



**Verified Carbon
Standard**

KHAMMOUAN REDD PROJECT



Document Prepared by Guangdong Shuangtanda Technology Co., Ltd

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CONTENTS

1	PROJECT DETAILS.....	4
1.1	Summary Description of the Project	4
1.2	Audit History.....	4
1.3	Sectoral Scope and Project Type	4
1.4	Project Eligibility	5
1.5	Project Design	6
1.6	Project Proponent	6
1.7	Other Entities Involved in the Project	6
1.8	Ownership.....	7
1.9	Project Start Date	7
1.10	Project Crediting Period	7
1.11	Project Scale and Estimated GHG Emission Reductions or Removals	7
1.12	Description of the Project Activity	9
1.13	Project Location	9
1.14	Conditions Prior to Project Initiation	10
1.15	Compliance with Laws, Statutes and Other Regulatory Frameworks	11
1.16	Double Counting and Participation under Other GHG Programs	11
1.17	Double Claiming, Other Forms of Credit, and Scope 3 Emissions.....	12
1.18	Sustainable Development Contributions	12
1.19	Additional Information Relevant to the Project	13
2	SAFEGUARDS AND STAKEHOLDER ENGAGEMENT	14
2.1	Stakeholder Engagement and Consultation.....	14
2.2	Risks to Stakeholders and the Environment.....	14
2.3	Respect for Human Rights and Equity	15
2.4	Ecosystem Health	15
3	APPLICATION OF METHODOLOGY.....	16
3.1	Title and Reference of Methodology	16
3.2	Applicability of Methodology	16
3.3	Project Boundary	17
3.4	Baseline Scenario	17

3.5	Additionality	17
3.6	Methodology Deviations	17
4	QUANTIFICATION OF ESTIMATED GHG EMISSION REDUCTIONS AND REMOVALS.....	18
4.1	Baseline Emissions	18
4.2	Project Emissions	18
4.3	Leakage Emissions	18
4.4	Estimated GHG Emission Reductions and Carbon Dioxide Removals	18
5	MONITORING	19
5.1	Data and Parameters Available at Validation	19
5.2	Data and Parameters Monitored.....	19
5.3	Monitoring Plan.....	19
	APPENDIX 1: COMMERCIALLY SENSITIVE INFORMATION.....	20

1 PROJECT DETAILS

1.1 Summary Description of the Project

The Khammouan REDD Project (hereinafter referred to as “the project”) is located in part of Khammouan Province, Laos. It is a long-term carbon sequestration project to protect local forests, avoid deforestation and degradation, and protect biodiversity and the living environment of local communities.

The project area is approximately 200,000 hectares. The local government has authorized Laos Global Carbon Technology Co., Ltd (hereinafter referred to as "Project proponent") to manage it. The company provides basic ecosystem services, including climate mitigation, maintaining biodiversity, forest protection, and obtaining operating funds through tourism and commercial agroforestry.

The project started in 2022. Project proponent found that due to the low living standards of local residents and lack of ecological protection awareness, there were illegal deforestation and timber sales to obtain funds, illegal deforestation to build houses, etc., which caused great ecological damage. The goal of the project is to use carbon financing to: protect forest plots from illegal logging; protect the normal growth of trees to avoid greenhouse gas emissions, maintain carbon storage and carbon sequestration; protect and maintain local plant and animal diversity; enhance local community-led protection and climate restoration by raising awareness of key environmental and climate issues; and enhance the community's ability to achieve sustainable livelihoods and nature-based climate solutions.

In order to achieve the intended purpose, the main method of the project is to contract all rights in the project area, and Project proponent will manage the project and employ trained forest rangers to patrol the project area to prevent illegal logging, hunting, wildfires, etc. At the same time, Project proponent will work with local governments and ecologists to survey, assess, monitor and manage the biodiversity of local communities, provide continuous environmental education to project residents, and provide training, materials and technical support for sustainable livelihoods and nature-based climate adaptation solutions owned by the community.

The average annual emission reduction is expected to be 240,965 tons, and the total emission reduction is expected to be 4,819,300 tons over a period of 20 years.

1.2 Audit History

The project has not entered the review stage, so this chapter is not applicable.

1.3 Sectoral Scope and Project Type

Sectoral scope	Agriculture, Forestry and Other Land Uses
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AFOLU project category	Reduced Emissions from Deforestation and Degradation
Project activity type	Avoiding planned deforestation

1.4 Project Eligibility

1.4.1 General eligibility

The project activity of avoiding planned deforestation is allowable under the scope of the VCS Program as described in section A1.6 of the VCS Standard v4.7. The project also complies with the requirements laid out in Sections 3.1, 3.6, 3.8, 3.18, and 4.1 of the Standard including the following:

- The project is guided by the following principles set out in section 2.2.1 of the Standard including relevance, completeness, consistency, accuracy, transparency, and conservativeness.
- The project applies in full the latest version of VM0007 under the VCS Program along with the full application of the tools and modules identified in the methodology specific to the project activity type. VM007 is still permitted to be used for avoiding planned deforestation projects.
- The project and implementation of project activities do not violate any laws.
- The project proponent will demonstrate during each verification period that the project activities have led to the intended GHG benefits.
- The project is designed as a single installation of an activity rather than multiple project activities. It is also not a grouped project
- The project will follow the rules and requirements for its validation and verification in line with the requirements detailed in section 4.1 of the VCS Standard v4.7.

1.4.2 AFOLU project eligibility

The selected project category of Reduced Emissions from Deforestation and Degradation (REDD) and project activity Avoiding Planned Deforestation is allowable under the scope of the VCS Program as described in section A1.6 of the VCS Standard v4.7.

The forests within the project area also meet the Belize national definition of forest according to its 2001-2015 Forest Reference Emission Level submitted to the UNFCCC (Forest Department, 2020). Only areas that met the definition of forests for a minimum of 10 years before the project start date were included to ensure that no ecosystems had been converted to generate GHG credits.

1.4.3 Transfer project eligibility

Does not apply. This is not a transfer project.

1.5 Project Design

- ☐ Single location or installation
- ☒ Multiple locations or project activity instances (but not a grouped project)
- ☐ Grouped project

1.5.1 Grouped project design

This section is not applicable because this project is not a group project.

1.6 Project Proponent

Organization name	Laos Global Carbon Technology Co., Ltd
Contact person	Zhuang Fucheng
Title	General Manager
Address	Laos Global Carbon Technology Co., Ltd is located in Phongsavadai Village, Sikutaben District, Vientiane, the capital of Laos
Telephone	020 5248 8889
Email	info@laosglobalcarbon.com

1.7 Other Entities Involved in the Project

Organization name	Guangdong Shuangtanda Technology Co., Ltd
Role in the project	Project Application
Contact person	Xiaoming Li
Title	General Manager
Address	Room 1004, Building 16, Tian'an Headquarters Center, No. 555 North Panyu Avenue, Donghuan Street, Panyu District, Guangzhou, China 511400
Telephone	+86 15521179205

Email	std@gdstdkj.com
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1.8 Ownership

According to the relevant agreement signed between the Lao government and Laos Global Carbon Technology Co., Ltd, the ownership of the project is held by Laos Global Carbon Technology Co., Ltd.

1.9 Project Start Date

Project start date	01-03-2022
Justification	As indicated described in section 2.1.7, the title of the parcels making up the property were transferred to the Project proponent in December 2021. As such, the project began generating GHG emission reductions from its avoiding planned deforestation activity on January 1, 2022

1.10 Project Crediting Period

Crediting period	☐ Seven years, twice renewable ☐ Ten years, fixed ☒ Other (state the selected crediting period and justify how it conforms with the VCS Program requirements)
Start and end date of first or fixed crediting period	01-03-2022 to 28-02-2042

According to the VCS standard 4.7 section 3.9.2: For all AFOLU projects other than such ALM projects described in 3.9.2, the initial project crediting period shall be a minimum of 20 years up to a maximum of 100 years, which may be renewed at most four times, with a total project crediting period not to exceed 100 years. Therefore, the proposed project crediting period is set at 20 years.

1.11 Project Scale and Estimated GHG Emission Reductions or Removals

- ☒ < 300,000 tCO₂e/year (project)
☐ ≥ 300,000 tCO₂e/year (large project)

Calendar year of crediting period	Estimated GHG emission reductions or removals (tCO ₂ e)
01-03-2022 to 28-02-2023	486,200
01-03-2023 to 28-02-2024	432,750
01-03-2024 to 28-02-2025	398,500
01-03-2025 to 28-02-2026	465,300
01-03-2026 to 28-02-2027	503,860
01-03-2027 to 28-02-2028	351,900
01-03-2028 to 28-02-2029	489,000
01-03-2029 to 28-02-2030	245,000
01-03-2030 to 28-02-2031	132,400
01-03-2031 to 28-02-2032	158,900
01-03-2032 to 28-02-2033	84,500
01-03-2033 to 28-02-2034	116,300
01-03-2034 to 28-02-2035	145,000
01-03-2035 to 28-02-2036	92,750
01-03-2036 to 28-02-2037	123,600
01-03-2037 to 28-02-2038	137,800
01-03-2038 to 28-02-2039	105,340
01-03-2039 to 28-02-2040	79,800
01-03-2040 to 28-02-2041	156,000
01-03-2041 to 28-02-2042	112,400

Total estimated ERRs during the first or fixed crediting period	4,819,300
Total number of years	20
Average annual ERRs	240,965

1.12 Description of the Project Activity

The project activities include the following:

1. Purchase forested property (LAO REDD property area) under threat of conversion to commercial agriculture;
2. Maintain natural ecosystems and current forest cover for the conservation of native biodiversity through the implementation of management strategies, such as detection, mitigation, and control of wildfires and surveillance and patrolling, to conserve and protect ecosystem services supplied by the property;
3. Conduct ongoing community outreach and environmental education in nearby communities to foster support for LAO conservation and create awareness of climate change impacts on communities, including supporting the drafting and adoption of community conservation plans and community climate smart plans;
4. Provide training, material, and technical support for community-owned sustainable livelihoods and nature-based solutions for climate adaptation.

Activities 1 and 2 maintain the current forest carbon stocks in the area that would otherwise have been emitted as carbon dioxide through the land conversion. Activities 3 and 4 help enhance local communities' well-being and resilience to natural disasters, in addition to increasing local support for the conservation of the LAO.

The project is not located within a jurisdictional REDD+ program.

1.13 Project Location

The project is located in Khammouan Province, Laos.



1.14 Conditions Prior to Project Initiation

The baseline scenario is the same as the conditions existing prior to the project initiation.

Climate characteristics

Laos has a tropical monsoon climate, with hot weather all year round and little seasonal temperature difference. Except for the northern high mountainous areas, the temperature difference is not big, and there are only two seasons in the whole year: rainy and early. The rainy season is from May to October every year, with hot and humid climate and rising river water. The heaviest rainfall is from July to August, which often lasts for many days. There are also frequent storms, resulting in floods everywhere, affecting transportation and other activities. The dry season is from November to April of the following year, with almost no rainfall, and droughts are common in the plains.

The average temperature in Laos is between 20-26 degrees Celsius, and is greatly affected by the terrain. Frost, ice or snowfall occasionally occurs in mountainous plateaus, while the Mekong River Valley and other areas are hot all year round. The relative humidity in Laos is relatively high, with an annual average of 75%-85%, the highest in August and September, and the lowest in March.

Land Resources

Laos is mountainous, with mountains and plateaus accounting for about 80% of the country's total area, and plains and basins accounting for about 20%. The mountains in Laos form four major plateaus, namely, from north to south, the Hoi Pham Plateau, the Chin Ninh Plateau, the

Khammon Plateau and the Bolaven Plateau. The Chin Ninh Plateau (Xiang Khouang Plateau) is located in Xiang Khouang, Upper Laos, with an altitude of 2,000-2,800 meters. It is the highest area in Laos and is known as the "roof" of Laos; the Hoi Pham Plateau is located in Upper Laos, spanning the eastern part of Xiang Khouang Province and Houaphan Province, with an altitude of 2,000 meters; the Khammon Plateau is located in Khammon Province in Central Laos, with an altitude of 1,000 meters; the Bolaven Plateau is in the south, spanning Pakse Province and Attapeu Province, with an altitude of 300-1,000 meters. These areas are lush with trees and evergreen grass, and are excellent natural forests and pastures.

The arable land area in Laos is more than 4 million hectares, mainly in plains. These plains are distributed along the Mekong River south of Vientiane. The more famous ones are: Vientiane Plain, Savannakhet Plain and Mekong River Lowland southwest of Pakse. In the north of Vientiane, there are many small basins along the Mekong River and its tributaries that flow through the Lao-Myanmar and Lao-Thai border areas, namely the Ban Ban Plain and the Jar Plain. The Jar Plain covers an area of more than 100 square kilometers. These plains are flat, mostly alluvial soil and humus soil, and some are swamps. They are currently the main agricultural development areas and rice production areas in Laos.

Water resources

There are many rivers in Laos with a dense river network. The main rivers include the Mekong River and its tributaries, the Zhujiang River and the upper reaches of the Majiang River.

1.15 Compliance with Laws, Statutes and Other Regulatory Frameworks

The project complies with relevant laws of Laos, such as the Prime Minister's Decree on the Management and Utilization of Forests and Woodlands, the Logging Ban, the Regulations on the Obligations and Rights of Village Communities in Forest Resource Management, the Prime Minister's Decree on the Allocation of Land and Forestland for Tree Planting and Forest Protection, the Decree on the Prohibition of Illegal Logging, Felling, Collection, Gathering and Illegal Trade of Timber, the Control and Management of Aquatic Animals, Wildlife, Hunting and Fisheries, and the Regulations on the Control of Wildlife and Hunting.

1.16 Double Counting and Participation under Other GHG Programs

1.16.1 No Double Issuance

Is the project receiving or seeking credit for reductions and removals from a project activity under another GHG program?

☐ Yes ☒ No

1.16.2 Registration in Other GHG Programs

Has the project registered under any other GHG programs?

☐ Yes ☒ No

Is the project active under the other program?

☐ Yes ☒ No

1.16.3 Projects Rejected by Other GHG Programs

Has the project been rejected by any other GHG programs?

☐ Yes ☒ No

1.17 Double Claiming, Other Forms of Credit, and Scope 3 Emissions

1.17.1 No Double Claiming with Emissions Trading Programs or Binding Emission Limits

Are project reductions and removals or project activities also included in an emissions trading program or binding emission limit? See the *VCS Program Definitions* for definitions of emissions trading program and binding emission limit.

☐ Yes ☒ No

1.17.2 No Double Claiming with Other Forms of Environmental Credit

Has the project activity sought, received, or is planning to receive credit from another GHG-related environmental credit system? See the *VCS Program Definitions* for definition of GHG-related environmental credit system.

☐ Yes ☒ No

1.17.3 Supply Chain (Scope 3) Emissions

Do the project activities specified in Section 0 affect the emissions footprint of any product(s) (goods or services) that are part of a supply chain?

☐ Yes ☒ No

1.18 Sustainable Development Contributions

The overarching purpose is to stimulate effective routes toward sustainable development, ensuring a harmonious equilibrium among economic, social, and environmental dimensions while acknowledging their interconnectedness.

	Goal 1: End poverty in all its forms everywhere Extreme Poverty headcount ratio at \$2.15/day: (estimate for % in the project area is being researched)
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	Goal 3: Good health and well-being Maternal mortality ratio amongst community: (estimate for % in the project area is being researched)
	Goal 13: Climate action Percentage of protected forest in project area: (estimate will be presented in verification report)
	Goal 15: Life on land Percentage of Project Area designated as key biodiversity area: (estimate will be presented in CCB certification report)

1.19 Additional Information Relevant to the Project

1.19.1 Leakage Management

This section has been omitted in accordance with section 3.1.3 of VCS Registration and Issuance Process (version 4.7). Information will be made available at registration/validation stage.

1.19.2 Commercially Sensitive Information

This section has been omitted in accordance with section 3.1.3 of VCS Registration and Issuance Process (version 4.7). Information will be made available at registration/validation stage.

1.19.3 Further Information

This section has been omitted in accordance with section 3.1.3 of VCS Registration and Issuance Process (version 4.7). Information will be made available at registration/validation stage.

2 SAFEGUARDS AND STAKEHOLDER ENGAGEMENT

2.1 Stakeholder Engagement and Consultation

2.1.1 Stakeholder Identification

This section has been omitted in accordance with section 3.1.3 of VCS Registration and Issuance Process (version 4.7). Information will be made available at registration/validation stage.

2.1.2 Stakeholder Consultation and Ongoing Communication

This section has been omitted in accordance with section 3.1.3 of VCS Registration and Issuance Process (version 4.7). Information will be made available at registration/validation stage.

2.1.3 Free Prior and Informed Consent

This section has been omitted in accordance with section 3.1.3 of VCS Registration and Issuance Process (version 4.7). Information will be made available at registration/validation stage.

2.1.4 Grievance Redress Procedure

This section has been omitted in accordance with section 3.1.3 of VCS Registration and Issuance Process (version 4.7). Information will be made available at registration/validation stage.

2.1.5 Public Comments

The project is in the listing phase and the section will be completed after a 30-day public comment period.

2.2 Risks to Stakeholders and the Environment

2.2.1 Management Experience

This section has been omitted in accordance with section 3.1.3 of VCS Registration and Issuance Process (version 4.7). Information will be made available at registration/validation stage.

2.2.2 Risk Assessment

This section has been omitted in accordance with section 3.1.3 of VCS Registration and Issuance Process (version 4.7). Information will be made available at registration/validation stage.

2.3 Respect for Human Rights and Equity

2.3.1 Labor and Work

This section has been omitted in accordance with section 3.1.3 of VCS Registration and Issuance Process (version 4.7). Information will be made available at registration/validation stage.

2.3.2 Human Rights

This section has been omitted in accordance with section 3.1.3 of VCS Registration and Issuance Process (version 4.7). Information will be made available at registration/validation stage.

2.3.3 Indigenous Peoples and Cultural Heritage

This section has been omitted in accordance with section 3.1.3 of VCS Registration and Issuance Process (version 4.7). Information will be made available at registration/validation stage.

2.3.4 Property Rights

This section has been omitted in accordance with section 3.1.3 of VCS Registration and Issuance Process (version 4.7). Information will be made available at registration/validation stage.

2.3.5 Benefit Sharing

This section has been omitted in accordance with section 3.1.3 of VCS Registration and Issuance Process (version 4.7). Information will be made available at registration/validation stage.

2.4 Ecosystem Health

This section has been omitted in accordance with section 3.1.3 of VCS Registration and Issuance Process (version 4.7). Information will be made available at registration/validation stage.

2.4.1 Rare, Threatened, and Endangered Species

This section has been omitted in accordance with section 3.1.3 of VCS Registration and Issuance Process (version 4.7). Information will be made available at registration/validation stage.

2.4.2 Introduction of Species

This section has been omitted in accordance with section 3.1.3 of VCS Registration and Issuance Process (version 4.7). Information will be made available at registration/validation stage.

2.4.3 Ecosystem Conversion

This section has been omitted in accordance with section 3.1.3 of VCS Registration and Issuance Process (version 4.7). Information will be made available at registration/validation stage.

3 APPLICATION OF METHODOLOGY

3.1 Title and Reference of Methodology

Type (methodology, tool or module).	Reference ID, if applicable	Title	Version
Methodology	VM0007	VM0007 REDD+ Methodology Framework (REDD+MF)	1.7
Module	VT0001	AFOLU Non-Permanence Risk Tool	4.2

3.2 Applicability of Methodology

Methodology ID	Applicability condition	Justification of compliance
VM0007	Avoiding planned deforestation activities are applicable under the following condition: 7) Where conversion of forest land to a deforested condition is legally permitted.	The conversion of the Project Activity Instance to agriculture is legal, as defined under the Land Utilization Act, Chapter 188, revised Edition 2000, the Private Forest (Conservation) Act, Chapter 217 Revised Edition 2000, and the Forest Act Chapter 213, Revised Edition 2003.
VM0007	Land in the project area has qualified as forest for at least the 10 years prior to the project start date.	Remote sensing analysis clearly demonstrate that the project area was Forest according to the VCS definition for 10 years before the start date of the project
VM0007	Where land within the project area is peatland or tidal wetlands and emissions from the SOC pool are deemed significant, the relevant WRC modules are applied alongside other relevant modules.	The project area contains no peatlands or tidal wetlands.

VM0007	Baseline deforestation in the project areas falls within either of the following categories: a) Unplanned deforestation (VCS category) b) Planned deforestation (VCS category)	Because the baseline deforestation activities are legally permitted, baseline deforestation falls within the planned deforestation category.
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3.3 Project Boundary

This section has been omitted in accordance with section 3.1.3 of VCS Registration and Issuance Process (version 4.7). Information will be made available at registration/validation stage.

3.4 Baseline Scenario

This section has been omitted in accordance with section 3.1.3 of VCS Registration and Issuance Process (version 4.7). Information will be made available at registration/validation stage.

3.5 Additionality

This section has been omitted in accordance with section 3.1.3 of VCS Registration and Issuance Process (version 4.7). Information will be made available at registration/validation stage.

3.5.1 Regulatory Surplus

This section has been omitted in accordance with section 3.1.3 of VCS Registration and Issuance Process (version 4.7). Information will be made available at registration/validation stage.

3.5.2 Additionality Methods

This section has been omitted in accordance with section 3.1.3 of VCS Registration and Issuance Process (version 4.7). Information will be made available at registration/validation stage.

3.6 Methodology Deviations

This section has been omitted in accordance with section 3.1.3 of VCS Registration and Issuance Process (version 4.7). Information will be made available at registration/validation stage.

4 QUANTIFICATION OF ESTIMATED GHG EMISSION REDUCTIONS AND REMOVALS

4.1 Baseline Emissions

This section has been omitted in accordance with section 3.1.3 of VCS Registration and Issuance Process (version 4.7). Information will be made available at registration/validation stage.

4.2 Project Emissions

This section has been omitted in accordance with section 3.1.3 of VCS Registration and Issuance Process (version 4.7). Information will be made available at registration/validation stage.

4.3 Leakage Emissions

This section has been omitted in accordance with section 3.1.3 of VCS Registration and Issuance Process (version 4.7). Information will be made available at registration/validation stage.

4.4 Estimated GHG Emission Reductions and Carbon Dioxide Removals

This section has been omitted in accordance with section 3.1.3 of VCS Registration and Issuance Process (version 4.7). Information will be made available at registration/validation stage.

5 MONITORING

5.1 Data and Parameters Available at Validation

This section has been omitted in accordance with section 3.1.3 of VCS Registration and Issuance Process (version 4.7). Information will be made available at registration/validation stage.

5.2 Data and Parameters Monitored

This section has been omitted in accordance with section 3.1.3 of VCS Registration and Issuance Process (version 4.7). Information will be made available at registration/validation stage.

5.3 Monitoring Plan

This section has been omitted in accordance with section 3.1.3 of VCS Registration and Issuance Process (version 4.7). Information will be made available at registration/validation stage.

APPENDIX 1: COMMERCIALLY SENSITIVE INFORMATION

This section has been omitted in accordance with section 3.1.3 of VCS Registration and Issuance Process (version 4.7). Information will be made available at registration/validation stage.