



SCIENCE BASED TARGETS NETWORK
GLOBAL COMMONS ALLIANCE



LAND

Technical FAQs

For SBTN Land Guidance

Step 3: Measure, Set and Disclose

STEP

3

**MEASURE, SET
& DISCLOSE**

Version History

Version	Update description	Release Date	Effective Dates
1	Tech FAQ Step 3 Land	September 2024	September 2024 - Indefinite

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info@sciencebasedtargetsnetwork.org.

About Land targets

What is the business case for setting Land targets?

Between one third and a half of all habitable land has been converted to agricultural and other human uses, undermining the ecosystem services on which many people and economic activities depend. Further degradation to this converted land, such as through soil erosion, could result in an economic loss of up to US\$11.2 trillion in agricultural assets, with knock-on impacts on the rest of the economy through higher commodity and food prices. As such, companies across the economy both impact and, in turn, depend on nature. Companies who implement science-based targets and take action to meet these will be frontrunners in managing the significant risks and opportunities that they will be increasingly exposed to. Companies that do not act risk undermining their business resilience, brand value, and access to capital, as well as increasing their exposure to future nature policy and regulations.

Who developed the Land targets and who has been consulted ?

The SBTN Land Hub is responsible for developing the technical content of the Land targets as part of the Science Based Targets Network's (SBTN's) multi-stakeholder, multi-year initiative to provide companies with comprehensive science-based targets for nature.

The SBTN Land Hub is a collaboration between World Wildlife Fund (WWF), Conservation International (CI), The Nature Conservancy (TNC), World Resources Institute (WRI), and the Food and Land Use Coalition (FOLU). As a core partner of FOLU, the Land Hub engaged Systemiq as its primary consultant partner to collaborate and lead the development of this version.

The Land Hub also convened a number of experts from the following organizations in support of the technical development of these methods: Accountability Framework Initiative (AFi), ISEAL, Tropical Forest Alliance, CDP, Rainforest Alliance, and Proforest.

Throughout the development and consultation process, the Land Hub received active input from a broad range of stakeholders. These dedicated experts from industry, academia, and NGOs provided detailed input during the planning phase and on drafts of the guidance and tools. An internal consultation took place in December 2022 and January 2023 followed by a public consultation in February and March 2023 to ensure a wide range of input on key methodological choices from all stakeholders. The beta version of the Land targets was then tested during the corporate pilots and refined into the final Version 1 released in July 2024.

How was the work on Land targets funded?

This guidance was primarily funded by the in-kind contributions of the core organizations that comprise the SBTN Land Hub and the wider organizations who collaborated. In addition, Rockefeller Philanthropy Advisors (RPA) and SBTN provided funding to support the Food and Land Use Coalition and Systemiq. The development of Land targets is also funded in part by the Gordon and Betty Moore Foundation, Norway's International Climate and Forest Initiative (NICFI), and Robert Bosch Stiftung. It received no corporate funding.

How is biodiversity integrated into the V1 Land targets?

The Land targets do not explicitly focus on metrics for biodiversity but have positive impacts for biodiversity by alleviating the major pressures on it. The Land targets directly address the major driver of terrestrial biodiversity loss globally: land use change. The targets also address pollution, another driver of biodiversity loss. The targets provide indirect benefits for biodiversity through mitigated climate change and natural resource use.

The No Conversion of Natural Ecosystems and Land Footprint Reduction targets directly address land use change, while the Landscape Engagement target is designed to promote large-scale, multi-stakeholder collective action to improve ecological and social conditions in landscapes. As part of this, companies can work to regenerate working lands, reduce pollution at its source, and restore natural habitats. These actions are likely to have positive impacts on biodiversity.

While the Land targets are intended to create positive outcomes for biodiversity by alleviating the major drivers of biodiversity loss, SBTN recognizes that there may be more opportunities to address threats to biodiversity, for example by considering invasive species impacts on biodiversity, and nature's contributions to people. Accordingly, SBTN intends to develop a separate, more complete set of biodiversity target-setting methods.

Following the final revision of the beta version and the launch of the [Step 3: Land Technical Guidance V1](#), the SBTN Biodiversity Hub will develop an approach and roadmap to better understand and document the capacity of existing methods to adequately address additional drivers of biodiversity loss.

How do the V1 Land targets address land degradation?

Degradation is a complex and highly localized issue. Therefore, it is difficult to define it in a way that would apply universally, which is why the United Nations Convention to Combat Desertification (UNCCD) is cautious in defining "degradation." The Accountability Framework Initiative (AFi) defines degradation as "changes within a natural ecosystem that significantly and negatively affect its species composition, structure, and/or function and reduce the ecosystem's capacity to supply products, support biodiversity, and/or deliver ecosystem services." Land degradation is not yet addressed through indicators that directly account for land degradation, but instead is accounted for by the impacts of land conversion and agricultural footprint. We intend to provide more guidance on this in version 2.

The **No Conversion of Natural Ecosystems** target is based on the classification of natural and non-natural lands using the SBTN Natural Lands Map (information on which is included in the methods). If corporate land use practices or sourcing activities result in a change in land use or land cover, this is considered conversion by the natural/non-natural classification in the SBTN Natural Lands Map. Moreover, persistent degradation can be expected to result in permanent changes in land cover or land use.

The natural/non-natural classification is based on the AFi's definition of natural ecosystems, which can include partially degraded or managed natural lands in addition to "pristine" or regenerated natural ecosystems. The "natural" classification does not apply only to unmodified lands as there are significant areas worldwide that are managed for natural resources and which maintain their ecological character and composition. There are also areas that some consider non-natural (e.g., Scandinavian forests, low density pasture, or rangeland) yet are considered natural lands in the SBTN Natural Lands Map because of their ecological value.

The actions required by companies setting a **Landscape Engagement** target are likely to involve efforts to reduce and reverse degradation on working and natural lands. The Landscape Engagement target is intended to enable regenerative, restorative, and transformational actions in landscapes that are relevant to a company's operations and

supply chains. The regeneration of working lands and the restoration of natural ecosystems are clear means of avoiding and reducing some of the main drivers of degradation.

Companies are required to engage in two landscape initiatives or in a landscape initiative covering 10% of their land footprint in their initial targets. Here they commit to improving conditions that benefit nature and support livelihoods, expanding actions beyond but still material to their immediate production and sourcing areas to enable positive outcomes across the entire surrounding landscape. To make such improvements, it is likely that companies will have to engage with and undertake a variety of restorative actions both within the lands they manage or control and also to work with suppliers to do the same within the areas from which they source. These actions may include management improvements of working lands to the restoration to fully functioning natural ecosystems.

For the first version of the Landscape Engagement targets, the level of ambition will be determined by the collective goals defined in landscape initiatives through multi-stakeholder processes that will have to take into consideration the needs of local communities and indigenous people. For future versions, the Land Hub will continue to work with the Earth Commission and other scientific institutions to consider the viability of spatially explicit thresholds and metrics for degradation and land quality.

How does the Natural Lands Map consider land degradation?

The purpose of the SBTN Natural Lands Map is to provide a reference for the target on No Conversion of Natural Ecosystems. Whether and why different land classes are classified as “natural” or not can be found within the technical documentation for this map. Figure 3 provides a brief summary of this.

Some land classes are self-evident (e.g., urban areas, intensive annual row crops, large infrastructure) while others likely include different degrees of “degraded” that spatial data at a global scale cannot capture. For this reason, SBTN has taken a precautionary approach by adopting a broad definition of “natural” in line with the Accountability Framework Initiative, which includes “ecosystems that have been partially degraded by anthropogenic or natural causes”. The second version of Land targets will provide place-based thresholds for specific indicators of land quality. It is envisioned that this second version will include targets on specific land indicators that cover frequent components of land degradation.

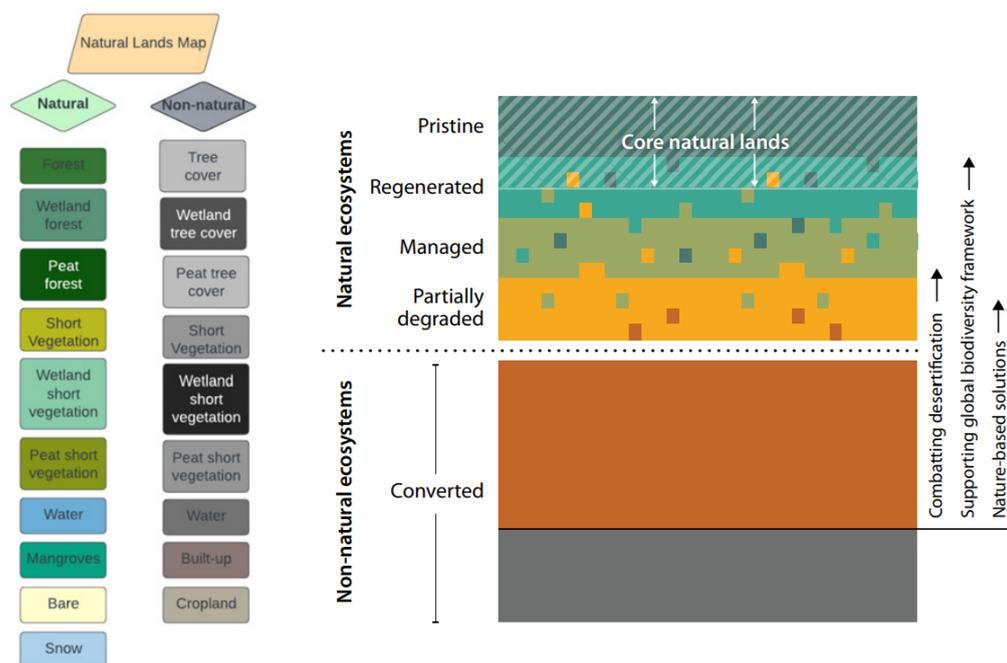


Figure 3: Land-cover classes of the SBTN Natural Lands Map and the classification categories of natural ecosystems.
 Note: This figure outlines the range of what is considered “natural” for inclusion in the SBTN Natural Lands Map. Core natural lands are a priority designation within the No Conversion MICE pathway. Here they are indicated as primarily pristine or regenerated ecosystems, though they exist in managed or partially degraded ecosystems as well.

How do Land targets ensure the conservation of natural areas within working lands?

All three Land targets help to ensure the conservation and restoration of natural areas within working lands. Within working lands, the No Conversion target prohibits the conversion of natural land, ensuring that natural land that already exists in working lands remains natural. The Land Footprint Reduction target helps combat land degradation through a reduction in the agricultural footprint, given that agriculture is a leading cause of land degradation. The Landscape Engagement target then goes further by encouraging companies to take a landscape approach to improving ecological integrity. The actions required for this target focus not only on the direct sites and working lands that companies own, operate, or source from, but necessitate that companies engage with other stakeholders to contribute to ecological and equity improvements across the broader landscape. Thus, the Landscape Engagement target promotes an additional layer of accountability and incentive for companies to maintain and advocate for the enduring health and stability of natural areas within and beyond their material sites.

How do the V1 Land targets relate to other corporate commitments?

Land targets are designed to increase the clarity, ambition, and/or scope of existing initiatives. They link to and build upon existing and emerging initiatives and frameworks and are not intended to lead to parallel or asynchronous processes that confuse or undermine existing, quality work on corporate sustainability.

The Land targets quantify the specific contributions that companies can make to reduce their impacts on land and to contribute to a nature-positive future by 2030. To achieve this, the targets reflect an integrated approach to target setting, accounting, and reporting. The V1 Land targets are built upon and written in collaboration with the experts and institutions that developed key existing data and environmental

initiatives that cover land-related impacts, namely:

- The Greenhouse Gas Protocol (GHGP) Land Sector and Removals Guidance
- The SBTi Forest, Land and Agriculture (FLAG) Guidance
- The Accountability Framework Initiative.

The development of the Land targets in collaboration with the above listed initiatives helps ensure alignment, strengthens the target approaches, and reduces the burden for companies who are already working or will work with these initiatives

Please refer to the “*How do the Land targets relate to the FLAG methods from SBTi? Will companies be able to use the same data, tools, and/or reporting mechanisms to fulfill requirements under both methods?*” FAQ for further information on that initiative.

Do the Land targets cover the whole value chain?

The first release of science-based targets for nature covers impacts occurring in direct operations and upstream value chains, enabling companies to assess and set targets on environmental impacts occurring within these parts of their value chain.

It does not address environmental impacts occurring in companies’ downstream value chains. As we expand the scope of the guidance in subsequent releases, environmental impacts in companies’ downstream value chains will be considered.

How do companies know which targets they need to set?

Based on the outputs of Step 1: Assess and Step 2: Interpret & Prioritize, companies should adopt some combination of the three Land science-based targets based on:

- The materiality of specific pressures generated by the company’s activities
- The sector in which they operate
- The size of the company

The guidance includes decision trees for each of the targets to enable companies to establish whether targets are a) required, b) recommended, c) not required. Further information can be found on pages 29 and 33 of the [Step 3: Land Technical Guidance V1](#) document.

Companies operating in or sourcing from the following sectors will likely be required or recommended to set the Land targets, including but not limited to: food and beverage, agriculture, forestry, fishing and aquaculture, bioenergy, mining, infrastructure, accommodation, and construction.

How do the Land targets align with the Convention on Biological Diversity’s Global Biodiversity Framework?

The Land targets are aligned with the Global Biodiversity Framework (GBF) in the following ways:

- **No Conversion of Natural Ecosystems:** This target addresses loss of biodiversity from the conversion of natural ecosystems attributed to company activities or sourcing. This supports global targets 1, 2, 3, 10, 11, 15, 16, 19, 20, 21 of the Kunming-Montreal GBF.
- **Land Footprint Reduction:** This target aims to reduce land use and land use change pressures on biodiversity by reducing land requirements. This supports global

targets 2, 3, 10, 15, 19, 20, 21 of the GBF.

- **Landscape Engagement:** This target encompasses a variety of potential actions that companies can implement for achieving holistic environmental and social outcomes within collaborative landscape initiatives. This supports targets 2, 3, 10, 11, 15, 16, 19, 20, 21, 22, 23 of the GBF.

[The Supplementary Material](#) – Science-Based Targets for Land shows the alignment between the objectives that are pursued by the Land targets and the GBF in greater detail.

How do the Land targets relate to the FLAG methods from SBTi? Will companies be able to use the same data, tools, and/or reporting mechanisms to fulfill requirements under both methods?

The Land targets are designed to address environmental impacts that the SBTi FLAG Guidance cannot, for example nutrient pollution and effluents, pesticide use, and erosion.

The Land targets also go beyond the SBTi’s recommendation to set a No Conversion of Natural Ecosystems target and make this a requirement for companies that have material impacts on land.

The broader coverage of land types in the SBTN Land targets methods results in mostly aligned but broader data requirements for companies. Both SBTi FLAG and SBTN Land targets methods require data on direct land use change, statistical land use change and/or land management data. The SBTN Land targets additionally require companies that produce conversion-driving commodities to provide spatial data to identify production and locations and assess whether these areas have been affected by conversion of natural lands after 2020. For companies’ upstream value chain, sub-national data is required. Thus SBTN has additional spatial data and value-chain data requirements than are currently included in SBTi FLAG.

Target 1: No Conversion of Natural Ecosystems

How can the Natural Lands Map be accessed?

The Natural Lands Map can be visualized at: <https://wri-datalab.earthengine.app/view/sbtn-natural-ecosystems>. Data are available on Google Earth Engine.

All code is available on GitHub at the following link: <https://github.com/wri/natural-lands-map/>

How frequently will the Natural Lands Map be updated?

The SBTN Natural Lands Map is a beta version using the best public data currently available. As new and improved (higher accuracy, finer resolutions) datasets are published, they will be incorporated into the map as future versions. New data for natural grasslands and planted forests in temperate and boreal regions would be especially valuable to future maps. New global grassland and pasture data at 30-m resolution are expected from Land & Carbon Lab's Global Grassland Monitoring Consortium in 2024 and will be incorporated into a version of this map when they become available.

The Land Hub and the World Resources Institute Land & Carbon Lab will continue to incorporate national or regional data sources.

If you know of local spatial data that could help further delineate natural and non-natural lands, please email SBTN (info@sciencebasedtargetsnetwork.org). Further work in this field is needed to define conversion and identify and create data capable of monitoring the conversion of natural lands.

What alternatives are there to the Natural Lands Map?

Companies setting No Conversion targets must use the Natural Lands map to estimate the conversion of natural ecosystems since 2020 that is associated with the company's operations or commodity volumes in supply chains. Additionally, the map provides the data necessary for companies to operationalize a 2020 cutoff for no-conversion calculations.

As the data in the SBTN Natural Lands Map are often based on global data where regional or local data is not publicly available, there may be cases where the Natural Lands Map indicates that an area is natural land (based on SBTN's operationalized definition) when it is not. Companies wishing to contest a land class designation within the Natural Lands Map may submit supporting data to the Accountability Accelerator validation service, using the template provided in the [Supplementary Material – Science-Based Targets for Land](#).

Is there a list of certifications and assurance systems that comply with the conversion-free criteria that we could consult?

Companies wishing to use certification schemes to comply with the requirements of the No Conversion of Natural Ecosystems target must provide evidence to the Accountability Accelerator Validation Service that the certification scheme, through a chain of custody system, demonstrates both a deforestation and conversion-free assurance. Preliminary guidance for certifications that demonstrate such assurance for deforestation-free and

conversion-free assessments has been provided by the Accountability Framework initiative's [Time for Transparency report](#).

Should companies operating downstream of the first point of aggregation remediate any conversion occurring between the cut-off date and the target year?

The criteria for the No Conversion target focus on impacts associated with the sourcing stage in the value chain. Therefore, a company like a food retailer that purchases from the first point of aggregation must follow the requirement to remediate impacts generated at the sourcing stage.

While the current guidance does not require companies purchasing downstream from the first point of aggregation to remediate sourcing impacts, all companies at all stages of the value chain should bear the remediation costs for conversion associated with the commodities they purchase. Downstream companies can contribute to remediation by supporting producers directly or by participating in landscape initiatives where larger, collective remediation efforts are being implemented.

SBTN may develop more specific requirements for how downstream companies must support remediation efforts in the future.

How are restoration/rehabilitation efforts accounted for in the No Conversion target?

Not all past restoration and rehabilitation efforts by a company will count as relevant remediation for converted land. Remediation must be associated with the actual land that was converted. The Land Hub is collaborating with partners to further define remediation requirements, including how companies will need to identify the specific land that must be remediated to align with the target requirements. This includes determining when a company must remediate the exact land that was converted or when they can remediate an equivalent area within the same managed unit or landscape.

How should waste and residues be included in the scope of the No Conversion target?

To identify whether waste and residues from the inputs to, processing of, or manufacturing of conversion-driving commodities must be included in the scope of the No Conversion target, companies must follow the following hierarchy.

Volumes of waste and residues used in such processes will be included within the scope of the No Conversion target based on:

1. Compliance with existing national or relevant jurisdictional legislation defining what constitutes waste and residues;
2. Alignment with sectoral best practices on the inclusion of waste and residues;
3. If either option is not clear or available, waste and residue must be included when the product is classified as waste and/or residue and has an economic value.

How did SBTN select the 2020 cutoff year for conversion in Target 1? How does the target address companies' contributions to conversion before 2020 vs after that date?

The 2020 baseline year for the Natural Lands Map has been agreed upon by a broad membership of organizations, including those of the SBTN Land Hub and the Accountability Framework Initiative (AFi). The choice of 2020 as a base year from which to estimate conversion of natural lands is based on the availability of best quality, global spatial data on land cover including forested and non-forested land.

While the 2020 baseline offers a global reference for assessing conversion of natural lands, SBTN acknowledges previous efforts to halt deforestation and conversion of natural lands, which use reference states that are set earlier than 2020. Where other cut-off dates earlier than 2020 exist, such as from existing company initiatives or targets, SBTN requires companies to use those earlier dates (e.g., sectoral or regional cut-off dates).

Target 2: Land Footprint Reduction

Should Land Footprint Reduction targets be based on land use calculated through economic allocation, or should they be based on the total physical area?

The goal is to estimate the total physical space occupied. Land occupation can generally be calculated using yields (e.g., crop yields in t/ha/year) to convert from metric tons of product to hectares, or by using land occupation factors (e.g., m²a/kg) from Life Cycle Assessment (LCA) databases.

If the specific land area and the multiple products produced on it are known, some allocation may be necessary. In such cases, a company can choose between mass (physical) allocation or economic (value) allocation, depending on which method is best suited to arriving at an estimate for the area of land occupied. The decision tree for selecting an allocation approach from the GHG Protocol (Figure 8.2) is also relevant for land occupation, with "land occupation" replacing "GHG" or "emissions."

Land Footprint Reduction targets are for a maximum of 10 years, but the SBTi target is for 2035. How do we align these?

Land Footprint Reduction targets must cover a minimum of 5 years and a maximum of 10 years from the date the target is submitted to SBTN for official validation.

Companies setting Land targets are also encouraged to develop long-term targets (e.g., to 2050) in addition to near-term targets. This aligns with the SBTi approach to emissions, where near-term targets drive the necessary action for significant reductions by around 2030. Near-term emissions reductions are crucial for staying within the global emissions budget and are not a substitutes for long-term targets.

Target 3: Landscape Engagement

The Landscape Engagement target requires companies to commit to substantial improvements in ecological and social conditions in landscape initiatives. How can a company establish an appropriate numerical target?

The Land guidance states that further research and development is needed to set thresholds for improving the ecological or social condition of a landscape. In the meantime, companies should align with the goals of existing initiatives and targets (such as those of the Global Biodiversity Framework) to contribute to improving such conditions proportionally to a company's engagement.

However, SBTN cannot guarantee that adhering to these external targets will align with the level of ambition defined in V2. Since achieving meaningful ecological condition goals takes several years, companies can begin their efforts now, and SBTN will provide additional guidance in the near future.



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