

The role of Natural Climate Solutions (NCS) in reaching Net Zero

We face multiple interlinked crises – the climate emergency, nature loss and mounting inequality – and integrated solutions that contribute to solving all three challenges must be deployed wherever possible.

The Agriculture, Food, and Other Land Use (AFOLU) sector directly impacts climate, nature and people. Almost 22% of annual global greenhouse gas (GHG) emissions are emitted by the AFOLU sector, and over 50% of global economy is moderately or highly-dependent on healthy and functioning ecosystems¹. Transforming this sector will deliver a positive impact on all three fundamental challenges.

Natural Climate Solutions (NCS) offer an opportunity to transform the AFOLU sector through protecting, restoring and improving the management of natural ecosystems. High-quality NCS deliver a significant range of “core” benefits including climate mitigation, improved biodiversity and livelihoods for rural communities.

What are Natural Climate Solutions, and how do they deliver positive impact?

Natural Climate Solutions (NCS) refer to Nature-based Solutions (NbS) addressing climate change. They include actions that conserve, restore, or improve land management practices to increase carbon storage and/or avoid greenhouse gas (GHG) emissions across global forests, wetlands, grasslands, and agricultural lands.²

High-quality NCS activities effectively address common issues in climate action (e.g. permanence, additionality, leakage, double-counting and robust quantification) and **go above and beyond the delivery of climate mitigation** by providing positive impacts such as:

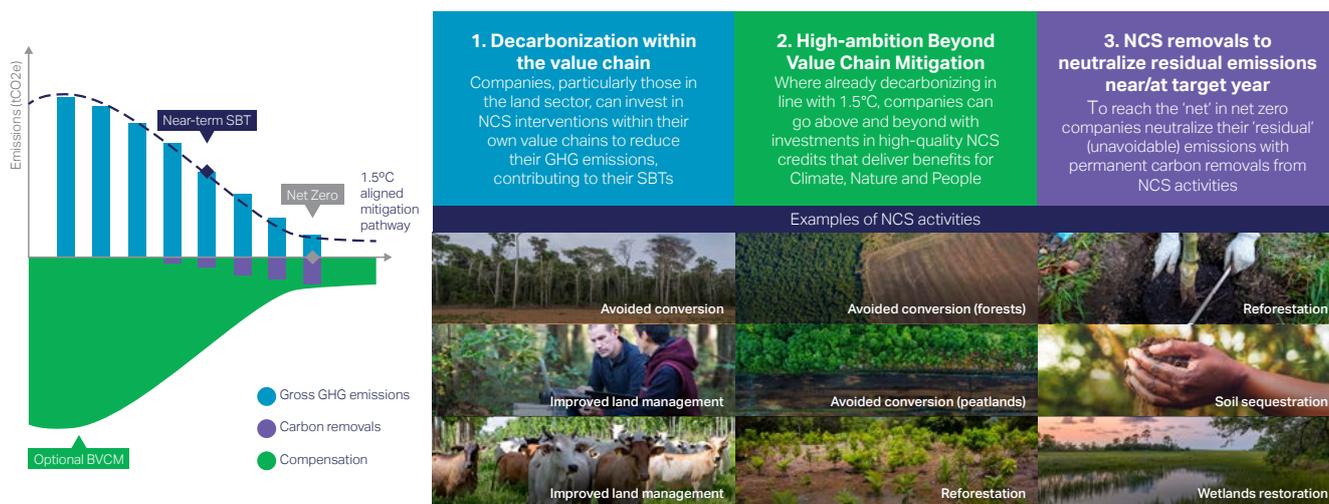
- gains to biodiversity and ecosystem integrity,
- substantive social and economic benefits for local communities and Indigenous Peoples, and
- climate risk protection (e.g. by improving the resiliency and adaptive capacity of landscapes).

Importantly, NCS also present the private sector with a mechanism to deliver finance to sustainable development for climate, nature and people. By investing in NCS, particularly those that can contribute to [Nature Positive](#), companies can support “core” benefits across all three spheres while on the journey to Net Zero.

On climate, NCS can contribute to all three elements of a company’s journey to Net Zero, as shown in Figure 1:

1. Within value chains, decarbonization in line with near-term Science Based Targets (SBT) can involve NCS (e.g. through insetting), particularly for companies in the AFOLU sector (see blue squares);
2. Through “Beyond Value Chain Mitigation”, NCS can compensate for emissions that have not yet been abated by a company on the journey towards Net Zero (see green squares);
3. Finally, when companies approach their Net Zero target year, NCS removals can be used to “neutralize” residual emissions (see purple squares).

Figure 1: breakdown of NCS uses in SBTi pathway to Net Zero³



Near-term Science Based Targets (SBT) / Internal Decarbonization

Decarbonization across a company’s Scope 1-3 emissions is the fundamental route to Net Zero. Many companies, particularly those in the AFOLU sector, depend on producing and processing natural resources. These activities (upstream or downstream) typically make up the majority of their emissions. For those companies, investing in NCS within their value chain represents one of the highest potential decarbonization opportunities. This can be achieved through “insetting”; for more on this, please see the associated paper [Insetting and Scope 3 action: applying and accounting for Natural](#)

[Climate Solutions \(NCS\) in land sector value chains.](#)

NCS activities in this category focus on improving land management through changes in farm and forestry practices that can help reduce GHG emissions or increase carbon sequestration. By rapidly scaling up these forms of NCS, the AFOLU sector can substantially contribute to decarbonizing the AFOLU sector and the global economy as a whole.

Beyond the climate change mitigation outcomes, investing in these activities can lead to several positive impacts and potential

financial returns. NCS can help supply chains adapt to climate change impacts and increase resilience, supporting production and yields under future climate scenarios. At the same time, NCS activities enable nature conservation and restoration and improve livelihoods for rural farmers, forest workers and their communities.

WBCSD is supporting the [GHG Protocol](#) as its [Land Sector and Removals Guidance](#) is developed to provide clarity to companies on how these activities will be accounted for, a key step in catalyzing their deployment.

Beyond Value Chain Mitigation

Companies can demonstrate the highest climate ambition by supporting mitigation beyond their value chain **while decarbonizing in line with Net Zero**. Using NCS carbon credits to compensate for unabated emissions in this way enables a wide range of positive outcomes for climate, nature and people to be achieved.

This investment in high-quality NCS underpins the global transition to a 1.5-degree future by channeling finance to climate mitigation

activities outside corporate value chains. Such activities currently face severe shortages of resources and climate finance at an international level and contribute to reducing the global atmospheric carbon budget while also delivering environmental and social benefits.

We reiterate that internal decarbonization aligned with a science-based target is the fundamental action to reach Net Zero; NCS credits should not disincentivize or replace these

activities. For more information on how corporates can identify and use high-quality NCS credits, see [Natural Climate Solutions for Corporates](#). In this document, the [Natural Climate Solutions Alliance](#) outlines key principles companies should adhere to when sourcing high-quality credits from reputable, independent standards. Additional content on this topic also appears in their latest report, [Natural Climate Solutions and the Voluntary Carbon Market: A Guide for C-suite Executives](#).

Neutralization of residual emissions at the point of Net Zero

Despite significant efforts to decarbonize, a limited volume of emissions will likely continue at Net Zero – for example, the emissions which cannot be decreased using available technologies. These "residual" emissions must be "neutralized" using carbon removals (the "Net" in "Net Zero"). NCS activities, including forest and wetland restoration, agroforestry, and soil restoration, remove carbon from the atmosphere and can be used to neutralize emissions.

Technological solutions (such as Direct Air Capture with Carbon Storage, or DACCS) will play a critical role in scaling removals to the volumes necessary for the global economy to reach Net Zero. They require investment now to scale, but they remain far higher in cost and provide very limited co-benefits towards the nature and inequality crises. As a result, NCS removals should be prioritized in the near term while technological approaches are developed and

scaled. NCS removals can be sourced through high-quality NCS credits or by implementing NCS activities to generate removals from within the value chain. For more information on how corporates can identify and use high-quality NCS credits, see [Natural Climate Solutions for Corporates](#).

The NCS Alliance's "High Ambition Pathway"

In addition to what is described by the Science Based Targets initiative (SBTi), the NCS Alliance (NCSA) has set out a "high ambition pathway" in their recently-released report [Natural Climate Solutions and the Voluntary Carbon Market: A Guide for C-suite Executives](#). The NCSA urges all businesses that avoid and reduce their own emissions in line with a science-based reduction pathway to counterbalance their annual unabated emissions by purchasing high-quality NCS voluntary carbon credits. The "high ambition pathway" calls for:

- purchasing and retiring high-quality NCS voluntary reduction and removal credits during the transition to Net Zero to counterbalance unabated value chain emissions. These credits should not be used in lieu of or delay the emissions reductions necessary to meet long-term science-based targets for Scopes 1, 2 and 3; and
- going beyond Net Zero by purchasing and retiring high-quality NCS voluntary carbon credits to counterbalance historical emissions and contribute towards climate recovery.

A full breakdown of the high ambition pathway, the business case and recognizing the full value of investments in NCS using this approach is available in [Natural Climate Solutions and the Voluntary Carbon Market: A Guide for C-suite Executives](#).

NCS can deliver for Climate, Nature and People as part of the transition to Net Zero

Through a blend of in-scope decarbonization, Beyond Value Chain Mitigation, and neutralization of residual emissions, NCS can play a fundamental role in every company's climate action and Net Zero strategy. High-integrity NCS can also be vital in corporate action toward Nature Positive and addressing inequality.

Companies should therefore explore their strategy and business activities for opportunities to incorporate approaches such as Natural Climate Solutions. It is crucial that this action follows the mitigation hierarchy, is informed by the latest science, and supports high-quality NCS that deliver for more than just climate. These topics are the focal points of WBCSD and the NCS Alliance's work on NCS, and we welcome companies to learn, share and take action alongside our existing membership.

While we face three profound and connected crises – the climate emergency, nature loss and mounting inequality – this presents an opportunity and a challenge. Transforming the AFOLU sector through financing integrated approaches, such as NCS, can move companies toward Net Zero while delivering for climate, nature and people.

References

- ¹ WEF, 2020. The New Nature Economy series: Nature risk rising. Available: http://www3.weforum.org/docs/WEF_New_Nature_Economy_Report_2020.pdf
- ² WBCSD, 2020. Accelerating business solutions for climate and nature – Report I: Mapping nature-based solutions and natural climate solutions. Available: <https://www.wbcsd.org/Programs/Food-and-Nature/Nature/Nature-Action/Resources/Accelerating-business-solutions-for-climate-and-nature-Report-I-Mapping-nature-based-solutions-and-natural-climate-solutions>
- ³ SBTi, 2021. The Net Zero Standard. Available: <https://sciencebasedtargets.org/net-zero/>



ABOUT THE WORLD BUSINESS COUNCIL FOR SUSTAINABLE DEVELOPMENT (WBCSD)

WBCSD is the premier global, CEO-led community of over 200 of the world's leading sustainable businesses working collectively to accelerate the system transformations needed for a net zero, nature positive, and more equitable future.

We do this by engaging executives and sustainability leaders from business and elsewhere to share practical insights on the obstacles and opportunities we currently face in tackling the integrated climate,

nature and inequality sustainability challenge; by co-developing "how-to" CEO-guides from these insights; by providing science-based target guidance including standards and protocols; and by developing tools and platforms to help leading businesses in sustainability drive integrated actions to tackle climate, nature and inequality challenges across sectors and geographical regions.

Our member companies come from all business sectors and all major economies, representing a combined revenue of more than USD \$8.5 trillion and 19 million employees. Our global network of almost 70 national

business councils gives our members unparalleled reach across the globe. Since 1995, WBCSD has been uniquely positioned to work with member companies along and across value chains to deliver impactful business solutions to the most challenging sustainability issues.

Together, we are the leading voice of business for sustainability, united by our vision of a world in which 9+ billion people are living well, within planetary boundaries, by mid-century.

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