

A Technical Guide to the Earthly Assessment

Identifying best practices

Introduction



The Earthly Assessment identifies best practices amongst Nature-based Solutions (NbS) by bringing together the lessons learned on the ground with insights from the latest scientific research.

As more companies make climate pledges, global demand for carbon offsets has been growing exponentially. Whilst this incentivises project development, it also poses a high risk of low-quality offsets being sold, thus reducing the mitigation potential of the Voluntary Carbon Market.

Several initiatives have been taken to regulate this growing market and assess certain quality criteria. ¹ However, too many offsets are currently being sold which overestimate their carbon benefits (for instance by setting outdated baselines and using unreliable data sources), and/or **fail to deliver real and lasting benefits for people and nature.** ²

There is a growing consensus that successful NbS are those which go beyond carbon and take an inclusive and holistic approach through all stages of development. ³ Similarly, a rigorous assessment, one which is truly effective in analysing the benefits and chances of success of each project, is one that does not focus on one aspect alone, but looks at each metric both in detail and as part of an interconnected whole.

It is for this reason that the Earthly Assessment builds a **detailed, holistic picture** of project quality by integrating information on carbon, biodiversity & social impacts; using all the information provided by the projects, reputable third-party auditors, and independent and reliable data sets.

To ensure that the Earthly Assessment is always at the forefront, and often beyond, the latest guidelines and standards, our Research Team regularly integrates and aligns its methodology with both the Earthly Scientific Board, the global quality standards currently under development (e.g. Integrity Council for the Voluntary Carbon Market and IUCN Global Standard) and our partner assessor companies (e.g. BeZero and Google Earth Engine).

It is rare for companies to have the capacity and expertise required to analyse project impacts at this level of depth, thus exposing them to the risk of purchasing offsets which, under our expert analysis, turn out to under-perform or may even do more harm than good. Given the growing attention of global media on some of these projects, ⁴ the Earthly Assessment tackles head on both investment and reputational risks.

¹ <https://www.iif.com/tsvcm>; <https://vcmintegrity.org/>

² <https://www.pnas.org/doi/10.1073/pnas.2004334117>

³ <https://royalsociety.org/topics-policy/projects/biodiversity/nature-based-solutions/>

⁴ <https://redd-monitor.org/>

Assessing the Quality of Nature-based Solutions



Nature based Solutions are defined as “actions to protect, conserve, restore, sustainably use and manage natural or modified terrestrial, freshwater, coastal and marine ecosystems, which address social, economic and environmental challenges effectively and adaptively, while simultaneously providing human well-being, ecosystem services, resilience and biodiversity benefits.” - UNEA-5 Resolution.

For this reason the Earthly Assessment is composed of **three main pillars: Carbon, People, and Biodiversity**, which includes a much wider range of ecosystem services, biodiversity and social indicators which cannot be captured by looking at carbon alone.

As explained more in detail below, each pillar is composed of 7-9 criteria, which are in turn assessed according to a number of maturity and performance indicators. A single pillar is assessed on the basis of **between 30 - 40 quality indicators**, which has a minimum quality threshold and is scored based on the full range of available evidence rather than just project documents.

Governance, and in particular inclusive planning, transparent monitoring, and adaptive management, are assessed in relation to the specific challenges associated with each pillar.

The scoring methodology






Each quality indicator is scored according to two elements:



Maturity

Measures the degree to which, given all the information we have available, we believe the project to have satisfactorily addressed the given indicator.

Is scored between 0 and 4, where generally speaking a project is given a

-  0 If it hasn't addressed this aspect at all.
-  1 If it addressed it but unsatisfactorily
-  2 If it has addressed it satisfactorily, but without going beyond compliance
-  3 If it went beyond compliance but could have gone even further
-  4 If it is an example of best practice

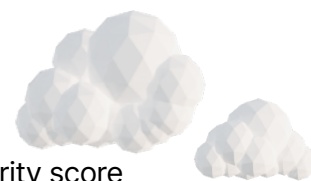
Or N/A (+ a justification) if it isn't relevant to the specific case considered

Each of the 4 maturity levels of each indicator are associated with a detailed description of what that maturity level consists of for that particular indicator (as shown below) which is based on a 12 months iterative learning process in collaboration with our Independent Scientific Board of 8 advisors and with input from major global consultations and standards including:

- IUCN Global Standard for NBS
- ICVCM Core Carbon Principles
- ICROA Code for Best Practice
- Oxford Principles for Net-Zero Aligned Offsetting

If a project scores below 2 in any of the indicators we get in touch with project developers to ask for additional information, and if the project is unable to provide some satisfactory justification and/or promptly engage with that aspect, then Earthly will not endorse nor sell the project. This ensures that Earthly projects perform above market average and go beyond compliance in every single aspect assessed.

Confidence



Measures the reliability and depth of the evidence available to back the maturity score assigned to that indicator.

Is scored between 0 and 3, where:

0

If **no direct evidence** is available. This means:

- No explicit mention in the project documents,
 - No mention by third-party auditors,
- In these cases, therefore;
- Indirect evidence such as proxy measurements may be used to assign a maturity score
 - If no evidence is available for a relevant indicator the research team asks project developers for more information

1

If the information is merely **narrated**. That is:

- Is only found in project documents, but no evidence is provided
- Is not validated or verified by independent third parties

2

If the information is **evidenced**, that is:

- The project addresses the indicator in detail
- Additional evidence is available but is not easy to verify independently by Earthly researchers
- The evidence is verified by third parties, but the only auditors who verified the data were those part of the Standards (e.g. Verra or Gold standard) registration. In particular, this applies if the third party verifiers have certified projects which have identified as performing below our standard

3

If the information is reliably **verified**, that is:

- The project addressed the indication in detail
- Appropriate, clear and easy to verify evidence is provided
- Evidence is verified either directly by earthly research team or by a trusted third-party (generally one of our trusted assessment partners) as opposed to any auditor

Assessing confidence is particularly important because Nature-based Solutions adhere to a wide range of methodologies and standards, that have different requirements for transparency and reporting across carbon, biodiversity and social impacts.



Only projects that can provide verified evidence to support their claims about maturity across all quality indicators can achieve high scores. We work with projects to retrieve additional evidence where this is stored locally, providing a 3 month period to improve scores.

We also work with independent third-parties to improve the accuracy of our scores and support evidence verification. Partnerships allow up to integrate additional qualitative and quantitative data, providing improved capabilities and confidence. We will continue to build on this as new approaches to monitoring project behaviour and impact are developed.

Example
For Carbon Maturity indicator

Maturity	0	1	2	3	4
Viability without external finance	Without external funding, the project is still the most profitable use of land.	Without external funding, the project is still the most profitable use of land.	Without external funding the project wouldn't be more profitable than its alternatives, and the project carried out an assessment of the viability of its activities.	Without external funding the project is very unlikely to be financially sustainable, and the project carried out an assessment of the viability of its activities to show this.	The project is not viable without external funding (eg. state funds, carbon finance, private funds...) which has been shown through an investment and/or barrier analysis and/or market penetration rates.
Confidence Score	Statement	Funding history and projects for the Applicable Project	Verification by project auditors	Other trusted verification	3
	PDD Risk assessment	PDD Annex 4.4	CCB Verification 2017	BeZero	
	"Project has secured less than 15% of funding needed to cover the total cash out before the project reaches breakeven Applicable Project is largely dependent on revenues from REDD sales to reach breakeven."	Funding history and projections for the Seima Protection Forest	"Sustainable financing from carbon revenue for the site is essential to enable conservation action to be expanded and sustained in the long-term."	"Financial constraints moderate additional score."	

Table 1. Two quality tracks

 Maturity How well designed are the project activities? Are they delivering a positive impact?	×	 Confidence How strong is the evidence for the project activities and impacts?
High Aspirational best practices Significant impacts	4	Verified 3 The project has discussed this criteria and provided clear evidence verified by a trusted party.
Mid-high Excellent practices Clear impacts	3	Evidenced 2 The project has discussed this criteria and provided evidence.
Medium Good practices Impacts planned or limited	2	Narrated 1 The project has discussed this criteria without providing evidence.
Mid-low Practices limited Impact not planned	1	No Direct Evidence 0 The project has not discussed this criteria. Indirect or proxy evidence may be considered.
Low No practices Negative impacts possible	0	

The indicator score matrix

Each indicator is assigned an **overall score between 0 and 10** based on a combination of the scores for maturity and confidence, as shown in the table below.

Confidence	Below Minimum Target		Can be listed on Earthly Platform			Weights To each indicator, we assign a weight which reflects their relative importance in the assessment. 5 High weight 3 Medium weight
3 Beyond reasonable doubt	0	5	7	9	10	
2 Likely	0	4	6.5	8.5	9.5	
1 State	0	3	6	8	9	
0 No explicit mention	1	2	5.5	7.5	8.5	
Maturity	0 Not addressed	1 Dissatisfactory	2 Good	3 Excellent	4 Best practice	

The above distribution of scores for each combination of maturity and confidence was devised such that:

- When a project is taking some initiative to address this indicator **greater confidence implies a higher score** (see maturity levels 1,2,3,4) but on the other hand having evidence that the project is doing nothing implies a lower score (0) than if we have no evidence that the project is doing nothing
- In cases where the project seems to be addressing the indicator very well (maturity levels 3 and 4) then **transparency is rewarded over narrating more initiatives** but lacking transparent and reliable verification (so for instance a maturity 3 + confidence 3 is given a 9, while a maturity 4 confidence 0 is given an 8.5)

Minimum standards

To further define 'high-quality', we have determined a minimum quality threshold for every single quality indicator, across all of Carbon, Biodiversity, People.

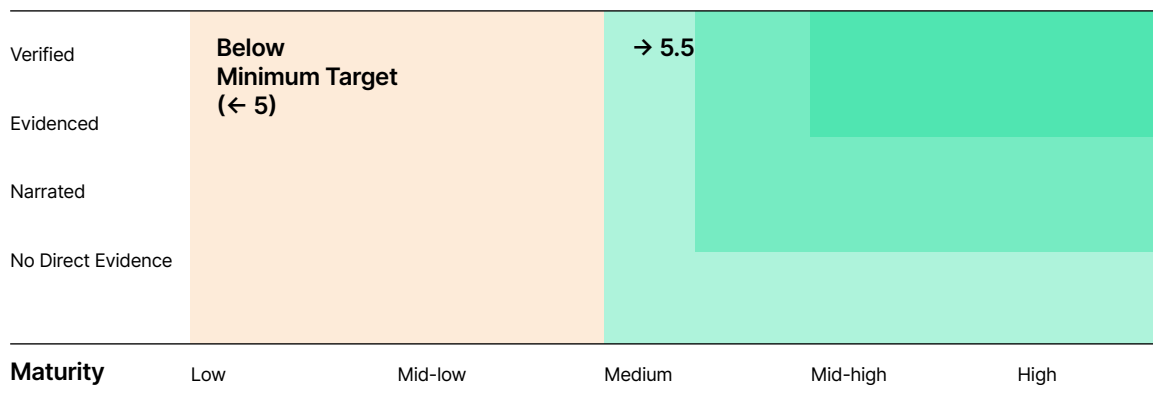
- The minimum thresholds were developed through:
 - Thorough review of the current standard of NbS projects in the voluntary carbon market
 - Scientific board consultation, determining expectation for minimum, good and best practices. This included consultation on the challenges for projects in different contexts, as well as how best practices look different depending on the type of intervention and the social and environmental context.
 - Alignment with thresholds for passing the IUCN Global Standard for NbS and the ambitious Core Carbon Principles (currently under consultation)
- Passing the minimum target is equivalent to getting a score over 5.5 for every indicator.



Example

How minimum targets are operationalised

Confidence



Beyond ticking boxes: engaging in conversation with project developers

Whenever there is insufficient information to score an indicator, or we have some evidence that an overall high-quality project seems to be under-performing under some indicator, we get in touch with project developers and ask for more information.

- This process is done in a systematic and transparent way, where **each question and response by the project developer is recorded** and noted in the project assessment, with reference to the relevant indicator(s).
- Whenever clients get in touch with specific questions about project quality we are happy to disclose this information, to explain what led us to score the project as we did.

This also creates the basis for our **monitoring of project performances over time**, where we put extra care to monitor the indicators that we initially noted as potentially weaker.

Finally, as each project's engagement with a given indicator may have its idiosyncrasies, each assessment has a dedicated space where project assessors can record information that doesn't fit into the maturity and confidence framework.

Subdivision and weighting of assessment criteria

Indicators (scored individually as described above) are grouped into broader **assessment criteria**, and each pillar (carbon, biodiversity social) is composed of 7-9 of such criteria.

All impact pillars of carbon, biodiversity and people contribute equally to the total project score, because they all strongly influence the long-term positive impact potential of nature-based solutions.

However, **within each impact pillar, the criteria are weighted differently.** This ensures that projects which excel in the areas most indicative of high quality nature-based solutions, and are most aligned with our values at Earthly, receive the highest scores in our assessment.

The table below details the weight assigned to each criteria:

Table 3
Criteria & weighting

Weight	Carbon	Biodiversity	People	Focus
1.5	Additionality	Baseline	Context Awareness	Avoid net negative impact
	Baseline	Suitability	Stakeholder Engagement	
	Permanence	Conservation	Human Rights	
1	Accuracy	Net Gain	Equity	Deliver net positive impact
	Leakage Management	Ecosystem Benefits	Livelihoods	
	Governance	Governance	Education	
	Transparency	Transparency	Health	
			Governance	
			Transparency	

All high-quality nature-based solutions must have core practices in place that ensure negative impacts are avoided, whether this is in calculating carbon credits, planting trees in the right places and limiting threats to biodiversity, or following a rights-based approach with indigenous peoples' local communities. This builds the foundation for delivering a positive impact.

Positive impact, weighted slightly lower, assesses the true delivery of benefits from the project alongside how robustly and transparently this is governed. Impacts take time to be delivered, and are likely to improve over time as a project matures and applies best practices.

Generating an overall score

The final score is calculated through a combination of the maturity awarded to each quality indicator and our confidence in this maturity, given our data. The maturity and confidence for each indicator is combined to generate a score for each criteria.

Specifically, each criteria is scored as the average of the score for each indicator. Each impact pillar (Carbon, Biodiversity, Social) is then given a score using the weighted criteria scores, and normalised to give a value on a 1-10 scale using the following calculation:

$$S = \frac{\sum_j C_j W_j}{\sum_j W_j}$$

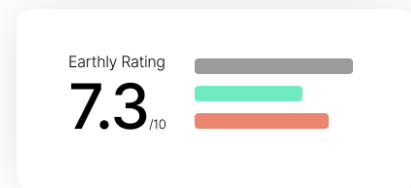
C = criteria
W = weight (w=1.5 (high), w=1 (low))
S = impact on pillar score

Finally each project is assigned an **Earthly Project Score**. This is the total score and is the aggregate of the Carbon, Social and Biodiversity impact scores. This provides an indication of project quality at a glance, going beyond just carbon.

Understanding our multi-layer scoring

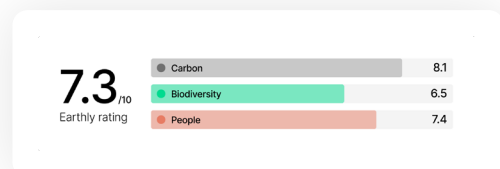
Total score

- Aggregated score across three impact pillars of carbon, biodiversity and social.
- Gives an indication of project quality at a glance, going beyond rating systems that only look at carbon.



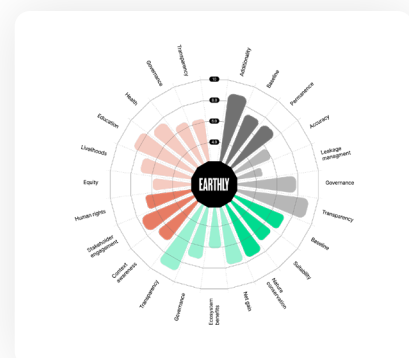
Impact pillar scores

- Weighted scores for each impact pillar
- Indicates relative potential with regard to carbon, biodiversity & social impact.



Pillar breakdown

- Individual scores for each quality criteria
- Full visibility into projects unique strengths and weaknesses.



Pillar breakdown

- Granular evidence provided to generate confidence for each indicator
- See the real project impacts from a variety of information sources
- Regularly updated with impact & verification reports

● Carbon

1.93M

Emissions avoided

● Biodiversity

48

Endangered species protected

● People

405

Families with improved livelihoods

Carbon Maturity: Criteria Breakdown



Criteria	Explainer	Quality Indicators (example for each criteria)
<p>ADDITIONALITY</p> <p>Has the project created a net-positive carbon impact that would not have occurred without the incentive created by carbon credit revenues?</p>	<p>Additionality ensures that businesses investing in carbon credits are creating a real improvement to climate mitigation.</p> <p>If projects can deliver climate mitigation without carbon finance, this invalidates any 'offsetting' done by businesses - as the impact would have been the same with or without their investment.</p> <p>Our assessment of additionality focuses on the financial and legal viability of the project. In particular, projects should not have been doing the same activities prior to considering carbon finance, and they should not be viable through alternative investment or be required through old or new legislation.</p> <p>The integration of top-down data from the national context supports the analysis of government activities.</p>	<p>The project is not viable without external funding, demonstrated through an investment, barrier or market penetration analysis.</p>
<p>PERMANENCE</p> <p>Is the carbon likely to remain stored in the long-term?</p>	<p>Permanence is essential to ensure that the carbon impact, be it removal or avoidance, remains intact. If the impact is at risk of being reversed, any climate mitigation or carbon offsetting claims could become invalid.</p> <p>All projects face natural and human impermanence risks, therefore projects must analyse these risks and implement management and mitigation measures.</p> <p>These measures come in a range of forms, including in the design of the intervention and project activities both during and after the project lifetime, legally-binding contracts and economic incentives, as well as setting a buffer that responds to the level of risk and uncertainty in carbon accounting. There is also the potential for political risk, as governments decide their national strategy towards voluntary carbon markets.</p> <p>It is important to note that projects with higher biodiversity and social scores are more likely to survive and thrive into the future, as ecological integrity and biodiversity alongside engagement and ownership by local communities will build resilience and durability of the social-ecological system.</p>	<p>A portion of credits, which is sufficient to make up for all reversal and non-permanence risks, has been set aside for a buffer with justification for the selected percentage.</p>

Criteria	Explainer	Quality Indicators (example for each criteria)
<p>BASELINE</p> <p>Is carbon accounting based on clear, justified expectations and modelling?</p>	<p>To predict how many carbon credits should be generated, many projects propose a baseline (a counterfactual 'without-project scenario') and compare this against expectations for the carbon impact of project activities.</p> <p>Incorrect baselines can result in over or under crediting, whereby the wrong number of carbon credits are attributed to the project activities. In the case of overcrediting, businesses will be investing in carbon avoidance or removal that has not actually been realised.</p> <p>Our assessment focuses on science-based carbon accounting and the principle of conservativeness. This includes the selection of appropriate data to estimate baselines, the use of robust, up-to-date carbon accounting methodologies and in cases of uncertainty, conservative estimates and justification of any assumptions.</p> <p>We also integrate additional quantitative analysis for a precise estimate of the most appropriate baseline.</p>	<p>Selection of the most conservative estimates for carbon accounting in cases of uncertainty</p>
<p>LEAKAGE MANAGEMENT</p> <p>Is the project addressing the risk of increasing carbon loss in its surrounding areas?</p>	<p>Leakage management is essential to ensure that the carbon emissions removed or avoided by a project aren't simply pushed outside of the project boundary. This is especially pertinent in projects that reduce emissions by protection of land from deforestation and degradation, as if an equivalent amount of deforestation takes place elsewhere, the carbon impact of the project risks being entirely negated.</p> <p>Our assessment rewards projects that not only make a scientifically backed, conservative analysis of the leakage risks involved, but also satisfactorily monitor and mitigate these risks effectively throughout the project lifetime.</p> <p>Leakage can occur via a variety of mechanisms, and correspondingly a high quality project takes into account a thorough and holistic range of leakage risks.</p>	<p>Sufficient sources of leakage are taken into account in analysis (market leakage, activity-shifting leakage, incentives of perverse behaviour, ecological leakage).</p>
<p>ACCURACY</p> <p>Does the project's issuance of carbon credits match real benefits?</p>	<p>Accrediting bodies such as Verra issue carbon credits proportional to the GHG reduction claims of the project. Established carbon registries are useful for verifying standard methodologies and safeguards but have not proven to be sufficient to provide certainty of quality claims.</p> <p>At Earthly, our assessment of project performance goes deeper. We partner with independent third-parties to collect carbon sequestration data using industry-leading remote sensing technology. This allows us to evaluate whether a project is matching its issuance of carbon credits, and therefore the true value of an investment.</p>	<p>Match or supersede issuance of credits</p>

GOVERNANCE

Is the project's carbon impact appropriately designed, monitored and adapted over time

Effective project governance, including design, monitoring, evaluation and adaptive management, underpins the project's ability to deliver positive impacts.

Mechanisms to support evidence-based learning and adaptive management

We focus on the key elements that make up a robust strategy, including selection of evidence-based methodologies; benchmarks and appropriate metrics to monitor both positive and negative impacts; as well as data management and storage. Importantly, projects must demonstrate the ability to adapt over time based on learnings, as uncertainty is inherent in all interventions as they operate within complex social-ecological systems.

Effective project governance is essential to ensuring a project can consistently deliver on its impacts. A project developer might have all the right ideas, but they also need systems in place to realise these goals in the face of adversity and change.

TRANSPARENCY

Does the project have a transparent approach to data storage and communication, as well as taking steps to avoid double-counting?

Transparency catalyses wider positive impacts, as learnings can be taken up by other projects and best practices developed. Our assessment accordingly values those projects that transparently and systematically share data on relevant performance metrics. High quality projects have a regular reporting frequency, sharing details about project activities both within and outside of the project area. This extends to influencing policy, regulation and influential actors, who can help to mainstream nature-based solutions in the local and national agenda.

Internal and external communication and dissemination strategy, including policy engagement and high reporting frequency

For carbon credits, there are serious risks related to double-counting that can be addressed by making information public. The credits must be traceable via a registry listing, retrievable by only one entity, and projects can also get a corresponding adjustment, indicating that governments will not use the carbon towards their own Nationally Determined Contributions. The process for adjustments is still under development, therefore this is not currently an option for all projects.

What if a project doesn't meet our minimum carbon standard?

In the fight against climate change, NbS delivering on their carbon emissions avoidance and removal promises is key. At Earthly we place a high minimum standard on the carbon sequestration potential and overall carbon impact of our projects. Correspondingly, if a project fails to meet our standard, we won't use this project for offsetting.

Despite this, carbon removal is one of many benefits a project might offer. For this reason, we may still choose to list a project which delivers strong social or biodiversity benefits on our platform, and encourage businesses to support them without making carbon claims so they can continue to deliver on these benefits.

Biodiversity: Criteria Breakdown



Criteria	Rationale & Focus	Quality Indicators (example)
<p>BASELINE</p> <p>Does the project demonstrate an understanding of the environmental context in which it operates?</p>	<p>Interventions that work with and depend on nature require a robust understanding of the initial state of the ecosystem, including the physical, chemical and biogeochemical foundation, land cover and biodiversity.</p> <p>The state can be evaluated in multiple levels of detail, from identifying the high level biodiversity values and ecosystem services, to carrying out field studies and identifying key taxa to help monitor change. We focus on development of a robust baseline that allows impact to be monitored and evaluated over time.</p>	<p>The state of biodiversity in the relevant ecosystem(s) was surveyed, analysed and documented in detail at appropriate spatial and temporal scales. The assessment included detailed field verification and was informed by scientific methodology.</p>
<p>SUITABILITY</p> <p>Is the intervention suitable for the ecosystem context?</p>	<p>Interventions in nature must be tailored to the specific ecological context to ensure that the activities will result in a net positive impact, and will be maintained into the future.</p> <p>We focus on how projects have considered the different options for net improvements to biodiversity, including whether both expert and local knowledge have been taken into account. Focusing only on scientific information can result in important aspects of the local context being missed in the intervention design, and thus unintended outcomes.</p> <p>The highest quality projects will also take the impact of climate change into account, as this will influence which species are likely to be suitable in the future. Maintaining high levels of biodiversity will also support the resilience of the ecosystem to climate change.</p>	<p>The impact of the intervention on biodiversity has been specifically discussed with and approved by both experts (qualified scientist, conservationist or similar) and appropriate local interlocutors.</p>
<p>NATURE CONSERVATION</p> <p>Does the project understand and address the direct threats and systemic drivers of environmental degradation and biodiversity loss?</p>	<p>To maintain or enhance biodiversity and a healthy ecosystem, projects need to fully understand the direct threats, which can include human threats like roads and logging, as well as natural disturbances like pests and fire.</p> <p>Metrics are needed to monitor threats and enable the demonstration of effective management and mitigation measures.</p> <p>Projects are also subject to systemic drivers of risk, like climate change, depopulation or bad governance. These drivers can be difficult to influence, however it's important they are taken into consideration and that the project engages associated actors to minimise the likelihood that they will undermine project activities.</p>	<p>The assessment of direct threats has identified metrics to monitor them, including all of the following (where relevant):</p> <ul style="list-style-type: none"> <input type="checkbox"/> Location <input type="checkbox"/> Actors involved <input type="checkbox"/> Frequency/intensity <input type="checkbox"/> Magnitude of harm to the system

Criteria	Rationale & Focus	Quality Indicators (example)
<p>BIODIVERSITY NET GAIN</p> <p>Does the project play an active role in improving biodiversity?</p>	<p>Nature-based solutions and their positive outcomes for people strongly depend on a healthy, functional ecosystem. Biodiversity underpins the ecosystem, supporting resilience and durability.</p> <p>All projects can take actions to enhance biodiversity, whether this is through specific actions to conserve specific taxa, reduce habitat fragmentation or manage non-native and invasive species.</p> <p>Generating measurable improvements to biodiversity can also be the first step to facilitating investments focused on biodiversity, as opposed to other outcomes.</p>	<p>The project has significantly and measurably improved biodiversity (in terms of species traits, populations, and/or community composition) for 3 or more of the above & below-ground taxa identified in criteria 1.</p>
<p>ECOSYSTEM BENEFITS</p> <p>Does the project play an active role in improving ecosystem services?</p>	<p>Healthy ecosystems deliver a reliable and durable flow of ecosystem services. Ecosystem services can range from soil health, to freshwater and air quality to pollination. Healthy stocks of natural resources ultimately lead to positive outcomes for people and society.</p> <p>It is also important that projects limit negative inputs (like chemical fertiliser and pesticides) into the ecosystem which undermine both biodiversity and ecosystem services.</p>	<p>The project has significantly and measurably enhanced some of the ecosystem services identified in section 1.</p>
<p>GOVERNANCE</p> <p>Is the project's biodiversity impact appropriately designed, monitored and adapted over time?</p>	<p>Effective project governance, including design, monitoring, evaluation and adaptive management, underpins the project's ability to deliver impacts.</p> <p>We focus on the key elements that make up a robust strategy, including selection of evidence-based methodologies; appropriate metrics to monitor both positive and negative impacts; setting of detailed targets and consideration of timeframe for impact delivery, trade-offs for biodiversity due to project priorities, and a plan for maintaining the project after its end date.</p> <p>Importantly, projects must demonstrate the ability to adapt over time based on learnings about ecosystem impacts, as uncertainty is inherent in all interventions as they operate within complex social-ecological systems.</p>	<p>The strategy includes specific metrics related to biodiversity and ecosystem integrity; targets for magnitude and direction of desired change (e.g. 20% increase); and expected time frame for impact.</p>
<p>TRANSPARENCY</p> <p>Does the project have a transparent approach to data storage and communication?</p>	<p>Transparency catalyses wider positive impacts, as learnings can be taken up by other projects and best practices developed. Our assessment accordingly values those projects that transparently and systematically share data on relevant performance metrics.</p> <p>High quality projects have a regular reporting frequency, sharing details about project activities both within and outside of the project area. This extends to influencing policy, regulation and influential actors, who can help to mainstream nature-based solutions with benefits to biodiversity and ecosystem services in the local and national agenda.</p>	<p>Biodiversity and ecosystem data is easily accessible by the public and by project assessors with open access to metadata, as opposed to local storage.</p>

People: Criteria Breakdown

Criteria	Rationale & Focus	Quality Indicators (example)
<p>CONTEXT AWARENESS</p> <p>Does the project demonstrate an understanding of the social context in which it operates?</p>	<p>Stakeholder mapping and analysis identifies those who may be directly and indirectly, positively or negatively, affected by the NbS.</p> <p>This allows the intervention to afford opportunities to affected stakeholders to engage with and participate in the design and implementation, advocate clearly to uphold their own rights and interests, and where necessary, prevent further marginalisation.</p> <p>In cases when an NbS intervention operates or impacts on the lands and territories of indigenous peoples, their beliefs, practices and traditions, as well as their knowledge, should be a priority, and projects should not enforce alternative, often western, world-views on indigenous peoples and local communities, including the commodification of nature.</p>	<p>A comprehensive literature review of all relevant community-level challenges have been identified, analysed, and publicly documented which speaks to the social relevance of the project in the region.</p>
<p>STAKEHOLDER ENGAGEMENT</p> <p>Are local and indigenous stakeholders included in project planning, management, and monitoring</p>	<p>Inclusion of stakeholders in all project processes and activities can take many forms, however the most impactful is where projects are an example of ground-up community mobilisation. Between this and uni-directional information sharing, there are other actions projects should take to encourage participation based on engagement and dialogue.</p> <p>Participation in the project should be based on mutual respect and equality, regardless of gender, age or social status. It is important for projects to implement specific measures to uphold this value.</p> <p>Trade-offs to different stakeholders must be identified and analysed with a set of costs and benefits, as part of an inclusive process. Where risk is unavoidable, safeguards must be in place and periodically reviewed to anticipate and avoid adverse consequences of interventions. A key function of NbS safeguards is to ensure that necessary trade-offs do not negatively impact the most disadvantaged elements of society or, equally, that they are denied access to the intervention's benefits.</p>	<p>Level of stakeholder participation from unidirectional information sharing to community mobilisation.</p>

Criteria	Rationale & Focus	Quality Indicators (example)
<p>HUMAN RIGHTS</p> <p>Is the project taking action to respect, protect and enhance rights?</p>	<p>NbS often centre around communities of people alongside nature, therefore a rights-approach should be taken from project conception. This means ensuring land owners meet legal obligations to protect, respect and fulfil human rights within the project area. In addition, this means encouraging rights holders to claim their rights, extended to customary rights holders.</p> <p>In many places, a large proportion of people do not have land tenure, however they have customary rights that should be respected and enhanced. Projects should take a conscious effort to bring these often excluded groups into the project where possible.</p> <p>In cases when an NbS intervention operates or impacts on the lands and territories of indigenous peoples, it is essential that an established and full FPIC process is followed, respecting their right to self-determine interventions and outcomes.</p>	<p>Due diligence to identify, prevent, mitigate and account for how human rights are addressed.</p>
<p>EQUITY</p> <p>Has the project demonstrated improved equity through its benefit-sharing and decision-making processes?</p>	<p>In terms of performance, projects should make a conscious effort to ensure benefits, in particular carbon revenue, reach the relevant project stakeholders effectively and equitably.</p> <p>High quality projects will have evidence demonstrating that they are prioritising the challenges and interests of the majority of people in the project area, as well as taking explicit care to empower women, children, indigenous peoples and vulnerable groups.</p> <p>To further impact equity, the project can take actions to improve social cohesion, reduce conflict and promote more equitable decision-making.</p>	<p>There are public documents and/or concrete evidence of systematic processes ensuring the effective and equitable partitioning and distribution of carbon revenue with project stakeholders, and, legal and/or customary rights holders have influence the design of the benefit sharing mechanism.</p>
<p>LIVELIHOODS</p> <p>Has the project demonstrated improved livelihoods through both direct investment and ecosystem services?</p>	<p>All NbS projects impact livelihoods directly or indirectly through investments and the improved delivery of ecosystem services.</p> <p>We look at livelihoods in the context of poverty, labour, circularity, security and access to resources. The relevant indicators depend on the project context and associated livelihood challenges. In some cases a project might focus on reducing poverty and increase the availability of secure, sustainable jobs, while another project may instead help improve access to markets for local products and increase product demand and value.</p> <p>By restoring ecological integrity, the project can also improve access to raw materials and natural resources, such as improving fisheries through mangrove restoration.</p>	<p>Quantity, quality and security of available jobs</p>

Criteria	Rationale & Focus	Quality Indicators (example)
<p>EDUCATION</p> <p>Has the project demonstrated improved education and training opportunities?</p>	<p>Education in this case incorporates all forms of education from school children to training opportunities, depending on the local context.</p> <p>There are many ways projects can invest in education and training, and this can be linked to a variety of outcomes, such as improving capacity for people to participate in the project, preserving traditional and indigenous knowledge, supporting knowledge exchange and improving opportunities to access higher-education and high-quality jobs.</p>	<p>Training opportunities that directly contribute to skills needed in project decision-making, implementation, monitoring, and evaluation</p>
<p>HEALTH</p> <p>Has the project demonstrated improved health and resilience to disasters, including direct investment and ecosystem benefits?</p>	<p>Projects that maintain or enhance ecosystem services also impact human health. This is because healthy ecosystems naturally provide benefits like clean air, water, food, medicine and access that can improve physical and mental wellbeing. High quality projects monitor the impact of interventions on human wellbeing. Furthermore, interventions can impact people's health by reducing the risk of extreme weather and the impact of disasters.</p> <p>In addition, some projects prioritise direct investment and initiatives for human health, whether improving healthcare, water, food or energy sources.</p>	<p>Ecosystem benefits to air quality, temperature regulation, water quality and security, food quality and security, medicinal and nutritious plants, and/or nature access</p>
<p>GOVERNANCE</p> <p>Is the project's social impact appropriately designed, monitored and adapted over time?</p>	<p>Effective project governance, including design, monitoring, evaluation and adaptive management, underpins the projects ability to deliver and communicate impacts.</p> <p>We focus on the key elements that make up a robust strategy, including selection of evidence-based methodologies; appropriate metrics to monitor both positive and negative impacts; setting of detailed targets and consideration of timeframe for impact delivery, trade-offs for biodiversity due to project priorities, a plan for maintaining the project after its end date, and a data management and storage.</p> <p>Importantly, projects must demonstrate the ability to adapt over time based on learnings about ecosystem impacts, as uncertainty is inherent in all interventions as they operate within complex social-ecological systems.</p>	<p>There are clear agreements with relevant stakeholders pertaining to sharing of benefits, risks, and rights.</p>
<p>TRANSPARENCY</p> <p>Does the project have a transparent approach to data storage and communication?</p>	<p>Transparency catalyses wider positive impacts, as learnings can be taken up by other projects and best practices developed. Our assessment accordingly values those projects that transparently and systematically share data on relevant performance metrics.</p> <p>High quality projects have a regular reporting frequency, sharing details about project activities both within and outside of the project area. This extends to influencing policy, regulation and influential actors, who can help to mainstream ambitious nature-based solutions with benefits to people and society in the local and national agenda.</p>	<p>The project has a data management plan and stakeholders are trained to increase data quality, awareness and decision-making.</p>

Generating a Score

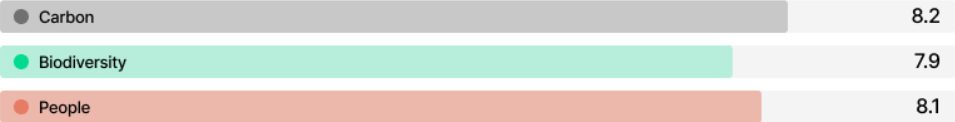
Case Study: Peatland protection, Rimba Raya, Indonesian Borneo

General information

The Rimba Raya Biodiversity Reserve is a REDD+ project protecting one of the most endangered ecosystems in the world. Without this project, the carbon-rich peatland forest of Rimba Raya would have been converted to palm oil, emitting over 100 million tonnes of carbon into the atmosphere. Instead, the project protects the land and works with local communities to achieve all 17 of the Sustainable Development Goals.



Overall score



Project Impact

Carbon Impact

3,527,171

Estimated carbon emission reduced annually

Biodiversity Impact

120

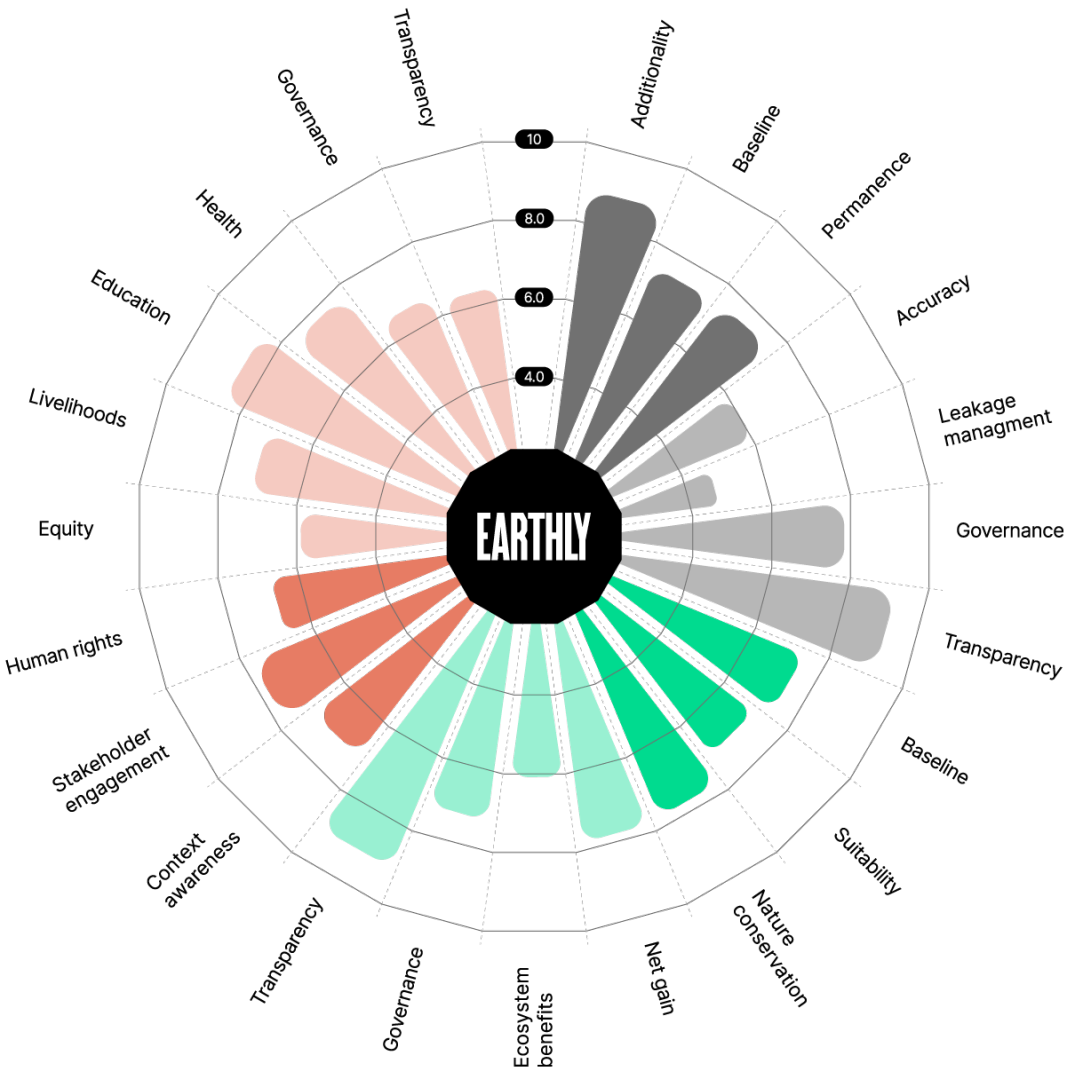
Threatened and endangered species restored

People Impact

9,000

Over 9,000 people have improved access to healthcare, including 4377 women

Full breakdown



Ongoing Assessment

Our Assessment has been informed by ongoing international work governing Nature-based Solutions and the Voluntary Carbon Market. We aim to continue improving the accuracy of our scoring by integrating new learnings as they become available, and by continuing to work with trusted third-parties and public data. In particular, we are excited to integrate new information as technologies to monitor and evaluate project performance on carbon, biodiversity and people improve.

By regularly screening project performance we have access to up-to-date information on projects that supports both decision-making and communication. As new monitoring reports are released or supporting evidence becomes available, we integrate and update scores to reflect the new reality.

Sometimes new information on performance may result in a lower score, and if the minimum target is missed on key indicators, we have established an escalation process that allows us to determine the best course of action with the project. Our goal is to engage with projects directly to understand any issues before creating penalties, as follows:

- Internal review by our Research Team
- Project engagement with deadlines
- Adding project to Watch List (if certain criteria are not met)
- Consulting our Scientific Advisory Board
- Final mitigation

For questions related to the project assessment, please contact us at: hello@earthly.org



Giacomo Bartoleschi
Research Associate



Banashree Thapa
Research Associate



Oliva Rowe
Head of Research