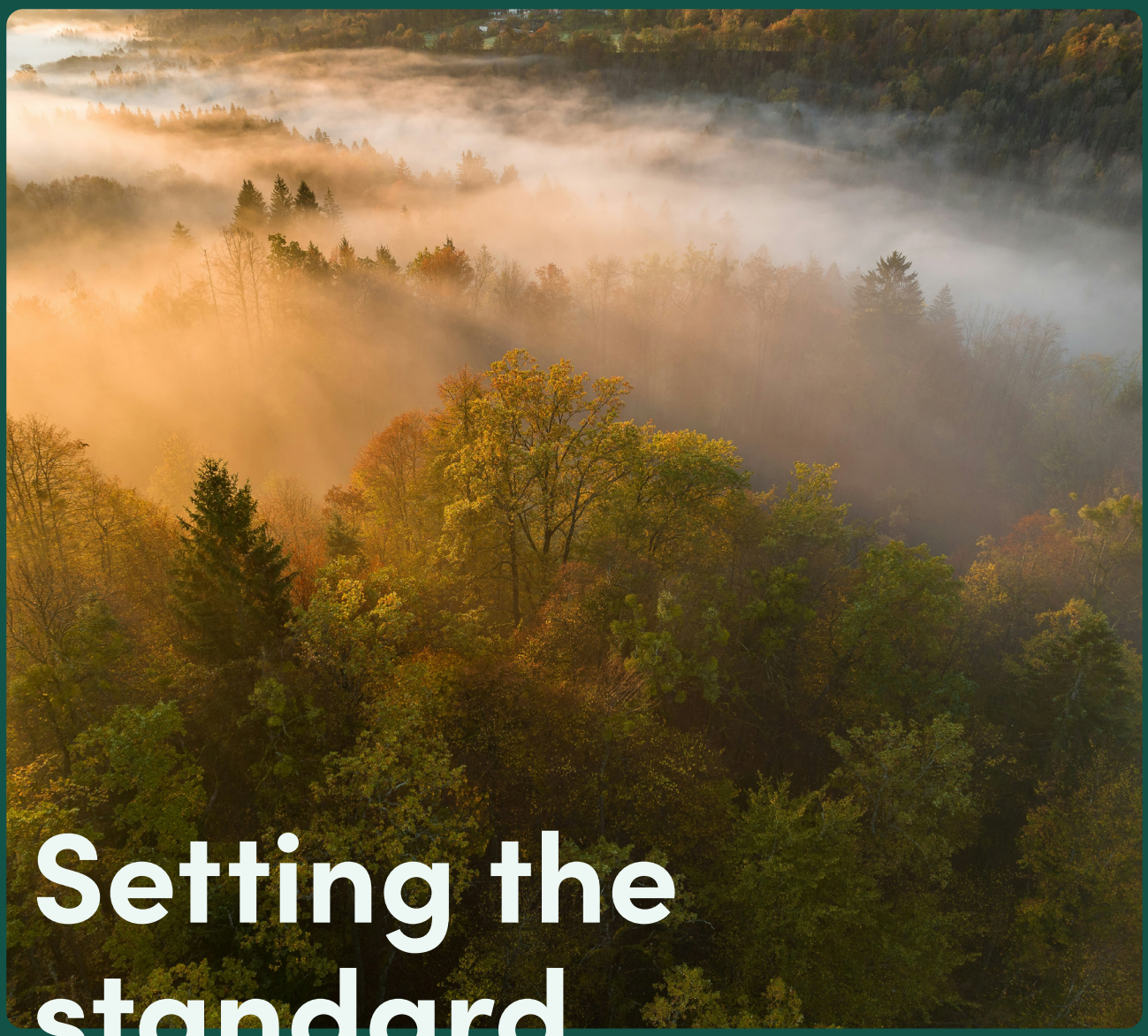

Setting the standard

Ecologi's industry-leading carbon project assessment framework

Ecologi

Contents

Foreword

This whitepaper serves as an outline for Ecologi's carbon credit assessment framework.

By publishing this whitepaper, we aim to provide insight into our project selection process and establish a new standard of due diligence in the voluntary carbon market.

At Ecologi, we are proud to be collaborating with the industry's most innovative partners to identify and fund the world's most impactful climate projects. We are founding members of the Startup Coalition's **Carbon Markets Innovation Forum** and participate as Actors in the **UN Decade on Ecosystem Restoration**. We have been focused on continuously improving how we select and diligence projects since our founding in 2019.

We know that the voluntary carbon market is an efficient mechanism to drive funding to impactful projects and is critical to all pathways towards global net-zero. We also recognise that trust in the market is low due to several market failings in recent years. At Ecologi, we believe that the science, technology and tools currently exist to understand the nuances that determine whether a carbon credit project worth supporting – and we understand the value in co-benefits beyond carbon, which are crucial to assessing a project's overall impact.

By developing this framework and publishing a summary in this whitepaper, we strive to build the foundation of trust and quality that will help inspire a flourishing voluntary carbon market – one that rewards projects delivering a meaningful impact in the global pursuit of net-zero and the preservation of nature.

No framework is flawless, and no risk can be entirely eliminated. Nevertheless, we are confident of the work our team has accomplished and the collaborations we have forged with some of the world's leading carbon market experts.

We are grateful to our partners and to the several initiatives around us enhancing the integrity of the carbon markets and mobilising the necessary financing for projects making a genuine difference to emissions, the natural world and all its people.

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Partners

We are grateful to the several partners who have supported this work both directly and indirectly, through our valued relationships, and exchange of ideas and best practices. Together, we aim to drive the integrity of the voluntary carbon market forward and we are thankful for all the support they have shown us in preparing this framework and whitepaper.

Executive summary

The purchasing of voluntary carbon credits by businesses has an important role in driving private capital to impactful climate projects. Doing so is targeted at accelerating the global drive towards net-zero, and halting the degradation of nature.

When it comes to the use of carbon credits by businesses, they must be used in the appropriate step of the **mitigation hierarchy** – which emphasises making direct emissions reductions first. At Ecologi, we align our own work with the extensive technical guidance on the appropriate use of carbon credits by businesses, which is provided to businesses by expert reports such as the Science-Based Targets initiative (SBTi)'s reports on **Beyond Value Chain Mitigation (BVCM)**, and the **Oxford Principles for Net Zero Aligned Carbon Offsetting**.

Whether purchasing credits for the purpose of compensating for unabated emissions, or simply to contribute to global net-zero targets, it is imperative that buyers of carbon credits understand how carbon credit quality is assessed, and take steps to maximise the likelihood that the credits they are buying are (a) of good quality and (b) appropriate for the uses the business intends to make of them. Doing so means that the business can be more confident that **the impact they are supporting is real**, and that any brand and financial risks associated with a potential project failure are mitigated.

At the same time, it is paramount that the voluntary carbon market as a whole continues its current drive towards increasing quality standards, market integrity, and accountability, in order to rise to the challenge of scaling funding to genuinely impactful climate and nature projects.

Our assessment process

This whitepaper provides an outline of the process we take to assess and select projects which can be funded by our customers.

The assessment has **three levels**: Standard-level, Methodology- (or 'Protocol-') level, and Project-level. We maintain **six due diligence principles** which underpin our assessment process and govern our behaviour in the voluntary carbon market. These include, for example, keeping the life-cycle of a carbon credit short – to ensure the maximum amount of carbon credit funding as possible goes back to the local community.

Our full assessment process includes three steps: **initial screening, full project scoring**, and **project labeling**. Project-level scores involve an assessment of the project across three pillars – its impacts on **Climate, Nature** and **People** – and two dimensions: **quality** and **risk**.

We currently maintain full assessment frameworks across **nine different project types** – from forest conservation, to carbon dioxide removal through enhanced rock weathering – each with its own intervention-specific set of assessment criteria, with an **average of 90 criteria** feeding into each project assessment. Since many criteria (such as a project additionality score awarded by a carbon credit ratings agency) are themselves underpinned by a wealth of more granular data, each project scoring process is fed in reality by many hundreds – or in some cases thousands – of individual data points.

After scoring, projects are labelled using a **traffic light system**, based on how their score compares with the high standard we expect for projects of its type.[1] Only projects which **achieve a score of 80 (out of 100) or higher** in their respective project type ranking are eligible for funding through Ecologi.

Why Ecologi's assessment process is market-leading

Our project assessment framework is proprietary and unique. Through our partnerships with the industry's four leading carbon credit ratings agencies – **BeZero Carbon, Calyx Global, Renoster** and **Sylvera** – and also carbon intelligence platform **AlliedOffsets**, each of our project assessments is fed by an enormous quantity of both quantitative and qualitative project data. This third-party data is layered into Ecologi's own in-house analysis – which also incorporates a proprietary review of peer-reviewed literature on **project regionalisation**, incorporates two **national-level risk indices** from the European Commission's INFORM Risk Index, and leverages satellite imagery for project validation and monitoring purposes, using **Earth Blox**.

[1] We aim to publish a future whitepaper in Q2 2025, to explain how to compare scores across the different project types.

Driving innovation at industry-level

As well as maintaining what we believe to be a genuinely industry-leading carbon project assessment framework, the Ecologi team is also driving progress at the industry level.

- We are proud founding members of the Startup Coalition's **Carbon Markets Innovation Forum** and of the **Carbon Accounting Alliance**.
- In 2024, we were on the BSI Advisory Group to help design the **BSI Flex 3030 Standard** for Net Zero Transition Plans for Small and Medium Enterprises.
- We are Actors in the **UN Decade on Ecosystem Restoration** and have been a certified **B Corporation** since 2021.

1. Introduction

Businesses have a key role to play in financing the global transition to net-zero, and this role was emphasised by the outcomes from COP29 in Baku at the end of 2024 (UNFCCC, 2024). Credible corporate climate action must follow the **mitigation hierarchy** to ensure that value chain emissions reductions are prioritised.

There are a number of steps any business must take on their climate journey, which at Ecologi we cluster into three elements: **Reduce**, **Restore** and **Report**.

- **Reduce** includes the measurement of emissions, reduction target setting (for example, setting Science-Based Targets), and the significant and permanent reduction of the business's emissions toward net-zero;
- **Restore** includes taking accountability for the damaging effect of unabated emissions on the planet, and driving funding to climate and nature restoration activities elsewhere in the world to accelerate the global drive toward net-zero and halting of the degradation of nature;
- **Report** includes the transparent and proactive disclosure and reporting of climate action taken to date, including progress against targets, and acknowledgement of future steps.

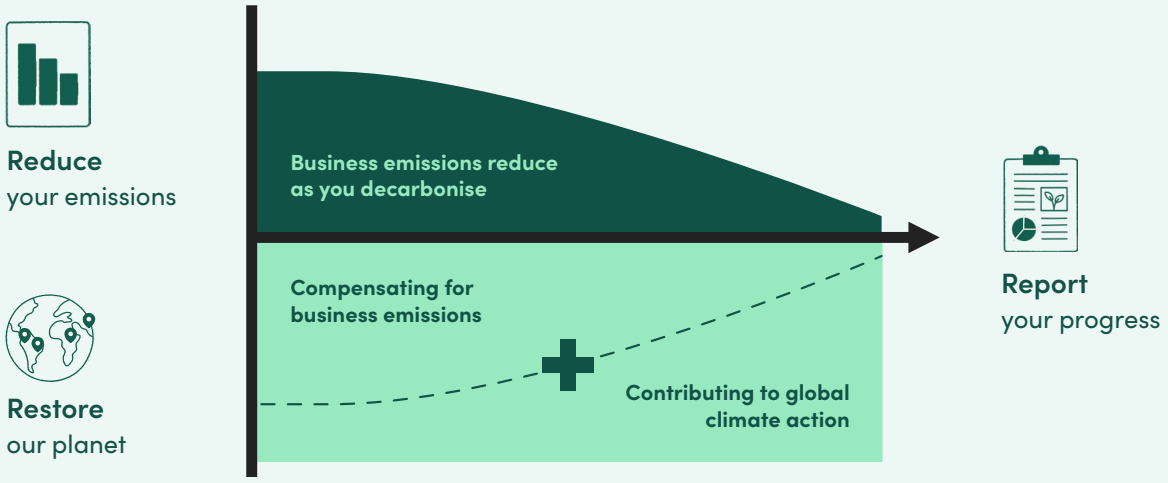

Figure 1: *A simplified chart showing Ecologi's recommendation to businesses under three clusters of steps on the climate journey: Reduce, Restore and Report. The chart shows how businesses should directly reduce their emissions over time (top of graph, in dark green) whilst also contributing to climate projects around the world (bottom of graph, in light green), including a compensatory component for unabated emissions (bottom of graph, in light green, above the dashed line). All the while, businesses must transparently disclose their climate action ('Report').*

At Ecologi, we support the industry frameworks which require this holistic approach to climate action: *both* reducing value chain emissions, *and* funding restoration projects (*and* reporting and disclosing each transparently). Credible corporate climate action includes participation in carbon markets only at the appropriate place along this step-by-step journey.

1.1. Carbon market context

Voluntary carbon credits each represent one tonne of emissions (as carbon dioxide or as other greenhouse gases measured in carbon dioxide-equivalent) which have been prevented from being emitted, or have been removed from the atmosphere by a project activity. The purchase and 'retirement' of carbon credits is a market mechanism to drive finance to projects that produce climate benefits through avoidance or removal of emissions.

Compliance markets such as the EU Emissions Trading System (EU ETS), the UK Emissions Trading System (UK ETS) and the California Cap-and-Trade Program, allow regulated bodies to meet legally-binding emissions targets through the purchase of carbon credits. As the 'cap' (the allowable amount of emissions the regulated body is allowed to produce) decreases year-on-year, regulated businesses' choices are either to decarbonise, or to buy allowances (carbon credits) from someone else. The theory – which has proven reasonably successful over the years (see Bayer and Aklin, 2019) – is that the economic incentive to reduce emissions to stay within the capped allowance is sufficient to drive emissions down, at market-level.

Historically, the **voluntary carbon market** has run separately and in parallel with the compliance market. Carbon standards Verra and Gold Standard have issued and transacted the largest volumes of credits on the voluntary market to date, with a range of standards now available, all with their own approaches and methodologies (ICROA, 2024). In recent years, the interconnections between the compliance and voluntary markets have evolved as the two sets of standards and mechanisms converge, and with recent developments including the launch of the Paris Agreement Crediting Mechanism (PACM), the interlinkages between compliance and voluntary markets are likely to increase.

1.2 Corporate use of voluntary carbon credits

Through the voluntary carbon market, organisations and individuals can contribute to global emissions reductions via a range of different approaches.

1.2.1 Compensatory approaches, carbon neutrality and offsetting

When we think about carbon credits, we often assume their main (or only) use is for offsetting – where an organisation calculates their operational emissions, and proceeds to fund the same amount of carbon credits to 'offset' it.

This is an example of a **compensatory approach** – the organisation is trying to compensate tonne-for-tonne, for emissions they have produced. This can be done well or badly, depending on the approach taken by the organisation at hand.

Use of the word 'offset'

At Ecologi, we prefer to use the word 'offset' as a verb only. *To offset* is to make a specific type of claim about the way an entity is using carbon credits.

We don't tend to refer to carbon credits as 'carbon offsets' (though many organisations do), because we find this presupposes that the credits will be used for *offsetting* – and that's often not true. More and more, carbon credits are being purchased and retired for reasons other than offsetting (such as for contributory project funding under 'BVCM' – see WWF, 2024), and so in terms of their voluntary use, to refer to carbon credits as 'carbon offsets' can be reductive or misleading.

By purchasing certain types of carbon credits, organisations can 'offset' their unabated emissions whilst simultaneously working on their long-term decarbonisation strategies. Another key example of the compensatory approach is the 'neutralisation' of residual emissions with permanent carbon dioxide removal credits, which comes at the end of the net-zero journey as laid out by the SBTi's Corporate Net-Zero Standard.[2]

[2] Important here is the difference between 'unabated' emissions and 'residual' emissions. Formal definitions of these are provided by the SBTi, Oxford Net Zero and others. In short, we use the term *unabated emissions* to refer to emissions produced within a specific reporting period (such as a calendar year) which have not already been reduced, whereas the term *residual emissions* (sometimes *unavoidable emissions*) specifically refers to the maximum of 10% of baseline emissions which are to be 'neutralised' by permanent carbon dioxide removal at the end of the net-zero journey, as described by the SBTi's Corporate Net-Zero Standard.

1.2.2. Emergence of contributory approaches and BVCM

Another approach to corporate funding of climate projects is the contribution model, which promotes funding climate action alongside decarbonisation efforts without making tonne-for-tonne compensation claims.

This approach is not about 'offsetting', but about funding projects that avoid or remove emissions, and otherwise support the drive towards global net-zero and the restoration of nature – as part of a broader obligation to the planet. In contrast to a tonne-for-tonne compensatory approach, contributory approaches can be:

- **Money-for-tonne** – such as setting an internal carbon fee based on operational emissions produced, and using that to set a budget for contributing to climate projects.
- **Money-for-money** – such as allocating a percentage of company revenue or profit to donate to climate projects.

Contributory approaches can also take the shape of a hybrid between the two, as can be seen in the 2024 *Above* and *Beyond* report from the SBTi and in our chart in ***Figure 1***. The important point with these contributory approaches is that they place the emphasis differently: the focus of an organisation's BVCM contribution is to *give back*, rather than to *compensate* for.

1.3 Guidance for best practice

There are a number of best practice frameworks which can prove valuable to businesses, with many commonalities between them. Critical among the frameworks we support at Ecologi is the prioritisation of organisations setting out on a plan to reduce emissions first and foremost, before engaging with the purchase of carbon credits.

A couple of explanatory notes are given below, with further detail and how to find these frameworks provided in the **references**.

1.3.1 Oxford Principles for Net Zero Aligned Carbon Offsetting

The Oxford Principles were developed by University of Oxford scientists to guide organisations to align their carbon offsetting strategies with long-term net-zero goals. Published in 2020 and revised in 2024, the principles address key challenges with existing offsetting practices and help direct organisational approaches to supporting climate projects.

Crucially, the Oxford Principles reinforce the importance of reducing organisational emissions first, as well as:

- Highlighting the need to scale carbon removal projects within one's offsetting portfolio to ensure sufficient durable removals needed to counterbalance residual emissions at the net-zero date;
- Reinforcing the importance of investing in nature-based solutions in their own right;
- Clarifying the differences between different types of carbon projects, including their reversal risks and co-benefits;
- Providing definitions for contentious or ambiguous terms;
- Recognising the value of mitigation efforts outside of compensatory claims.

Read the Oxford Principles (revised 2024)

1.3.2. Beyond Value Chain Mitigation (BVCM) reports from the SBTi

The Science Based Targets initiative (SBTi) maintains sector-specific guidance for setting targets which are aligned with the 1.5°C target set by the Paris Agreement. To meet the requirements of the Corporate Net-Zero Standard, most businesses are required to reduce their emissions by a minimum of 90% across all scopes of emissions, and subsequently 'neutralise' the residual emissions with permanent carbon removal.[3]

Read the SBTi's Corporate Net-Zero Standard

Whilst working their way towards their science-based emissions reduction targets, the SBTi strongly encourages businesses to fund **Beyond Value Chain Mitigation** (BVCM). Funding BVCM means providing finance to climate mitigation projects which lie outside the organisation's operations and value chain – *out there* in the world. Corporate BVCM strategies expand the scope of the organisation's climate action to address additional, external emissions, supporting broader societal decarbonisation efforts, climate justice, and the restoration of nature.

In early 2024, the SBTi published two reports on BVCM to help businesses understand the considerations they need to take into account when considering investing in projects outside the value chain.

The model put forward by the SBTi in the Above and Beyond report is a money-for-tonne approach, which sets aside a budget on the basis of an internal carbon fee governed by a **science-based carbon price**. This budget is then to be allocated to projects which prioritise the two 'Goals' of BVCM:

1. **Goal #1:** "Deliver additional near-term mitigation outcomes to achieve the peaking of global emissions in the mid-2020s and the halving of global emissions by 2030."
2. **Goal #2:** "Drive additional finance into the scale-up of nascent climate solutions and enabling activities to unlock the systemic transformation needed to achieve net-zero by mid-century globally."

In the report, the SBTi describes a best practice approach where the budget is allocated to a minimum of 50% tonne-for-tonne (compensatory) mitigation, with the remainder of the budget spent on other projects and activities targeted towards the achievement of the two BVCM Goals. The purchase and retirement of carbon credits can be used to contribute to either case.

Read the SBTi's Above and Beyond Report

Read the SBTi's Raising the Bar Report

[3] At the time of writing, the SBTi is undergoing a routine review and update to its Corporate Net-Zero Standard.

2. Assessing carbon credit quality

When it comes to buying carbon credits, buyers must mitigate their own risk by building a solid understanding of what carbon credit quality looks like – and how to spot the difference between high-quality and low-quality credits – before going to market.

The assessment of carbon credit quality begins with understanding some elementary concepts, which apply in all cases.

2.1. Fundamental concepts

1. **Additionality:** the project must demonstrate that it is not a "business as usual" activity; the emissions benefit produced by the project would not have happened without the project activity, and the project activity could not have taken place in the absence of finance from the sale of carbon credits.
2. **Permanence:** the emissions benefit must be long-lasting – especially relevant to nature-based projects which store carbon in their biomass. Projects must acknowledge and mitigate permanence risks (e.g. forest fires, and logging) to ensure the benefit achieved by the project (avoidance of emissions, or removal of carbon dioxide and storage of carbon) lasts.
3. **Accurate measurement with no double counting:** the project must use robust calculations of its intended emissions benefits, and must set appropriate baselines against which credits will be issued. Safeguards must exist to prevent the same project work from being issued credits more than once for the same emissions benefit produced. The project developer must disclose the methodologies used to calculate the emissions avoidance or removal, and those methodologies must be robustly science-based, and maintained by a third party.
4. **Leakage:** the project must prove that its intended positive benefits do not result in negative effects elsewhere. For example, a forest conservation project must minimise any risks leading to additional deforestation in another area.
5. **Co-benefits:** the project must contribute to broader environmental, social, and economic goals, such as improving biodiversity, creating jobs, or enhancing local livelihoods. Often these are quantified against the UN Sustainable Development Goals.
6. **Third party verification:** the project should be verified and routinely monitored and its impacts assessed by independent third-party auditors or verifiers.

Despite these essential concepts being well-known, a number of challenges have persisted in the market – exacerbated by a lack of accountability for carbon project developers, poor data visibility, and insufficient third-party auditing – which has meant the market contains a large number of low-quality projects which fail to achieve their stated aims. Even well-intentioned projects can underperform due to poor governance, lack of technical expertise, or unpredictable weather events like wildfires or droughts which are themselves often attributed to climate change.

Acknowledging the challenges in the market, a groundswell of effort has sprung up since the early 2020s, to drive up quality in the market. At Ecologi, we carefully direct funding to projects with sound project designs, strong accountability, and a proven commitment to delivering real impact across multiple fronts. To explore how, we must go deeper than these first high-level concepts.

2.2 Assessment layers and data sources

Building on these elemental concepts, our detailed assessment of carbon credit projects has multiple layers.

Firstly, it is important to understand the integrity of the carbon standard which is issuing the credits. Then, we must understand the methodology (or 'protocol') against which the project's credits are being measured. Finally, any detailed assessment of project quality of course needs to include assessment of the project itself and its own project specific merits and limitations.

This architecture, and the components of the different assessment levels, are summarised in the table on the next page.

Assessment level	Examples	Third party data inputs	Components including in assessment
Carbon standard	*Gold Standard* *Verra* *Puro Earth* *Isometric* *Plan Vivo*	ICROA endorsement	• Independence • Governance • Registry • Validation • Transparency • Environmental and social impacts • Stakeholder impacts • Scale
		ICVCM CCP-Eligibility	• Effective governance • Tracking • Transparency • Robust independent third-party validation and verification • Robust quantification of GHG emission reductions and removals • No double counting • Sustainable development benefits and safeguards
Methodology (or 'Protocol')	*GS TPDDTEC* *VM0048* *ACM0002*	ICVCM CCP-Approval	• Additionality • Permanence assessment • Robust quantification and appropriate baselines • No double counting • Sustainable development benefits and safeguards • Contribution to net-zero transition
Project	*GS 10790* *VCS 1571*	**VVBs** e.g. Preferred By Nature	• **Validation:** checking that the project meets the rules and requirements of the carbon standard • **Verification:** checking that the outcomes set out in the project design have been achieved
		Ratings agencies e.g. BeZero Carbon, Calyx Global, Renoster, and Sylvera	Various and extensive direct analysis from primary data. Examples: • Carbon benefit analysis • Additionality analysis • Permanence analysis • Co-benefits analysis • Project developer integrity analysis
		Risk indices e.g INFORM Risk Index	• Country-level risk analysis • Projections of crisis risk under different climate pathways
		GIS monitoring e.g Earth Blox	• Verification of project's claims • Ongoing monitoring of project success over time

Table 1: *A summary table showing the different levels of assessment incorporated within Ecologi's carbon project assessment framework and some of the data inputs we use from across the industry to provide each level of scrutiny. The table demonstrates the role of Standard-level assessment, using the examples of ICROA and ICVCM CCP-Eligibility; the role of Methodology-level assessment, using the examples of ICVCM CCP-Approval; and Project-level assessment, using the examples of VVBs and carbon credit ratings agencies.*

2.2.1 Standard-level assessment by ICROA

The International Carbon Reduction and Offset Alliance (ICROA) is a global body which promotes best practices in the voluntary carbon market. ICROA delivers a layer of **Standard -level assessment** since it sets a Code of Best Practice for carbon avoidance and removal standards to ensure credibility, transparency, and environmental integrity, against which the carbon standards are measured, to become ICROA-Endorsed standards.

2.2.2 Standard-and Methodology-level assessment by the ICVCM

The Integrity Council for the Voluntary Carbon Market (ICVCM) is an independent body established in 2021 to ensure credibility and transparency in voluntary carbon markets. Its **Core Carbon Principles** (CCPs) provide a benchmark for high-integrity carbon credits, aiming to enhance trust and encourage investment in impactful climate projects.

The two-tick system of the ICVCM provides separate analyses for **Standard-level assessment** for carbon standards (which the ICVCM calls 'Carbon Crediting Programs') and **Methodology-level assessment**, for carbon credit methodologies. Carbon standards can become CCP-Eligible (the first 'tick'), and subsequently methodologies managed by those carbon standards can be put forward for CCP-Approval (the second 'tick'). These are different assessment rubrics designed by ICVCM's expert team to ensure that both the standards and methodologies are meeting high standards of integrity. The process is collaborative, working directly with the carbon standards to address shortcomings in existing methodologies with the aim of – over time – raising the tide of integrity market-wide.

2.2.3 Project-level review by Validation and Verification Bodies (VVBs)

Validation and Verification Bodies (VVBs) are independent third-parties which help ensure carbon projects deliver real and credible climate benefits – a type of **Project-level assessment.**

They play two key roles: **validation**, where they check if a project's design meets the required standards and is set up to achieve its goals; and **verification**, where the VVB confirms that the claimed emissions avoidance or removals actually took place. VVBs are accredited organisations standards and act as impartial third parties, targeted at ensuring transparency and accountability.

In our assessment framework, the work of VVBs can be helpful in providing third-party assurance that the claims being made by the project developer are being delivered upon. Within our assessments, the project's claims (for example, a claim to producing an impact against a particular UN Sustainable Development Goal) are rewarded a greater number of points in the scoring framework if they have been *evidenced* – or better still, *validated* by an independent third party such as a VVB or carbon credit ratings agency. Simply making a claim to having a particular impact within the project design document is insufficient – the project developer's impact claims must be backed up by evidence, and ideally validation by a third party in order to score well.

2.2.4 Project-level assessment through partnership with carbon credit ratings agencies

Carbon credit ratings agencies play a crucial role in evaluating the quality and risks of carbon projects – another form of Project-level assessment.

At Ecologi, we have partnerships with all four of the leading carbon credit ratings agencies: , **BeZero Carbon**, **Calyx Global**, **Renoster**, and **Sylvera**. We use data and analysis from all four of these organisations within our carbon project assessments.

Each ratings agency collects and analyses an enormous wealth of data about carbon projects, to produce ratings of a given project's greenhouse gas benefit, as well as assessing key factors like additionality, permanence, and how it produces co-benefits such as supporting biodiversity. Each agency uses its own methodology, which can differ in approach, and in the quantitative datasets used to analyse projects.

Ratings agencies also examine risks like leakage, reversals, and over-crediting, alongside broader factors such as project governance and financial sustainability. Their detailed assessments give buyers a clear picture of a project's strengths, weaknesses, and long-term benefits for climate, nature, and communities. We are extremely proud to have strong partnerships with all four of the leading carbon credit ratings agencies to inform our analysis – as well as working with **AlliedOffsets**, a leading provider of comprehensive data and market intelligence in the voluntary carbon market, which we use to inform our project assessment system.

2.2.5 Project-level risk assessment using open risk indices

Within our **Project-level assessment**, we leverage data from the **INFORM Risk Index** from the European Commission's Disaster Risk Management Knowledge Centre.

INFORM provides granular insights into different kinds of risk at a national level, using vast UN-level data repositories to assess risks produced by different **natural and human-caused hazards**. We layer these physical risks onto our analysis of project-specific risks, to give us a picture of how localised risk could hamper project success in the future.

In assessing project risk, we make use of two risk indices from the INFORM series:

- The **INFORM Risk Index** itself, which is updated annually and provides current assessment of eighteen components of risk – from exposure to earthquakes and flooding, to the quality of local physical infrastructure and population vulnerability.
- The **INFORM Climate Change Risk Index**, an upgrade to the original, which projects crisis risk into the future on the basis of both optimistic and pessimistic climate change scenarios, with timeslices in both mid-century (~2050) and end-century (~2080).

2.2.6 Project-level verification and monitoring using GIS monitoring platforms

We use the geospatial monitoring platform **Earth Blox** within our Project-level assessment. Earth Blox is a geographical information system (GIS) platform which enables us to use high-resolution satellite imagery to quantitatively assess a project against its claims.

Within our project assessment framework, we use Earth Blox to assess REDD+ (Reducing Emissions from Deforestation and Forest Degradation), ARR (Afforestation/Reforestation) and blue carbon ARR (like coastal mangrove restoration) projects, to review satellite imagery in order to validate the claims made by the project developer in the project design documentation – such as claims made about **historic deforestation rates**, **fire risk** and mitigation practices, and estimates of **carbon storage in forest biomass**.

Following the project assessment process, we subsequently use Earth Blox again on a routine basis as part of our own project monitoring practices, including:

- Monitoring how project indicators (e.g. vegetation indices) are changing over time;
- Investigating anomalies or alerts from other data sources;
- Spot-checking and reanalysis of projects.

3. Ecologi's approach to due diligence

As well as the detailed assessment framework we maintain at Ecologi, we also aim to adhere to a number of more generalised, axiomatic, principles which are designed to ensure our participation in the voluntary carbon market is as high-integrity and as transparent as possible.

3.1. Our core due diligence principles

These principles guide our behaviour in the market, and they interweave with the technical selection process we use to make decisions about which projects we ought to support. Both are explored in this section.

3.1.1 We supply credits from ICROA-endorsed standards only

The International Carbon Reduction and Offset Alliance (ICROA) is a program of the International Emissions Trading Association (IETA) which focuses on ensuring quality in the voluntary carbon market. ICROA's Programme Endorsement sees carbon standards audited by a third party against the ICROA Review Criteria which is related to the carbon credit-issuing organisation itself. The assessment contains categories such as independence, governance, registry function and transparency, stakeholder engagement and more. Successfully-audited carbon standards can use the 'ICROA-endorsed' label.

At Ecologi, we only supply credits to our customers which are issued (or will be issued, in the case of ex ante credits) to one of these ICROA-endorsed standards.

Read the ICROA Programme Endorsement Review Criteria

3.1.2 We are responsive to the ICVCM's assessment of carbon credit methodologies

The emergence of the Integrity Council for the Voluntary Carbon Markets (ICVCM) has already begun to improve standards across the voluntary carbon market. Their two-tick approach is already proving exceptionally valuable for buyers in both understanding the qualities of carbon standards (what the ICVCM calls 'Carbon Credit Programs') and their methodologies.

At Ecologi, we commit to being responsive to the ICVCM's CCP assessments. Importantly, this does not necessarily mean that we will only supply credits from CCP-Approved methodologies. This is because the assessment of the ICVCM for CCP-Approval is a **Methodology-level assessment** (see **Table 1** on page 16), meaning that an additional layer of **Project-level assessment** is often appropriate. To illustrate why standard and methodology-level assessments are insufficient on their own, and project-level assessment is also required:

- A project may have credits issued by a CCP-Eligible carbon standard on a CCP-Approved methodology, but may be a poor quality project in and of itself.
- A project may have credits issued by a CCP-Eligible carbon standard to a non-CCP-Approved methodology, but under project-level assessment is found to be an exceptional quality project on its own merit despite the limitations of the methodology to which it adheres.
- A project may have credits issued by a CCP-Eligible carbon standard to a methodology which is undergoing CCP assessment which is very likely to be approved (and be a high-quality project in and of itself), but has not been approved yet, due to the time it takes for the ICVCM to assess methodologies in full.
- In each of these cases, CCP-Eligibility of the carbon standard ('Program') and CCP-Approval of the methodology cannot give a full picture of whether a specific project ought to be funded. That's why we do not use the ICVCM's assessment in isolation – and instead we follow closely and are *responsive* to the rulings of the ICVCM.

Examples of how we have been responsive to ICVCM decisions to date:

- In September 2024, following the rejection of the current renewable energy crediting methodologies for CCP-Approval by the ICVCM (due primarily to limitations around additionality), we opted to discontinue supply of credits issued to these methodologies. We took this choice because we agreed with the ICVCM's ruling that there are significant barriers to methodological additionality for most renewable projects at the project-level.
- In November 2024, 'VM0048' and the Jurisdictional and Nested REDD+ (JNR) Framework were among the new REDD+ methodologies to become CCP-Approved by the ICVCM. These are new methodologies, so there are no projects on the market today which meet

them – though the existing effective REDD+ projects which we support are undergoing transition from older methodologies to these new approved methodologies. We believe this is a positive step which will raise the tide of integrity across the whole market.

Access the current status of methodologies undergoing assessment by the ICVCM

3.1.3 We keep the carbon credit life-cycle as short as possible

The ideal life-cycle of a given carbon credit is short: where the credit is issued to the project developer and is sold to the end buyer (and the carbon credit is retired) with no middlemen involved. In this way, all of the end cost paid for the credit before it is retired, is paid to the project developer – that is, the organisation who produced the original emissions benefit, and if the project is well-designed, a good portion of that will be put back into the project's local community through benefit-sharing mechanisms. The more intermediaries trade credits and the longer those credits are in circulation, the less of the end-value of the credit is passed to the project developer, and ideally to the local communities where the project is located.

At Ecologi, we aim to shorten the life-cycle of the carbon credits we buy as much as possible – maintaining excellent relationships with project developers all over the world – so that when we buy credits, we are able to drive the highest possible percentage of the purchase price to those responsible for producing benefits for our planet.

This doesn't mean we can guarantee that all credits come directly from the project developer (the economic realities of the carbon market would make such a guarantee impossible to uphold), but it remains an important priority at Ecologi, because we firmly believe that those who deserve the funding are those doing the impactful work.

As a result of this effort, **75% of the carbon credits we purchased in 2024** were purchased directly from project developers or their nominated dispensaries (with no third party intermediary involved).

3.1.4 We support only locally-appropriate projects

There are lots of different types of projects which can be issued carbon credits – and lots of them are worth funding. However, **not every project type is appropriate in every geography**. There are a number of factors which determine whether a particular project should be implemented in a particular location: from bioclimate factors, to terrain, to local legislation, and much more.

At the same time, funding for certain interventions is **more acutely needed** in some locations than in others – due to either an especially high level of need for the project locally, or a particular lack of funding for that kind of project from other sources.

At Ecologi, we believe the best way to deliver funding to projects is to seek out the projects where the potential ecological or social benefit from the project is high, but the current support or funding for the project is low. We designed proprietary strategic approaches based on academic literature so that before we fund a project, we can assess the project's alignment with these regionalised strategies. This allows us to target our funding toward locations which **maximise both environmental and social benefits**, and place funding where funding currently isn't being provided.

Separately, we also evaluate localised risks. We use tools like the **INFORM Risk Index** to assess national-level risk factors such as natural disasters (such as earthquakes, floods, and cyclones), political instability (including current conflict intensity and future conflict risk), and local coping capacity in addressing risks (such as access to communications and health infrastructure). In this way, we achieve a clear and heavily localised picture of appropriateness of an intervention in a particular location, before we will supply its credits.

Explore the INFORM Risk Index

3.1.5 We provide in-depth assessment at the project-level

When we've established that a particular kind of project is appropriate in its particular location, we then take great care to scrutinise the project on its own merit. We ask, *is this a good example of its project type?* – for example, if it's a forest protection project, does it have all the quality markers of a high-quality forest protection project? These are different from the quality markers for a landfill gas capture project, which are different again to the quality markers for a community-based cookstoves project. We maintain an extensive bank of quality criteria for each type of project, including multiple third-party data plugins through our partners, so that we can get a truly clear picture of whether the project is performing at a high enough level.

At Ecologi, we recognise that every project is different, and that the risk associated with funding a project will never be zero. But we believe that with sufficient scrutiny at all levels, buyers can

achieve a high level of confidence that the projects they are supporting are making a meaningful difference – and a huge amount of this confidence comes from a deep, detailed assessment at the project level.

3.1.6 We seek consensus across methodological approaches

Unlike just a few years ago, there are now a number of carbon credit ratings agencies and other similar data providers whose role in the market is to scrutinise projects in exceptional depth, using a range of proprietary methodologies and innovative technologies, to inform buyers as to project quality and the risk associated with supporting certain projects.

> At Ecologi, we are one of the only platforms maintaining partnerships with all four of the leading carbon credit ratings agencies – **BeZero Carbon**, **Calyx Global**, **Renoster** and **Sylvera**.

We also work with **AlliedOffsets**, whose extensive project and market insights support our comprehensive in-house analysis, which includes GIS monitoring via **Earth Blox**.

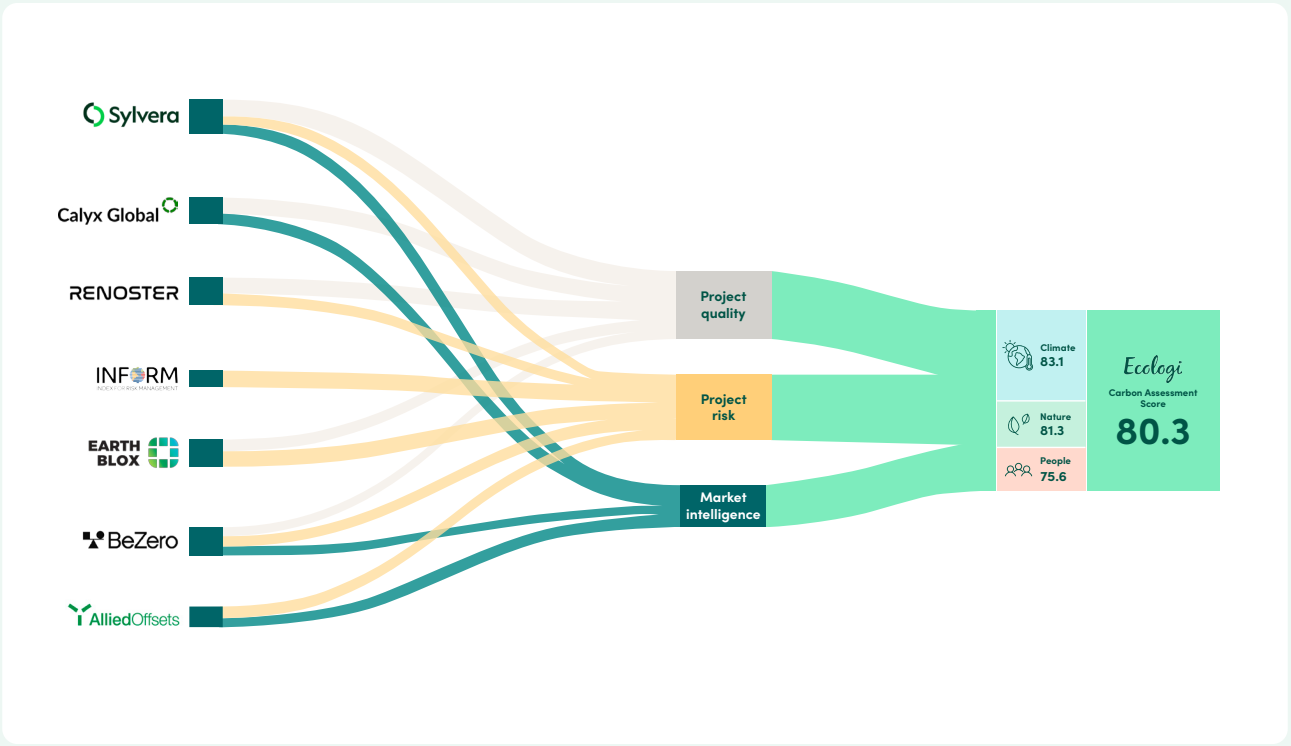

Figure 2: *A simplified flowchart demonstrating the main data inflows into our carbon project assessment framework through our third party data partnerships. The categories on the left demonstrate the main data inputs we leverage from each data partner (they are simplified, and not intended to provide a comprehensive summary of all data provided by each organisation). Using these data sources to supplement in-house assessment and our broader strategy as informed by IPCC science and our Climate Committee provides a wealth of data points which feed into our quantitative due diligence formula – feeding into the overall 'score' for a project, illustratively 80.3 (out of 100) in this example.*

Each of these partners provides different data using varying methodological approaches – from geospatial analysis, to machine learning models, to market intelligence, to qualitative expert review – all of which is designed to provide a comprehensive assessment of project quality and risk. The dozens of data points and assessment scores that we gain from these data providers reach across many different layers of our quality and risk assessment for each project (see our **project assessment framework** below).

In project assessment, different methods and data inputs will produce different results, so we seek to fund projects which achieve high scores across the different ratings providers, calculated using their different assessment methodologies. The more we can see that the different methods of assessment are finding similarly positive outputs for a particular project, the more confidence we can have that the project is genuinely impactful, whichever way it is assessed.

At the same time, within our assessment framework, many of the criteria we assess projects against can achieve higher scores if there is third-party evidence that the positive outcomes are being achieved, so having access to multiple ratings partners also assists us in validating the claims of positive impact which are being made by the project developer.

Finally, this approach also means we don't rely on a singular data provider's methodology to produce our whole understanding of a project's quality – if ever one of our partners' assessments has a particular methodological flaw, it is likely that the missing data will be picked up by one of the others.

3.2. How our assessment process works

When Ecologi first started in 2019, we had placed an emphasis on rotating through lots of projects available on the market, to provide a range of different projects for our community to support. As our assessment criteria for projects developed and our access to the market grew, it became increasingly cumbersome for our team to review the market once per month and assess all the potential projects every time — especially given how many projects in the market do not meet our strict quality criteria.

Starting in 2022 we changed this model, so that we now maintain a focused cohort of projects which we have already assessed, and have relationships with the project developers and retailers for, and are already reviewing, on a regular basis. This has enabled us to build more confidence in, and closer relationships with, the select projects we support.

3.2.1 Initial screening

The first step in our project assessment process is an initial screening.

This screening includes a handful of questions about the project's fundamentals – necessary criteria without which the project will automatically fail the rest of the assessment process. Examples include what type of project it is, whether its methodology meets ICVCM CCP-Approval, which Oxford Principles taxonomy the project type falls under, and whether the project is well-regionalised (see **3.1.4** on page 23).

The screening outcome is PASS / FAIL.

3.2.2 Full project scoring

Once a project has successfully passed screening, we use extensive data points – some of which are common to all kinds of projects, and many of which are unique to the specific project type – to review the project across three pillars (Climate, Nature and People) in two dimensions (Quality and Risk) – see **Equation 1** in the next section.

In this way, the full review and scoring process assesses both how well the project produces impacts across those three pillars, but also how confident buyers can be that the project's impacts are real and will endure. Within the scoring system, points are awarded summatively for Quality criteria, but the Risk criteria are punitive – taking points away from a project under each subscore to account for the project's associated risks within the category.

Ecologi's proprietary project assessment framework produces an overall score of out 100 for each project, which is designed to encapsulate a holistic picture which takes into account both the project's quality and potential risks across all pillars.

The framework is intended to provide a ranked assessment of projects against the criteria contained within (the specific version of) the scoring rubric.

See the next section for a full description of how Ecologi's project scores are produced.

3.2.3 Project labelling

Once projects have achieved overall scores (out of 100), we maintain internal lists of projects to govern whether we will fund them, which are labelled using a traffic light system. Our 'green list' contains only those projects which achieve a score greater than 80 on our proprietary scoring rubric.

As we assess new projects, their scores and labels are allocated based on the outcome of the project-level assessment. Similarly, as new information becomes available, already-assessed project rankings can move both up and down in the lists.

4. Our industry leading carbon project assessment framework

4.1 Overview of the framework

In our assessment framework, we employ a comprehensive proprietary scoring model that integrates three crucial pillars: **Climate**, **Nature** and **People**. A wide variety of data points are deployed under each pillar, to give a project a quality score for each (denoted as C, N and P).

The scores for each of these pillars is risk-adjusted (^{r}) to account for uncertainties and potential risks that may impact the outcomes of the projects we assess. This risk-adjusted approach ensures that our evaluations reflect the effectiveness of the projects against the identified quality criteria, whilst also considering potential challenges or barriers that might undermine their goals. The scoring formula is explained in **Equation 1** below, and produces an overall score out of 100.

$$\text{Ecologi Score} = (C_r)^{½} \cdot (N_r \cdot P_r)^{¼}$$

Where:

C is a project-specific Climate quality score, based on a number of criteria relating to the quality of the project in achieving its stated greenhouse gas benefits.

N is a project-specific Nature quality score, based on a number of criteria relating to the quality of the project in achieving benefits for nature.

P is a project-specific People quality score, based on a number of criteria relating to the quality of the project in achieving benefits for people and communities.

r denotes a risk-adjustment applied to each project-specific quality score on the basis of relevant risks which are applicable within each category (Climate, Nature and People).

Equation 1: *Shows the Ecologi carbon project scoring formula. Individual pillar scores (for each of Climate, Nature and People) are produced based on a summative calculation of the scoring from a range of criteria in each category. This pillar score is then risk-adjusted based on the calculated Risk score which is punitive – subtracting from the Quality score on the basis of perceived project risk. The overall score produced for the project is the product of the square root of the risk-adjusted Climate score and the fourth root of the other two risk-adjusted pillar scores.*

4.2 Why we opted to take this approach

The formula uses exponents (square and fourth roots) to compress the values in the risk-adjusted pillar scores, dampening the effect of any excessively high (or low) scores. It then uses the product of the risk-adjusted pillar subscores, so that especially low scores in one pillar will have a more punitive effect on the overall score than, for example, using the mean of the pillar subscores. A zero score in any one pillar will reduce the overall score to zero – no matter how high the score for the other two pillars is. The table below shows a comparison of how our formula compares against using the average pillar subscore to calculate the overall score.

Project	C	C_r	N	N_r	P	P_r	Ecologi Score	Comparison Score (mean)
P	91	90	96	94	95	93	91.7	92.3
Q	89	87	84	81	20	17	56.8	61.7
R	96	92	8	0	87	85	0	59.0

Table 2: *Shows three assessment scores for three hypothetical projects (P, Q and R) to illustrate how Ecologi's project scoring formula produces different outcomes from a comparison scoring system which uses the mean of the scores across the three pillars. For project P, which achieves reasonably similar scores across its risk-adjusted Climate, Nature and People scores, the two scoring systems produce similar results (scores of 91.7 and 92.3). For project Q, which has a low Pr (risk-adjusted People score), a noticeable divergence can be seen between the Ecologi Score (56.8) and the comparison score (61.7). Project R achieves very good Pr and Cr (risk-adjusted Climate score) scores but achieves a zero Nr (risk-adjusted Nature score). In this case the Ecologi score would be zero, but the comparison (mean) score would still rank the project reasonably well – awarding it a score of 59.0. This demonstrates how using the product of individual subscores allows our proprietary formula to heavily penalise projects in their overall scores if their impact in an individual pillar score is low or zero.*

By balancing the three pillars in this way, we aimed to create a comprehensive evaluation of the all-round impact of each project, which weights equally the carbon benefit of the project (Climate – holding 50% of the weight) against the combined weight of its co-benefits (Nature and People – holding 25% of the weight each).

4.3 How Climate subscores are calculated

Quality scores under the Climate pillar feature a number of criteria in relation to the greenhouse gas benefits of the project. This includes the **quantification of emissions benefits** from the project and how those calculations are corroborated by quantitative third-party verification. As well, carbon-related data points from our ratings partners contribute to this section – such as **additionality** assessment, **potential for overcrediting**, and **carbon storage estimates**.

Climate Risk scores are driven by assessments of risk associated with delivering the greenhouse gas benefit of the project. Within this category are permanence assessments, country risk profiles, project developer performance assessments, and regional natural and human risks which may impact the effectiveness of the greenhouse gas benefit of the project.

Since the unit of value for carbon credit purchases is predicated on the greenhouse gas benefit of the project, Climate scores are weighted the heaviest in our scoring framework (equal to the combined weighting of the People and Nature scores), and also tend to contain the most criteria. On average, **around 40 distinct criteria** contribute to the Climate scores across our project assessments.

4.4 How Nature subscores are calculated

Quality scores under the Nature pillar feature a number of criteria in relation to the project's impact on the natural environment. This includes, for example, criteria about the **use of chemicals** in the project which may be leached out into the environment, and whether the project meets separate **third-party certifications** in relation to biodiversity or the sustainable use of resources. For nature-based projects there are a range of project-specific additional criteria which must be fulfilled in this section, such as (for afforestation projects) **whether species are native, and whether species and planting densities are well-matched to local climate, soils and water availability**. For forest conservation projects, there are a number of criteria related to the condition, health and biological importance of the primary forest being conserved. This section of the assessment for nature-based projects also features an in-house assessment of the recent change in **Normalised Difference Vegetation Index (NDVI)** within the project area, to incorporate a direct check on how any change in vegetation density matches the project's design and claims.

Nature Risk scores are driven by assessments of risk associated with delivering the project's potential benefits to nature. **Leakage** analyses often feature in this category since they often apply to instances where a forest conservation project has caused additional logging elsewhere – a large risk to the natural environment, as well as potential risks of causing direct harm to nature. At the same time, we include analysis of the **strength of evidence provided against the project's claims** to its contributions to the nature-related UN Sustainable Development Goals, such as *Life on Land* and *Life Below Water*.

On average, **around 25 distinct criteria** contribute to the Nature scores across our project assessments.

4.5 How People subscores are calculated

Quality scores in the People pillar feature a number of criteria in relation to the project's impact on people and communities. This includes for example whether the project includes the **provision of healthcare services**, whether a comprehensive **financial benefit-sharing mechanism** has been established, and confidence in the project's commitment to **gender equality**. Many of the UN Sustainable Development Goals are directly related to people and communities, and so the strength of evidence of contribution to these specific SDGs is included here. As another example, for community cookstoves projects this is the section where we examine the **percentage uptake** of the distributed stoves, the **anticipated lifetime** of the stoves, and the **cash savings** reported by the members of the community using them.

People Risk scores are driven by assessments of risk associated with delivering the project's potential benefits to people, as well as potential risks of causing direct harm to people and communities. Here, we examine the treatment of staff and local people, evidence that **Free Prior and Informed Consent (FPIC)** was given by Indigenous peoples and local communities. At the same time, we include analysis of the **strength of evidence provided against the project's claims** to its contributions to the people-related UN Sustainable Development Goals, such as *No Poverty* and *Good Health and Wellbeing*.

On average, **around 35 distinct criteria** contribute to the People scores across our project assessments.

5. Accountability

5.1 Disclosures, claims and reporting

Businesses opting to participate in carbon markets should disclose information about their buying and retirement activity and how it fits into their wider emissions measurement and decarbonisation activities. Whilst doing so, businesses must be aware of the obligations and responsibilities they have regarding the claims they make about their use of carbon credits.

Green claims of any sort must be fully substantiated. The Competition and Markets Authority (2021) offers guidance to businesses under its **Green Claims Code**, on how to make appropriate green claims about goods and services.

Explore the CMA Green Claims Code

Similarly, the **Voluntary Carbon Markets Integrity initiative** offers a Claims Code of Practice (VCMI, 2024) to help businesses make substantiated, high-integrity claims.

VCMI Claims Code of Practice

5.2 'Best available data'

Sometimes, new data becomes available which means that our previous assessment of a project was incomplete or inaccurate. Sometimes, projects which are known to be high-quality today, might change their practices in some way, so that they are no longer high-quality tomorrow. And sometimes, new best practices or data emerge which allow our quality standards to become stricter, so that what was once considered high-quality is no longer considered so.

These are all normal evolutions of an industry like the voluntary carbon market which is proactively engaged in increasing standards, transparency and integrity over time.

At Ecologi, we adhere to the axiom of acting on the *best available data*. **We go to great lengths** to understand projects on a deep level so that we can be confident in our assessment of project quality – **but data *does* and *should* improve over time**, and no purchase of carbon credits is without risk.

So we believe that carbon credit buyers should be judged on the efforts they take to gather the data to make informed decisions, the way they use their credits, and the claims they make about them. Therefore it behoves buyers themselves to do this level of due diligence, and be responsive and accountable to when the best data changes.

We have seen firsthand how drastically data availability and reliability has improved over the years, and whilst no method is foolproof, informed actors in the voluntary carbon market are able to have a much higher conviction in their purchases nowadays.

5.3 Adapting to changes and trends

Standards and practices evolve over time – and again, we think this is a positive thing. As a general principle, we think better standards and more environmental regulation is an effective tool to drive vital action on climate change, and buyers should be aware of what's coming down the line, and plugged into regulatory and industry changes.

A few of the industry trends we are following closely at the time of writing include:

- Updates to existing corporate sustainability standards such as t**he SBTi's Corporate Net-Zero Standard** and the upcoming **ISO Net Zero Standard**;
- Developments following the agreement of rules and procedures in relation to Article 6 of the Paris Agreement at COP29 in Baku and the **Paris Agreement Crediting Mechanism (PACM)**.
- Iterations on an emerging voluntary market for '**biodiversity credits**' and how this may integrate with the existing voluntary carbon market.

5.4 How Ecologi is contributing to the development of a high-integrity voluntary carbon market

At Ecologi, we place great importance on the market-level improvement of standards in the voluntary carbon market, and in corporate sustainability more broadly.

As well as building out our industry-leading due diligence process described in this paper and working with some of the leading carbon intelligence partners in the industry, we also support, participate in, and co-founded a number of other programmes and consortia. Each of these is targeted at improving standards and maintaining best practice across all of our work, including in carbon markets. For example:

- We are a founding member and member of the Steering Committee of the **Carbon Markets Innovation Forum**, a group designed to convene startups in the carbon markets and ensure they have a seat at the policy table, interfacing with the UK Government to help drive up standards and innovation across the carbon markets.

Read more

- We were on the Advisory Group to the **BSI Flex 3030:2024 Standard** for Net Zero Transition Plans for Small and Medium Enterprises – helping to guide SMEs to interpret and apply different sustainability standards, to generate their own Net Zero Transition Plans.

Read more

- We are a founding member of the **Carbon Accounting Alliance**, a collaborative group dedicated to solving challenges in carbon measurement, sharing best practice and promoting the development of robust standards.

Read more

- We are an Actor in the **UN Decade on Ecosystem Restoration**, a global initiative which aims to prevent, halt and reverse the degradation of ecosystems on every continent and in every ocean.

Read more

- We have been a certified **B Corporation** since 2021. The B Corporation certification is run by B Lab, a nonprofit network aimed at transforming the global economy to benefit all people, communities, and the planet.

Read more

Ecologi's Values

We are science-led and impact-driven
We hold ourselves to the highest scientific standards and collaborate with the best global partners. We provide leading-edge solutions for our planet that customers love.

We gain trust through transparency
We do our due diligence and seek out the best possible data to inform our decisions. We value authenticity, openness, honesty and operate with integrity and autonomy.

We drive meaningful change
We're progress driven, setting ambitious goals even when faced with uncertainty and ambiguity. We test, we learn, we move forwards. We're brave, optimistic, resilient and enjoy the challenge that change brings.

We believe in the power of collective action
We inspire and empower our people and businesses to make a positive difference. Together, we challenge, we communicate, we collaborate. We celebrate and champion diversity and inclusion.

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Ecologi

FOR OUR PLANET

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Ecologi is the UK's most trusted climate action platform. Our mission is to inspire and empower businesses to accelerate global climate action through funding high-integrity, high-impact climate action including reforestation, habitat restoration, carbon avoidance and removal projects around the world. We are trusted by over 24,000 businesses Co-op, O2, albert (BAFTA), ITV, Ubisoft, Oracle, Capgemini, Mulberry including 300+ B Corps. As of January 2025, our community has collectively funded the planting of over 88 million trees, avoided 3.5m tonnes of verified CO_2e, over 31,000m^2 of habitat restored and permanently removed 25,000 tonnes of CO_2.

We're science-led and impact driven, aligned to the SBTi and Oxford Principles and guided by our Impact team and expert independent climate committee. We support leading industry standards including Gold Standard, VCS, Puro and 3rd party quality assessments such as Be Zero Carbon, Calyx Global, Renoster and Sylvera. We're a proudly certified B Corp, in the Top 5% for Environment and Governance, as well as the most trusted climate action brand in the UK with an average 4.8 rating on Trustpilot.

Visit ecologi.com to find out more