the standard, though some provisions may change in Version 2.

b In this report, we use 'internal' mitigation/reductions to refer to reduction of value chain emissions, including Scopes 1, 2 and 3.

The Nature Conservancy's Vision: Using Nature to Fill the Implementation Gap and Go Beyond Net Zero.^c

The Nature Conservancy's mission is to conserve the lands and waters on which all life depends. Tackling climate change is one of our organization's top priorities, as rising greenhouse gas emissions put at risk the ecosystems we strive to protect and the people who rely on them.

We applaud the progress that has been made to define net-zero action and the ambitious commitments companies have made. The problem is that, so far, direct value chain decarbonization alone has not been shown to result in the pace and scale of climate change mitigation needed to meet global climate goals. The limited role for credits defined by SBTi also leaves a gap in finance for natural climate solutions (NCS), especially those not linked with corporate value chains.^d The Intergovernmental Panel on Climate Change (IPCC) has repeatedly recognized the imperative of NCS, which can provide 8-14 GtCo₂e/yr of climate mitigation.⁷ Despite this enormous potential, nature's solutions remain underfunded.⁸ Carbon credits can help fill both of these gaps.

However, we believe carbon credits⁹ need to be used within specific confines and under constrained timelines to advance genuine climate action:

- Carbon credits must meet high-quality criteria to ensure they truly represent the mitigation they claim – using the best

available science and aligned with the Integrity Council for the Voluntary Carbon Market (ICVCM) Core Carbon Principles.

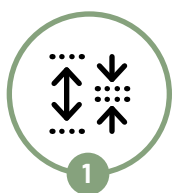
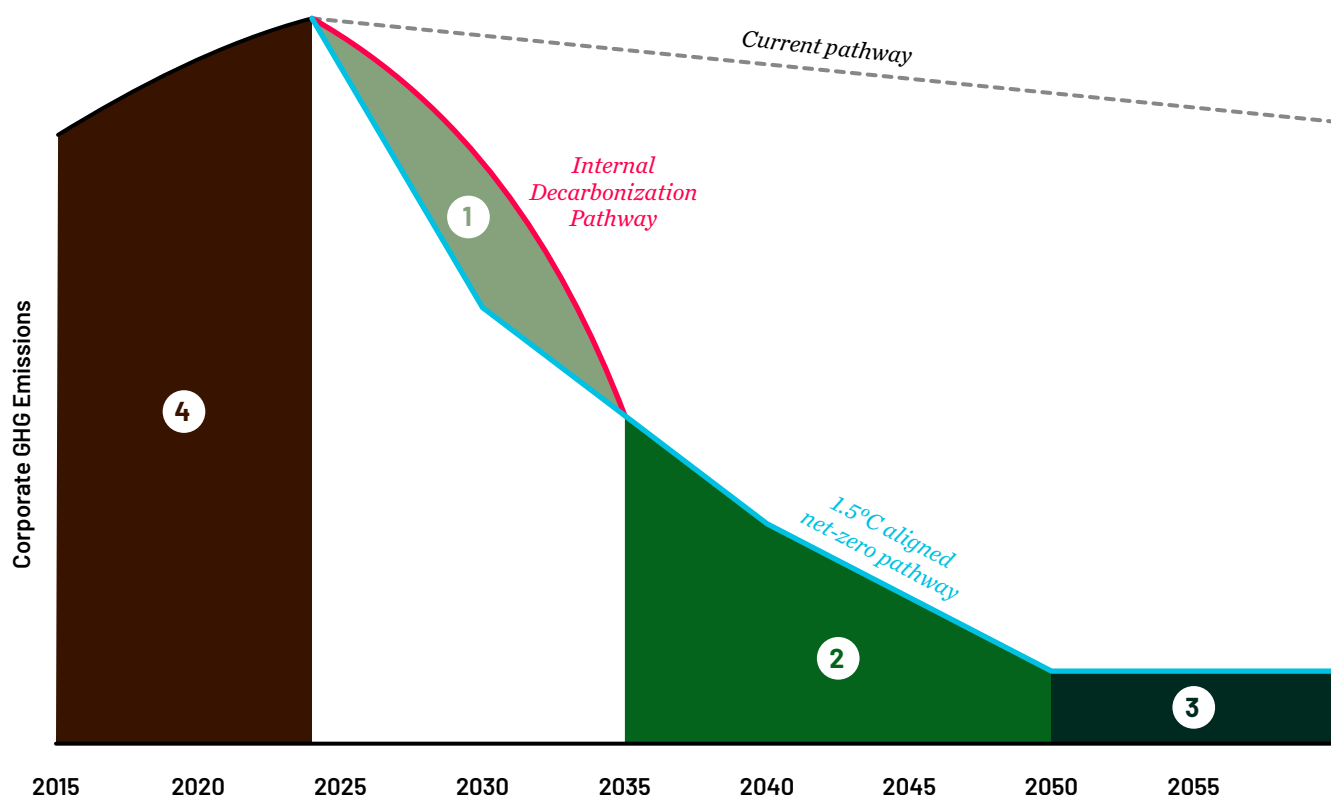
- They should be used in combination with companies setting and working toward science-based net-zero targets and applying the mitigation hierarchy by prioritizing readily abatable emissions within their own value chains whenever possible. Carbon credits should not be used to compensate for readily abatable emissions.¹⁰
- The risk of over-relying on carbon credits must be balanced with the science-based need for diverse, immediate, and pragmatic climate action that supports mitigation that will not be addressed through within-value-chain abatement alone.
- The role of carbon credits in the journey to net zero should change over time to capitalize on the evolving set of available climate solutions. With continued effort and investment, we expect that new tools, technologies, and policy changes will enable faster value chain decarbonization. Right now, and at every stage along this journey, we must do everything we can with the tools we possess while working to promote longer-term solutions.
- **We are in a climate emergency – and we need to act accordingly. Now is the time to expand the number of climate solutions available, not limit it.**

c Note on terminology: Unless otherwise specified, we use the term 'net zero' in this report to refer to the concept, not specific to any individual standard, program, or regulation.

d SBTi's Forest, Land and Agriculture (FLAG) Guidance gives companies guidance on reducing land-based emissions within their value chains. However, many NCS are not linked with corporate value chains, leaving a gap in incentives to finance those solutions.



Within this framework, we believe carbon credits can play a larger role in the journey to net zero, complementing value chain mitigation in a way that enables a livable climate future. We identified four use cases circumscribing credit use over the next 35 years:



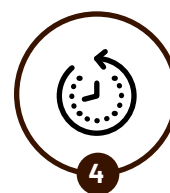
1
First, close the gap where internal decarbonization is falling short in the near term.



2
Once companies are on track to meet targets without carbon credits, use credits to address unabated emissions.



3
When companies have reduced internal emissions as much as possible, use credits to neutralize residual emissions – the “net” in net zero.



4
After achieving net-zero, take responsibility for historical emissions.

The Nature Conservancy partnered with MSCI to quantify the mitigation and market potential of each use case. We analyzed emission data from more than 4,000 publicly listed companies with climate targets and estimated potential credit demand ranges for all use cases by developing a set of high- and low-end assumptions, which defined the number of companies that would qualify and be interested in adopting a framework. The results of that analysis are in Table 1.

Table 1. Summary credit demand estimates for TNC’s four credit use cases

Use Case	Avg. Yearly Mitigation Potential Estimates	Avg. Yearly Finance Potential Estimates	Median Spend as a Percentage of Corporate Net Profit
1 Close the Near-Term Emissions Gap 2024-2035	0.55- 5.9 GtCO ₂ e	\$10-110 billion USD	1.1-2.2%
2 Address Unabated Emissions 2035-2050	0.27-3.2 GtCO ₂ e	\$11-130 billion USD	5.5-6.3%
3 Neutralize Residual Emissions 2050-2080	0.11-1.3 GtCO ₂ e	\$5.4-64 billion USD	1.8-2%
4 Take Responsibility for Historical Emissions 2050-2080	0.35-2.9 GtCO ₂ e	\$17-200 billion USD	5.3-5.7%

Of these use cases, #2 and #3 align with SBTi’s guidance on the use of carbon credits. #1 and #2 align with the Voluntary Carbon Markets Integrity Initiative (VCMi’s) Beta Scope 3 and Carbon Integrity claims, respectively. #1 and #3 would use credits to mitigate along a company’s net-zero pathway, whereas #2 and #4 would go above and beyond to demonstrate climate leadership.

Use case #1 would result in the greatest change to existing best practices and drive the greatest near-term mitigation by carbon credits. The Nature Conservancy views this use case as an “on ramp” for aligning with net zero. It would apply the principles of the mitigation hierarchy on an annual basis: Every year after setting a target, the company should strive to stay on track to meet that target using direct mitigation. Where within-value-chain mitigation falls short, carbon credits may fill the gap. The company should simultaneously work to address the longer-term barriers that are inhibiting direct mitigation – whether through supply chain engagement, investment in research and development, or policy advocacy. When used in this way, carbon credits become an additional capital expense that should motivate direct mitigation while funding much-needed mitigation elsewhere, often with additional benefits to livelihoods and the environment.

While it does not align with SBTi’s guidance, this use of carbon credits does align with the role of credits in many regulatory carbon pricing schemes in which regulated entities are allowed to meet a portion of their compliance obligations by retiring carbon credits. This includes California’s Cap and Trade program; China’s national and subnational Emissions Trading Schemes (ETS); Mexico’s, Chile’s, and Colombia’s carbon taxes; New Zealand’s ETS; South Africa’s carbon tax; and Switzerland’s carbon tax.¹¹ Similarly, under the Paris Agreement, countries including Singapore, Japan, South Korea, Norway, and Sweden are planning to use Article 6 credits to meet their Nationally Determined Contributions.¹²

Conclusion

Delivering on corporate mitigation ambition will require action from across the net-zero ecosystem – including companies, regulators and standard setters. We are deeply concerned about companies falling behind on their commitments and missing our opportunity to enlist the private sector in tackling climate change while the climate is warming to unprecedented levels in human history. Carbon credits alone will not get us to net zero, but we believe that with a clearly articulated purpose and constrained scope throughout the net-zero journey, they can help. We hope our vision and the data we present here will be additive to this evolving conversation.

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