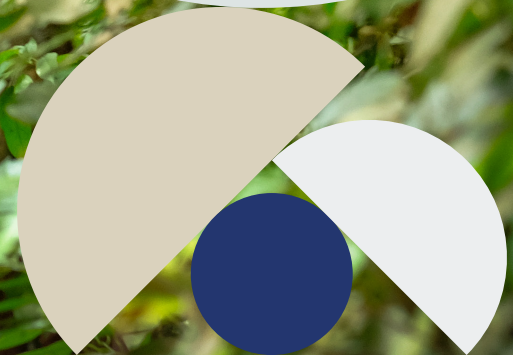




# Rimba Raya Biodiversity Reserve

Carbon offsetting project



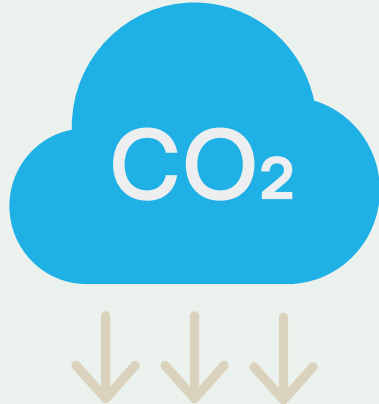


# Introduction



*Rimba Raya*  
BIODIVERSITY RESERVE

This document assesses the Rimba Raya Biodiversity Reserve carbon offsetting project (Rimba Raya project) that has generated the carbon credits upon which Zurich's carbon neutrality status has been based since 2014.



Overall, Zurich has purchased more than 900'000 carbon credits from the Rimba Raya project, all of which were issued between the period 2014-2019. We anticipate some additional future purchases of carbon credits from the Rimba Raya project with issuance dates between the period 2020-2022 subject to the completion of all required registration, validation and verification activities as required under the Verified Carbon Standard (VCS) and Indonesia's domestic carbon registry, the National Registry System for Climate Change Control (Sistem Registri Nasional Pengendalian Perubahan Iklim or the "SRN"), which as at the date of this paper is currently underway.

This document also summarizes the standards and certifications held by the Rimba Raya project and explores the quality of the issued carbon credits by evaluating the Rimba Raya project against 6 criteria that we consider key in determining project quality, namely;

1. **additionality**
2. **over-crediting risk**
3. **leakage**
4. **co-benefits**
5. **permanence and**
6. **transparency.**

This document concludes with a position summarizing our assessment of Rimba Raya project quality, recent market developments and implications for future carbon credit sourcing and procurement processes.



# Project overview

The Rimba Raya project is certified under three different certification standards; the Verified Carbon Standard (VCS), Climate Community and Biodiversity (CCB) standards and Sustainable Development Verified Impact Standard (SD VISta) which together provide a framework for verifying the Rimba Raya project's carbon offsets, the co-benefits it generates for local communities and biodiversity and its alignment with the global Sustainable Development Goals (SDGs) set forth by the United Nations.

To maintain these certifications, Rimba Raya undergoes regular third-party verification to ensure it continues to meet the requirements of those standards.

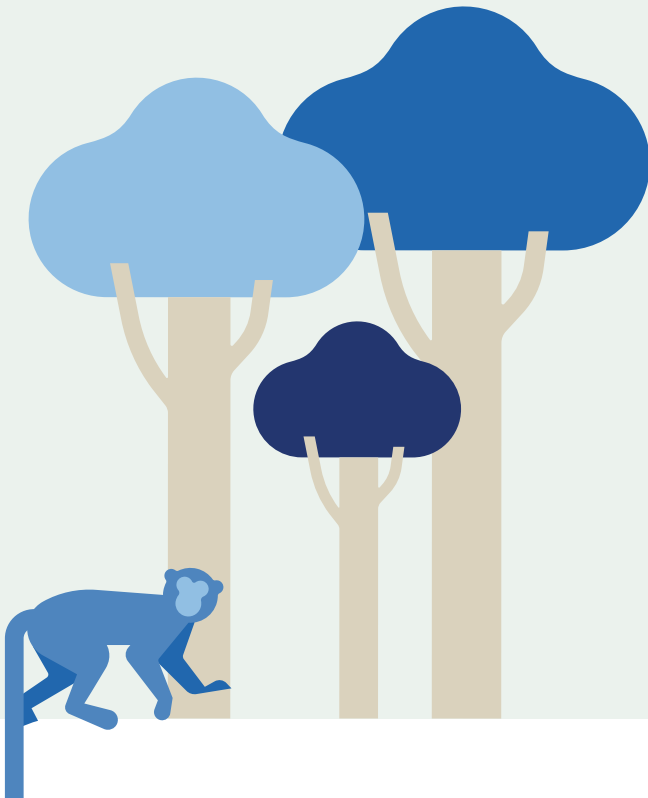
VCS requires projects to undergo annual verification by an independent auditor to ensure that the project is continuing to reduce emissions and that the carbon credits generated are correctly measured and verified in accordance with the relevant VCS methodology. The CCB standards require that projects commission a verification audit by an approved independent auditor every five years to assess their impact on local community livelihoods and biodiversity, as well as their carbon sequestration benefits. The SD VISta standard requires a verification audit by expert third-party auditors every five years to assess how projects advance the SDGs and deliver benefits for people, their prosperity and the planet.

VCS is the world's most widely used carbon crediting program. It is managed by Verra, a registered nonprofit corporation based in the district of Columbia, Washington DC, USA. The Rimba Raya project calculates the amount of carbon credits available for issuance according to the Verra methodology VM0004 – Methodology for Conservation Projects that Avoid Planned Land Use Conversion in Peat Swamp Forests.

This methodology was developed transparently with peer review. It was originally published in August 2010 prior to which public comments were invited and two independent assessments were carried out. Both external assessments confirmed that the methodology was prepared in line with the VCS program requirements, and it was granted approval by Verra. Version two of the methodology was published and approved by Verra on 31st October 2022, an independent

assessment has been conducted to confirm that the methodology updates were prepared in line with the applicable VCS program requirements, public comments were again invited. The update to version two was necessary to align the methodology with the updated rules of the VCS standard for Wetlands, Restoration and Conservation (WRC) projects, such as the Rimba Raya project. All the independent methodology assessment reports are available for download from Verra's public website.

According to this VCS methodology, at the outset of the project, a baseline for the emissions avoided due to the project is established and set for the first ten years of carbon credit issuance. The VCS methodology specifies how this baseline value is calculated by, for example and without limitation - estimating the volume of carbon stocks in peat soil and biomass, within the project boundary that is not released into the atmosphere as a result of deforestation. Deforestation rates are estimated based upon actual rates of deforestation observed at relevant proxy sites. The physical project area is monitored over the crediting period to account for emissions associated with any deforestation, illegal logging, peat drainage, or other land use changes that lead to an increase in emissions. The findings from the monitoring are incorporated into the emission calculations performed for each carbon credit issuance period and issuance volumes adjusted as necessary, meaning any emissions that occur within the project boundary in a given year after the start of the project must be subtracted from the carbon benefits estimated for that year. The monitoring activity and related calculations are verified by an independent third party. The baseline is subject to reassessment every 10 years at which time baseline emissions calculations are updated.



# Review of quality criteria for Rimba Raya project

## 1. Additionality

The Rimba Raya project stopped the planned deforestation of 64,977 hectares of tropical peat swamp forest, as the land was slated by the Provincial government and Ministry of Forest to be converted into four palm oil estates. In other words, it was planned for deforestation. Without this intervention and availability of funding provided by the sale of carbon credits the forest would have been deforested, making Rimba Raya a pure example of an avoided deforestation offsetting project. It is a matter of public record that the area surrounding the land protected by the Rimba Raya project was deforested and palm oil tree plantations developed in its place. It is noted that independent carbon credit rating agencies recognize the additionality of the Rimba Raya project according to their proprietary rating methodologies.

### Zurich assessment

High degree of confidence in Rimba Raya project additionality.



## 2. Risk of over crediting

The Rimba Raya project emission baseline which provides the basis for the volume of carbon credits available for issuance adopts a conservative approach and is calculated in accordance with the VCS methodology which was itself specifically created for calculating emissions from Conservation Projects that Avoid Planned Land Use Conversion in Peat Swamp Forests. The baseline is subject to review every 10 years but the limitation of a 10-year re-baselining period is acknowledged. The Rimba Raya project is monitored in accordance with the VCS methodology, documented annually and regularly verified by independent third parties. All verification reports are published and available for download for carbon credits issued between the period July 1 2014 to June 30 2019. The reports indicate that the VCS monitoring processes have been carried out and the results incorporated into calculations of carbon credits issued. The actual amount of carbon credits issued by the Rimba Raya project is below the original estimates at project commencement, illustrating the monitoring processes are functioning as intended. It is noted that independent carbon credit rating agencies recognize the accuracy of project emission avoidance claims overall for the Rimba Raya project according to their proprietary rating methodologies. For the period from July 1 2019 to December 31 2022 the verification process is currently underway in accordance with the VCS methodology and a new government mandated framework for domestic and international carbon trading in Indonesia. Under which, all carbon projects in Indonesia must be registered, validated and verified through the SRN.

### Zurich assessment

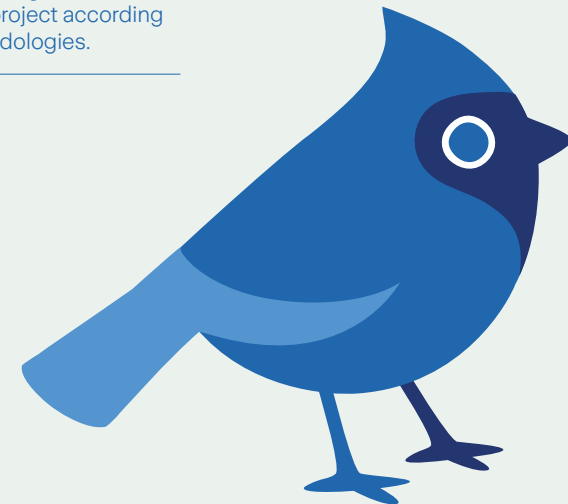
Low risk of over crediting.

## 3. Leakage

The VCS methodology under which Rimba Raya carbon credits are issued requires an evaluation of potential for leakage (deforestation being carried out in forests directly because of the protection of the land area to which the carbon credits relate) and ongoing monitoring for the first 5 years of the project (between 2009 and 2014). Whilst the limitation under the VCS methodology of a 5-year monitoring period is acknowledged, the VCS verification reports confirmed that an evaluation of leakage and ongoing monitoring was carried out for the full issuance period and that the residual peat drainage emissions from areas of expansion by palm oil plantations continue to be monitored and included in emissions accounting for the Rimba Raya project even though the VCS methodology did not require this. We acknowledge the difficulties generally in estimating and monitoring leakage on the basis required by the VCS methodology and are aware of public data (e.g. Treemap 2022) that shows deforestation and peat conversion for oil palm has continued in Indonesia since 2014 but levelled off in 2022. It is noted that independent carbon credit rating agencies recognize the risk of leakage for the Rimba Raya project according to their proprietary rating methodologies.

### Zurich assessment

Moderate risk of leakage.



# Review of quality criteria for Rimba Raya project

## 4. Co-benefits

The co-benefits of Rimba Raya are undisputed. By working directly with Infinite Earth, the project developers, we know the income derived from their direct sale of offsetting credits has been reinvested into the project itself and the local community, delivering benefits verified to be in line with all 17 SDGs, as further evidenced by the SD VISTA certification and independent verification.

### Zurich assessment

High level of confidence in realization of intended project co-benefits.



## 5. Permanence

The VCS methodology under which Rimba Raya carbon credits are issued requires consideration of risks to permanence of the claimed emission reduction and use of a prescribed tool for the calculation of a relevant carbon credit buffer pool – reflecting the permanence risks identified. In a forestry project such as Rimba Raya, relevant risks include (without limitation) deforestation, illegal logging and peat drainage. The third-party verification reports for the Rimba Raya project confirm that the permanence risks have been evaluated and a buffer pool of withheld carbon credits equating to 10% of net project emission reduction established, in-line with the requirements of the VCS methodology. The third-party verification reports also confirm that monitoring of the physical project area is carried out and documented annually in accordance with the VCS methodology to identify instances of deforestation, illegal logging and peat drainage which would impact the permanence of the emissions reduction claimed by the Rimba Raya project. The Rimba Raya project period is for 30 years with the option for this to be extended for an additional 30 years, subject to approval from the Indonesian government. Since the Rimba Raya project is reliant on funding from the sale of carbon credits, there is a risk to permanence after the project period. It is noted that independent carbon credit rating agencies, recognize the risk to permanence for the Rimba Raya project according to their proprietary rating methodologies.

### Zurich assessment

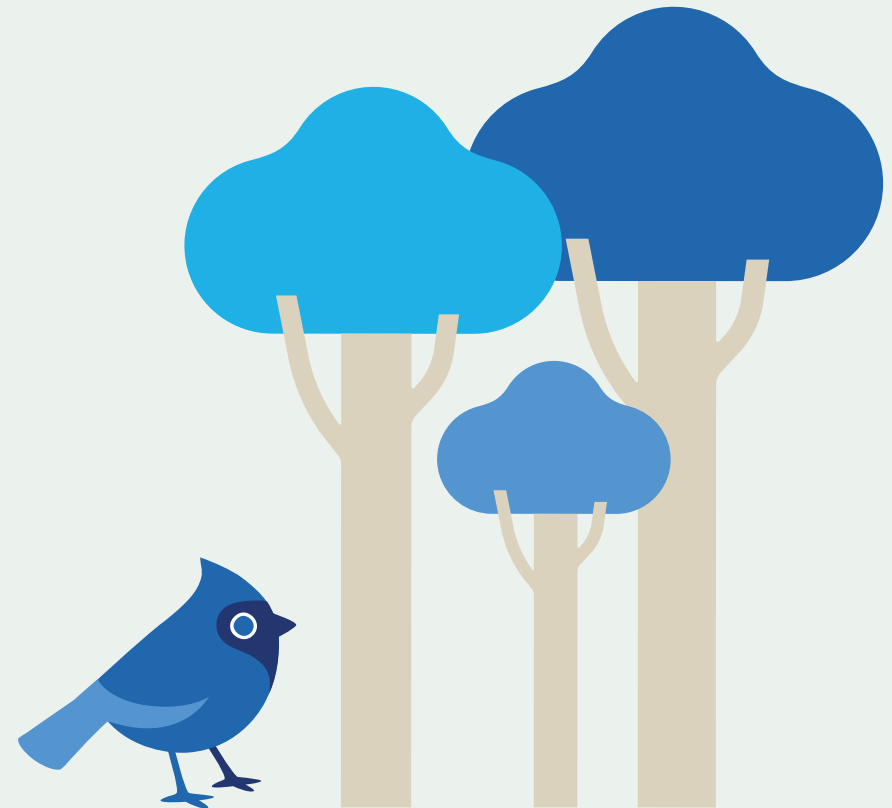
High level of confidence in permanence levels during the project period.

## 6. Transparency

The Rimba Raya project developers offer a multitude of resources on their project website and via the public Verra registry including newsletters, pictures, videos, verification reports, fact sheets, etc. Their efforts to transparently demonstrate the positive impacts offsetting has generated, are commendable.

### Zurich assessment

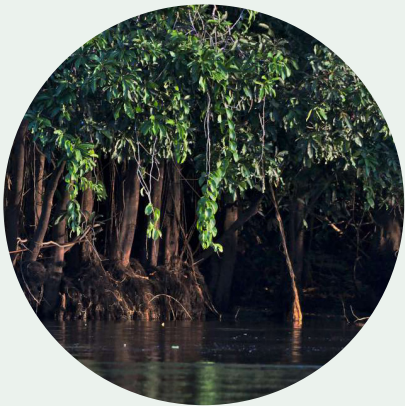
High level of transparency provided by project.





# Conclusion

It is clear that the Rimba Raya project has avoided significant deforestation, maintained rich biodiversity in a critical ecological system and provided economic opportunities in the local community for the benefit of the planet and broader society.



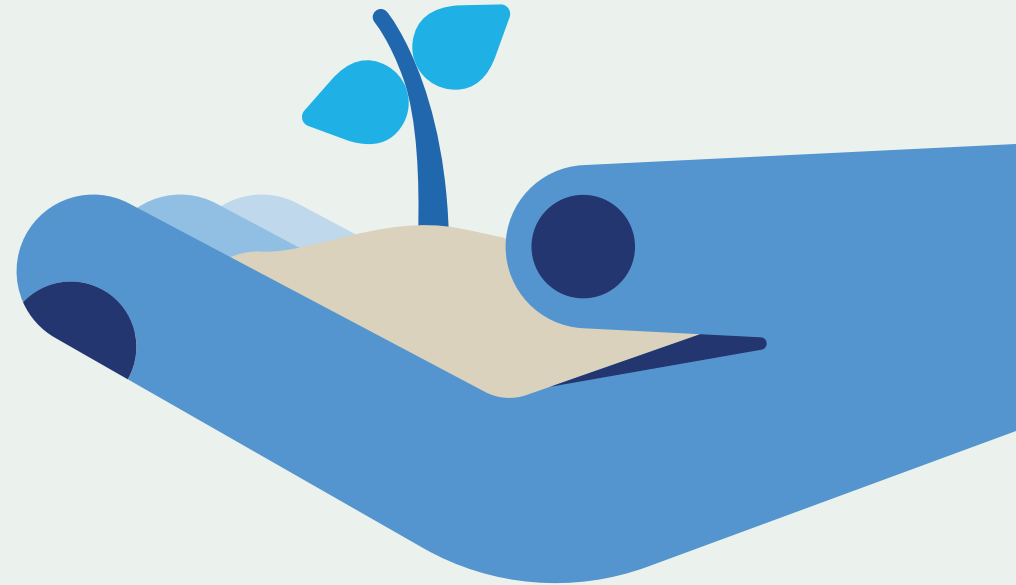
The Rimba Raya project demonstrates compliance with the VCS methodologies though we understand limitations with respect to the methodology itself, for example, the re-baselining of emissions is required only once every 10 years and with respect to calculating the risk of leakage and challenges with monitoring deforestation in other areas as a result of the project land being protected. Carbon credits are not all created equally but for the reasons set out above in our analysis, we have confidence that the Rimba Raya can be considered a high quality project overall.

Carbon credits are not perfect – our analysis acknowledges this, however we are determined to avoid the pursuit of perfection becoming the enemy of the good. In the years since Zurich first entered the voluntary carbon markets and selected the Rimba Raya project, the markets have evolved. Notably, the development of new technologies especially for remote sensing and monitoring of forestry projects has accelerated, leading to the establishment of new companies providing independent carbon credit ratings and monitoring services, acting as a further project quality assurance measure – beyond the core validation and verification requirements of the VCS methodologies and our own due diligence measures. On this basis, any future carbon credit procurements for forestry projects will incorporate additional independent intelligence to provide further and ongoing assurances as to project quality.

Verra is undertaking a public consultation regarding the future development of the VCS and the Voluntary Carbon Market Integrity initiative is shortly to publish the Core Carbon Principles (CCP) and Assessment Framework (AF) which act as a further quality standard against which all carbon credits can be measured. We eagerly await the outcome of Verra's consultation process,

and the publishing of the CCP and AF which will further improve the outcomes of carbon credit programs.

For Zurich, climate change is among the most pressing risks facing society today. It's for this reason that we are focused on implementing deep cuts to our operational emissions with the ambition of achieving net-zero emissions by 2030. Our procurement of carbon credits and relating carbon neutral status, maintained since 2014, is an interim but important step that has contributed to the protection of land that was slated for deforestation.



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