Guideline for Premium Thailand Voluntary Emission Reduction Program (Premium T-VER)

(Version 2.0)

PREFACE

To address the post-2020 climate actions, Thailand has submitted its Nationally Determined Contribution (NDC) to the United Nations Framework Convention on Climate Change (UNFCCC) Secretariat with a key message that "Thailand intends to reduce its greenhouse gas emissions by 30 percent from the projected business-as-usual (BAU) level by 2030 and the level of contribution could increased up to 40 percent subject to adequate and and enhance access to technology development and transfer, financial resources and capacity building support." At the 26th UN Climate Change Conference of the Parties (COP26), held from October 31 to November 12, 2021 in Glasgow, United Kingdom, General Prayut Chan-ocha, Prime Minister, delivered a statement to the meeting emphasizing on Thailand's highest intention to solve climate change problems in collaboration with the global community. Thailand will achieve its carbon neutrality target by 2050 and achieve net zero greenhouse gas emissions by or before 2065 with full and fair financial, technical assistance and capacity building through international cooperation and mechanisms under the UNFCCC, Thailand will be able to raise its NDC level to 40 percent, bringing Thailand's net greenhouse gas emissions down to zero by 2050.

GHG emission reduction mechanism is a tool to support the development of greenhouse gas emission reduction projects. UNFCCC has initiated an international crediting mechanism under the Kyoto Protocol called the Clean Development Mechanism (CDM). At current stage, crediting mechanism under the Article 6 of Paris Agreement is being developed. There are also other international voluntary crediting mechanisms implemented by private sector, such as Verified Carbon Standard (VCS), Gold Standard (GS) or bilateral crediting mechanism such as the Joint Crediting Mechanism (JCM) between the government of Japan and participating parties or domestic crediting mechanisms such as the Australian Government's Carbon Farming Initiative. Under the initiative, various departments can purchase carbon credits from crediting mechanisms and utilize, for example, to meet mandated emission reduction targets, and to demonstrate social responsibilities through carbon offsetting.

Thailand Greenhouse Gas Management Organization (Public Organization) or TGO, as an agency responsible for promoting Thailand's greenhouse gas management, has developed the "Thailand Voluntary Emission Reduction Program" or "T-VER Program" as a voluntary crediting mechanism that supports the voluntary reduction of greenhouse gas emissions in Thailand. The Project participants can sell greenhouse gas emission reductions units known as "carbon credits" generated from the T-VER projects to buyers for offsetting carbon footprint of organization/product/event/individual or reporting in sustainability or annual report.

The current climate change situation causes more demand on high quality carbon credits that contributes to the achievement of NDCs and the Paris Agreement targets, either through the voluntary market or the compliance market. Therefore, **TGO has upgraded the standard of the T-VER project to be consistent and equivalent to international standards**, and make Premium T-VER project as

- 1. Supporter for Thailand in achieving its NDC target more effectively
- 2. Contributor towards more sustainable development in Thailand
- 3. Facilitator to being more accepted by buyers at domestic and abroad
- 4. Consistent supporter for the global communities to meet the mitigation targets according to the Paris Agreement

"Guideline for Premium Thailand Voluntary Emission Reduction Program (Premium T-VER) (Version 1.0)" is a guideline that has elevated the standards of the T-VER project in consistency with and equivalent to international standards. This document will be used as a guideline for entrepreneurs and organizations in the development of a Premium T-VER project. The contents range from project development criteria and procedures, Premium T-VER project development, methodology, project registration, GHG certification, validation and verification to enable registered projects to reduce greenhouse gas emissions and support sustainable development that lead to the reduction of the country's greenhouse gas emissions and the development of a green economy and low carbon society.

2. Validation and Verification Body: VVB

Table of Contents

	Page
1.Objective and basic principles	5
2. Definitions	7
3. Characteristics and eligibility criteria for participating activities	13
4. Premium T-VER program management structure	19
5. Development of Premium T-VER Methodology	21
6. Development of Premium T-VER project	
6.1 Premium T-VER project registration	24
6.2 Issuance of carbon credits	27
7. Greenhouse gas reporting for Premium T-VER project	31
8. Valiation and verification	32
9. Renewal of crediting period	32
10. Changes to registered project	
10.1 Type of changes	33
10.2 Revalidation Process	33
10.3 Request for deviation	34
11. Monitoring by TGO	
11.1 Objective of monitoring by TGO	34
11.2 Procedures of monitoring	35
12. Carbon credits exchange	
12.1 Procedures for opening an account in registry	38
12.2 Procedures for carbon credit exchange	40
13. Channels for documents submission to TGO	41
14. Review of this guideline	41
Appendix	40
1. Premium T-VER methodology	42

43

1. Objective and basic principles

Topic	Description		
1. Objective	To provide procedures for Premium T-VER project registration, carbon credits issuance, and guideline for project development in consistence with international standards		
2. Scope	To be used as a guideline for Premium T-VER project development		
3. Basic Principles	 In order to ensure that the carbon credits are of high quality, six basic principles shall be considered in the planning and implementation of Premium T-VER projects including calculation, monitoring and verification of GHG emission reductions for creating confidence in the quality of Premium T-VER carbon credits. The six principles consist of: 1) Relevance means that the selection of GHG sources, GHG sinks, GHG reservoirs, data and methodologies are appropriate to the needs of the intended users and reflects GHG emission reductions occurred within the project boundary or related to the project. 2) Completeness means that all relevant GHG emissions and removals and information to support the criteria and procedure are included. 3) Consistency means that data collections and calculations of GHG emission reductions shall enable meaningful comparisons with GHG related information 4) Accuracy means that data collections and calculations of GHG emission reduction are correct, credible, and acceptable in order to reduce biases and uncertainties as far as is practical. 5) Transparency means that sufficient, appropriate and verifiable GHG-related information is disclosed in order to allow intended users to make decisions with reasonable confidence. 6) Conservativeness means that conservative assumptions, values and procedures shall be used in order to ensure that GHG emission reductions or removal enhancements are not overestimated. 		

Premium T-VER Premium Thailand Voluntary Emission Reduction Program

Торіс	Description
4. Insurance of the carbon credit credibility from Premium	 Implementation framework of Premium T-VER project is consistent with ISO 14064-2 standard. Project validation and verification framework of greenhouse gas emissions are consistent with ISO 14064-3.
T-VER project	 The Validation and Verification Body (VVB) is a juristic person that possesses qualifications as specified by the Board of Directors of TGO and is registered with TGO.

2. Definitions

Торіс	Definition		
greenhouse gas (GHG)	Natural and anthropogenic gaseous constituents in the atmosphere that absorb and emit infrared radiations at specific wavelengths within the spectrum of infrared radiation from the Earth's surface, the atmosphere and clouds.		
greenhouse gas emission reduction	Reduction, removal, capture and storage of GHG		
Global Warming Potential: GWP	The potential for each GHG to cause global warming varies depending on its heat radiation efficiency and the lifetime it stays in the atmonsphere. Hence, GWP is the normalized value of the global warming impact of one mass unit of a given GHG relative to an equivalent unit of carbon dioxide over a given time peiod. The value of GWP is referred from the IPCC Fifth Assesment Report (AR5).		
greenhouse gas source	Physical unit or process that releases a GHG into the atmosphere		
greenhouse gas sink or reservoir	Physical unit, process, or components of the biosphere, geosphere, or hydrophere with the capability to capture and store atmospheric GHG thereby removing it from the atmosphere.		
Premium Thailand Voluntary Emission Reduction Program: Premium T-VER single project	A type of voluntary project which the project participants wish to join voluntarily to reduce GHG emissions according to the premium standards of Thailand A Premium T-VER Project with GHG emission reduction		
	activities in one location.		
Bundled Project	A Premium T-VER project with the same type of GHG emission reduction activities in several locations and has the same crediting start date and crediting period for all locations.		
Program of Activities: PoA	A Premium T-VER project with the same type of GHG emission reduction activities in several locations. Project activities must		

Торіс	Definition
	be carried out as a group under the programme framework. Submission of an application requested for registration for each group can be done within the crediting period of the PoA as approved by the Board of Directors of TGO. Crediting period of each group can be identified differently.
Component Project Activities: CPA	Group of same type of GHG emission reduction activities under PoA. The activities can be located at several locations.
Project participant	A person who develops a Premium T-VER project and is responsible for the project development process such as preparing Project Design Document (PDD) and other documents for request for project registration, opening TCERs accounts, preparing documents for request for credits issuance. The person may be the project owner.
Project Owner	A person who has ownership of project assets such as factories, machinery, and land; who is the owner of the carbon credits. Project owner can enter into a Carbon Credit Ownership Agreement with the project participant in case the project participant and the project owner are different people.
Validation and Verification Body: VVB	A juristic person registered by the Board of Directors of TGO to be an external validator/verifier for the Premium T-VER project under the regulations set by TGO. The VVB has the responsibility to validate the voluntary project and verify the amount of GHG emission reductions of the project in accordance with the criteria, procedures and conditions set by TGO.
Program administering organization	Thailand Greenhouse Gas Management Organization (Public Organization) or TGO is responsible for registration of the Premium T-VER project, issuance of carbon credits and management of the Premium T-VER scheme.
Additionality	A project activity is additional if the project participants can demonstrate that GHG emission are reduced below those that

Торіс	Definition	
	would have occurred in the absence of the project activity or	
	business as usual (BAU). Demonstration of additionality shall	
	be done following the guideline set by TGO.	
Technology Positive List	A list of GHG emission reduction technologies that are	
	advanced and/or cost more than conventional technologies	
	or is still not widely used and/or has restrictions on use as	
	specified by TGO. A Premium T-VER project that complies to	
	at least one of the listed technologies will qualify for	
	additionality.	
T-VER Methodology	Specification of applicable activities, project conditions and	
	method for calculating GHG reductions/removals of the	
	Premium T-VER project according to the project type specified	
	by the Board of Directors of TGO as recommended by the	
	Subcommittee on Consideration of GHG Mitigation Projects	
	and Activities.	
Baseline Emission	GHG emissions that would have occurred in the absence of	
	the project activity, and shall be below business as usual	
	(BAU) except for project type number 13.	
Project Emission	GHG emissions from activities within the project boundary	
Leakage Emission	GHG emissions that occur outside the project boundary as a	
	result of project activities.	
Carbon Credit	The amount of GHG emission reduced or removed from the	
	operation of the Premium T-VER project approved by TGO.	
	Carbon credits can be used for exchange or trading. Its unit is	
	"ton carbon dioxide equivalent (tCO ₂ eq)".	
Sustainable Development	The United Nations has adopted the Sustainable	
Goals: SDGs	Development Goals. There are a total of 17 goals, divided	
	into 5 five major categories: People, Prosperity, Planet,	
	Peace and Partnership.	
Safeguards	Possible negative impacts of the project shall be assessed and	
	mitigation measures shall be proposed to prevent negative	
	impacts of the project (Do-no-net-Harm).	

Торіс	Definition
Non-permanence risk	The risk of carbon loss or stored GHG releasing back to the
	atmosphere as due to the non-permanency of project type
	number 13 (Reduction, absorption and removal of GHG from
	the forestry and agriculture sectors) and some project type
	number 14 (Capture, storage, and/or, utilization of GHG). The
	non-permanence risks from project type number 13 may
	include project mismanagement, land owner changes, forest
	fires, pest outbreaks, and natural disasters.
Modality of	A document informing the name of the main coordinator
Communication: MoC	(Focal point), project participants, project name and project
	location, it is signed by every project participant.
Project Design Document:	The document validated by the Validation and Verification
PDD	Body (VVB) containing information on the project's activities
	and the baseline/monitoring methodology. The document
	shall be prepared by the project participants and submitted
	as a part of Premium T-VER project registration request to
	TGO.
SD & Safeguards	A report containing information on: how the project activities
Assessment Report	supports the Sustainable Development Goals (SDGs),
	consideration of rights in accordance with laws/regulations
	and the negative impact assessment according to
	laws/regulations. The level of negative impact of the project
	shall be identified and mitigation measures shall be proposed
	in order to avoid negative impacts of the project (Do-no-net-
	harm). The Report shall be reviewed and approved by TGO.
Validation	A systematic, independent and documented process for the
	evaluation of a GHG assertion in a GHG project plan and GHG
	calculation in Project Design Document (PDD) against agreed
	Premium T-VER project validation criteria and in accordance
	with ISO 14064-3, validation is performed by Validation and
	Verification Body (VVB).

Торіс	Definition		
Validation Report	A report issued by the Validation and Verification Body (VVB)		
	to the project participants after completion of the validation		
	process to certify the GHG emission reduction project as		
	meeting the Premium T-VER project registration criteria		
	specified by TGO.		
Monitoring	Activities in which the project participants continuously/		
	periodically collect and manage GHG emission reduction		
	data direct or indirectly.		
Monitoring Report: MR	A follow-up report prepared by the project participants after		
	the project has been registered and operated. The project		
	participants shall submit the verified monitoring report at the		
	time of request for credit issuance.		
SD & Safeguards Monitoring	A follow-up report prepared by the project participants after		
Report	the project has been registered and operated. The report		
	shall contain information regarding the project's activities that		
	support the Sustainable Development Goals (SDGs) and		
	actions for preventing negative impact in accordance with the		
	guidelines set by TGO. The report shall be reviewed and		
	approved by TGO.		
Non-permanence Risk	A follow-up report prepared by the project participants after		
Report	the project has been registered and operated. The report		
	contains the monitoring result of the non-permanence risk in		
	accordance with the guidelines set by TGO and shall be		
	verified by the Validation and Verification Body (VVB).		
Verification	The systematic, independent and documented process for		
	evaluating GHG assertion against agreed verification criteria		
	and conformed to ISO 14064-3.		
Verification Report	A document issued by the Validation and Verification Body		
	(VVB) to the project participants after completing the		
	verification process and in accordance with the guidelines set		
	by TGO.		

Topic	Definition	
Monitoring by TGO	After project registration, TGO officers or persons assigned by	
	TGO shall annually monitor the project's implementation	
	throughout the project's crediting period.	
Buffer Credit	Carbon credit deposited into the pooled buffer account as	
	collateral for the risk of non-permanence in the	
	implementation of project type number 13 (except reducing	
	Methane or Nitrous oxide from agriculture) and number 14.	

3. Characteristics and eligibility criteria for participating activities

	Description		
1) Project type	Projects that can participate in the Premium T-VER program must		
	fall under the following project types:		
	1. Renewable energy or fossil fuel replacement		
	2. Improvement of the efficiency of electricity and heat generation		
	3. Use of public transportation system		
	4. Use of electric vehicle		
	5. Improvement of the efficiency of engine		
	6. Improvement of the efficiency of energy consumption in building		
	and factory and in household		
	7. Use of natural refrigerant		
	8. Use of clinker substitute		
	9. Solid waste management		
	10. Domestic wastewater management		
	11. Methane recovery and utilization		
	12. Industrial wastewater management		
	13. Reduction, absorption and removal of greenhouse gases from		
	the forestry and agriculture sectors		
	14. Capture, storage, and/or utilization of greenhouse gas		
	15. Other project specified by the Board of Directors of TGO		
	*Based on "Carbon Credit Management Guideline and Mechanism"		
	approved by the National Committee on Climate Change Policy on		
	16 March 2022.		
2) Types of	The Premium T-VER program will cover 7 types of GHGs:		
greenhouse gases	1. Carbon Dioxide (CO ₂)		
	2. Methane (CH ₄)		
	3. Nitrous oxide (N ₂ O)		
	4. Hydrofluorocarbon (HFC)		
	5. Perfluorocarbon (PFC)		
	6. Sulfur hexafluoride (SF $_6$)		
	7. Nitrogen trifluoride (NF ₃)		

		De	scription		
3) Project size		The project size is categorized by the amount of expected GHG reductions/removal or capacity of the project as listed in the table below:			
	Activity		e of Premium T-VER P		
	GHG emission reduction in the forestry and	Micro scale Reduce total GHG emissions by no more than 1,000	Small scale Reduce total GHG emissions by more than 1,000	Large scale Reduce total GHG emissions by more than 16,000	
	agriculture sector	tCO ₂ eq/y	but no more than 16,000 tCO ₂ eq/y Reduce total GHG	tCO ₂ eq/y	-
	GHG emission reduction in other sectors	emissions by no more than 20,000 tCO ₂ eq/y	emissions by more than 20,000 but no more than 60,000 tCO2eq/y	emissions by more than 60,000 tCO2eq/y	
		Generation of renewable energy up to 5 MW	Generation of renewable energy more than 5 MW but not more than 15 MW	Generation of Renewable energy more than 15 MW	
		Reduce energy consumption not more than 20 GWh	Reduce energy consumption more than 20 GWh but not more than 60 GWh	Reduce energy consumption more than 60 GWh	
4) Project model		Development of the Premium T-VER project can be categorized into 3 models as follows:			
	1) Single Project activities in on		at carries out GH	G emission reduct	ion
		2) Bundled Project is a project that carries out the same type of GHG emission reduction activities in several locations with the following requirements:			
		ery activity mus	tivities shall be t st be specified i	he same. n the Project Des	sign

	Description		
4) Project model	- The size of each activity shall not be a large-scale project.		
(continued)	3) Programme of Activities (PoA)		
	- The total amount of expected GHG emission reductions/removals		
	of all Component Project Activities (CPA) shall not be a large-		
	scale project.		
	- The size of each CPA shall be a micro-scale project.		
	* Validation is not required for the inclusion of CPA.		
5) Project	Any project that can be registered as a Premium T-VER project shall		
characteristics	have the following characteristics:		
	1) The project is located in Thailand.		
	2) The amount of GHG emission reductions of the project activities		
	can really be measured.		
	3) Reduction of GHG emissions or removals shall be permanent		
	and additional to those that would have occurred in the		
	absence of the project activity or business as usual (BAU).		
	4) No double counting is allowed.		
	5) Project activities shall foster sustainable development.		
	6) Project activities shall not negatively impact the natural		
	environment or local communities and do no net harm.		
6) Project conditions	The project participants shall start the Premium T-VER project		
	development before the project start date, and		
	- Project type number 1-12 shall request for registration within 3		
	years counting from the project start date.		
	- Project type number 13 and Project type number 14 shall		
	request for registration within 5 years counting from project		
	start date		
	- Project type number 15 shall follow the condition specified by		
	the Board of Directors of TGO.		
7) Project start date	The project start date shall be as set in the applied methodology.		
8) Registration Date	The date that the Board of Directors of TGO approved the request		
	for registration of the Premium T-VER project.		



	Description			
9) Crediting start date	The next day after the project registration date. TGO will inform the			
	registration date in the notification of the Premium T-VER project			
	registration result. Fo	registration result. For Project type number 13, the crediting start		
	date is same day as tl	he project start date		
10) Crediting Period	Crediting Periods of s	single and bundled	project, PoA and CPA are	
	as follows:			
	Project type	Crediting period of single and bundled project and CPA (year)	Crediting period of PoA (year)	
	Number 1-12 and some 13 that only reduce Methane or Nitrous oxide from agriculture	5	20	
	Number 13 and 14	15 Unless specified in the applied methodology	60	
	Number 15	as specified by the E	Board of Directors of TGO	
11) Renewal of	The project participants can request for crediting period renewal for			
crediting period	2 times, the request shall be submitted at least 180 calendar days			
	prior to the expiry of the crediting period. The project participants			
	shall update the Pro	ject Design Docume	ent (PDD) and re-estimate	
	the amount of GHG emission reduction using the latest version of Premium T-VER methodology.			
12) Additionality	The project participants shall demonstrate the additionality of the project activities following the "Guideline for demonstration of additionality" approved by the Board of Directors of TGO.			
13) Local Stakeholder Consultation	The project participants shall conduct a local stakeholder consultation according to TGO's guideline in order to engange all stakeholders. The consultation is to obtain stakeholder opinions by disseminating the project information, arranging a meeting, or promoting communication with the local people through various			

	Description		
13) Local Stakeholder	channels. A summary of the meeting results and comments shall		
Consultation	be presented in the draft of the Project Design Document (PDD) for		
(continued)	submission to TGO, whereby a VVB will review the comments		
	received and response actions during the validation process.		
14) Modality of	Before starting Premium T-VER project development, the project		
communication:	participants shall submit a Modality of communication (MoC) to		
MoC with TGO	TGO stating the name of focal point entity, project participants,		
	project name and project location(s) with the signatures of		
	authorized signatory of all project participants in order to inform		
	TGO on the project development, and contact point.		
15) SD & Safeguards	The project shall contribute to Sustainable Development Goals in		
Assessment	more than two areas and be managed to avoid negative impacts.		
16) Public Hearing	TGO will make the draft Project Design Document (PDD) publicly		
	available for public comments through the TGO website. The VVB		
	will consider the public comments to check the relevance of the		
	comments during the validation process. TGO will use the feedback		
	received in the review of the SD & Safeguards assessment report.		
17) Validation and	The Project Design Document (PDD) shall be validated and the		
Verification	monitoring report shall be verified by the Validation and Verification		
	Body (VVB). The VVB must be registered with TGO.		
18) Double counting	The Premium T-VER project shall be operationalized in a way to		
and double use	prevent double counting/use as follows:		
	18.1 Preventing double counting from request for credits		
	<u>issuance</u>		
	1) The project participants and project implementers shall		
	not request for credits issuance from activities in the		
	"same project boundary" from other GHG emission		
	reduction program.		
	2) In case that there is other project implemented in the		
	same area owned by the same juristic person/individual		
	but registered with other GHG emission reduction		
	program or certification system, the project participants		

Description
shall address the details in Project Design Document
(PDD) under the section of double counting.
18.2 Preventing double counting from reporting or declaring
voluntary GHG emission reduction performance
After the carbon credits has been transferred to another juristic
person/individual, the project participants and project operators are
not be able to claim the right over the carbon credits.
18.3 Prevention double counting from Renewable Energy
Certificate (REC) certification
In the case of a project that produces electricity from renewable
energy and a Renewable Energy Certificate (REC) was issued. Carbon
credits from the project activity during the same period as the REC
certificate can not be issued.

4. Premium T-VER program management structure



Figure 4-1 T-VER Project administrative structure

Topic	Description	
1. Implementation	The Premium T-VER program is managed by Thailand Greenhouse	
framework	Gas Management Organization (Public Organization) or TGO, under	
	the supervision of the following body:	
	1) Board of Directors of TGO	
	2) Subcommittee on Consideration of GHG Mitigation Projects and	
	Activities	
2. Board of Directors	The role and responsibilities of the Board of Directors of TGO are in	
of TGO	accordance with the Royal Decree establishing the Thailand	
	Greenhouse Gas Management Organization (Public Organization)	
	B.E. 2550 as amended by the Royal Decree establishing the	
	Thailand Greenhouse Gas Management Organization (Public	
	Organization) (No. 2) B.E. 2562	
3. Subcommittee on	1. Tasks of the subcomittee	
Consideration of	1) Make recommendations to the Board of Directors of TGO on	
GHG Mitigation	the assessment of requests of project registration and	

Торіс	Description	
Projects and	credits issuance done by the secretariat according to the	
Activities	standard set by TGO.	
	2) Make recommendations to the Board of Directors of TGO on	
	criteria of project registration, credits issuances and	
	Validation and Verification Body (VVB) registration.	
	3) Approve the proposed or revise the Premium T-VER	
	methodologies/tools/emission factors or cancel the	
	approved methodologies/tools/emission factors. The	
	decisions made by the subcommittee shall be notified to	
	the Board of Directors of TGO.	
	4) Make recommendations to the Board of Directors of TGO on	
	the registration, suspension, and revocation of Validation	
	and Verification Body (VVB).	
	5) Undertake any other tasks as instructed by the Board of	
	Directors of TGO.	
	<u>Membership</u>	
	Comprised of experts, academics, both from the government	
	sector, educational institutions, NGOs and others as the Board of	
	Directors of TGO deems appropriate.	

5. Development of Premium T-VER Methodology

A Premium T-VER Methodology may be proposed by TGO officials or other entities. The procedure for approval of a methodology is as follows:

- 1) TGO officials or other entities prepare a proposed methodology using the form specified by TGO.
- In the case of the proposed methodology is drafted by other entity, the proposed methodology shall be sent to TGO, specifying the contact address, phone number and e-mail.
- 3) TGO as a secretariat, determines whether the proposed methodology is complete and communicates the result to the methodology proponent within 10 working days from the date of the receipt of the submission.
- 4) The proposed methodology that satisfies the completeness check shall be reviewed by external experts. TGO could invite the methodology proponent to answer questions as deemed appropriate. At the same time, TGO makes the proposed methodology publicly available for public comments through the website for 30 calendar days.
- 5) TGO may revise the proposed methodology according to the comments from external experts and public.
- 6) Subcommittee on Consideration of GHG Mitigation Projects and Activities considers the proposed methodology. In case that the subcommittee does not approve the proposed methodology, TGO may ask the external experts to review the proposed methodology with more input from the methodology proponent. TGO revises the proposed methodology according to the received comments and then propose to the subcommittee for reconsideration.
- 7) The approved methodology shall be presented to the Board of Directors of TGO.
- 8) TGO notifies the result of the consideration to the methodology proponent.



Figure 5-1 Procedures for Premium T-VER methodology development

PDD of a proposed project under the validation process shall not be based on a previous version of a methodology whose validity has expired more than 180 calendar days.

6. Development of Premium T-VER Project

Premium T-VER project development cycle consists of two main steps namely (1) Premium T-VER project registration process and (2) credits issuance process. The project participants shall prepare all required documents and submit the request and documents to TGO in order to request for registration or credits issuance. Premium T-VER project development cycle is shown in Figure 6-1



Figure 6-1 Premium T-VER project development cycle

6.1 Premium T-VER project registration

In order to request for registration, the project participants shall prepare all required documents correctly and completely. The forms can be downloaded from the website:

https://ghgreduction.tgo.or.th/en/premium-t-ver-download/172-premium-t-ver-download-form.html

The Project Design Document (PDD) shall be validated by a Validation and Verification Body (VVB). The project participants shall receive a validation report from the VVB. In addition, the project participants shall prepare the SD & Safeguards Assessment Report which shall be reviewed by TGO. The final version of the PDD and SD & Safeguards Assessment Report shall be used for requesting for Premium T-VER project registration.

6.1.1 Premium T-VER project registration process

The Premium T-VER registration process is shown in Figure 6-2 and details are as follows:

- 1) The project participants examine eligibility of project activities according to the Premium T-VER project type and project registration criteria.
- 2) The project participants submit a "Modality of communication (MoC)" to TGO informing their intention to develop Premium T-VER projects.
- 3) The project participants have completed a local stakeholder consultation process in accordance with the guideline set by TGO.
- 4) The project participants prepare a draft Project Design Document (PDD), and a draft SD& Safeguards Assessment Report.
- 5) The project participants submit a draft PDD and a SD & Safeguards Assessment Report to TGO and pay the registration fee.
- 6) TGO publishes received documents in item 5) on the TGO website for 30 calendar days for public comments.
- 7) The Validation and Verification Bodies (VVBs) use the comments received to perform validation of the draft PDD and send the validation report to the project participants.
- 8) TGO uses the received comments to review the SD & Safeguards Assessment Report, and asks the project participants to revise the report (if any).
- 9) The project participants submit a request for registration and all required documents to TGO.
- 10) Upon receiving the registration request, TGO conducts a completeness check and notifies the project participants of the result within 15 working days after the date on which the secretariat found the incompleteness, incorrect or non-compliance

documents and data. The project participants shall revise and re-submit the documents and evidence within 15 working days from the date of the receipt of the notification from TGO. The re-submission date on which the documents and evidences are deemed complete is recognized as the date of receipt of the request.

In case that the project participants do not re-submit documents and evidences before the deadline/designated date, TGO has rights to revoke the registration request and return the project documents to the project participants.

- 11) TGO reviews the correctness of the documents and the materiality of the project by considering whether it complies with the Premium T-VER project registration criteria. TGO may notify the project participants to correct the documents or send additional information. TGO may conduct an on-site visit as deemed necessary.
- 12) If the request for registration meet the requirements of the completeness check, TGO proposes the project to the Subcommittee on Consideration of GHG Mitigation Projects and Activities within 30 working days of receipt of the request. If the subcommittee agrees, the project will be proposed to the Board of Directors of TGO for approval.
- 13) The Board of Directors of TGO shall make a decision on the request within 60 working days of receipt of the request. The meeting date is recognized as the project registration date.
- 14) TGO notifies the project participants of the registration and informs them to open an account in the registry system.

Processing and consideration of request for registration shall be in accordance with the regulations set by TGO.

Project Registration Process



Figure 6-2 Project registration process

6.1.2 Premium T-VER project registration criteria

- 1) The project activities shall not go against to relevant laws or regulations. It must be a voluntary action to reduce GHG emissions in addition to the law.
- 2) The project activities shall be in line with this guideline (Guideline for Premium Thailand Voluntary Emission Reduction Program: Premium T-VER).
- 3) The project participants shall hold a local stakeholder consultation meeting to hear opinions from stakeholders and the draft Project Design Document (PDD) and SD & Safeguards Assessment Report were published for public comments.
- 4) The project activities do not cause negative impacts or have a mitigation plan to avoid negative impacts and contribute to at least two additional Sustainable Development Goals (SDGs) in addition to addressing climate change (SDG13: Climate Action).
- 5) The project activities are additional to any that would occur in the absence of the project according to the criteria set by TGO.
- 6) The project activities shall meet eligibility criteria specified in the Premium T-VER Methodology set by TGO.
- 7) The project participants shall calculate greenhouse gas emission reductions of the project following the applied Premium T-VER Methodology.
- 8) The project participants shall conduct monitoring and reporting on the GHG reduction activities following the applied Premium T-VER Methodology.
- 9) The PDD are validated by the Validation and Verification Body (VVB) registered with TGO, except for the second Component Project Activities (CPA) onwards.

6.2 Issuance of carbon credits

The project participants shall prepare all required documents correctly and completely. The forms can be downloaded from the website:

https://ghgreduction.tgo.or.th/en/premium-t-ver-download/172-premium-t-ver-download-form.html

The GHG Monitoring Report (MR) and Non-permanent Risk Report (if any) shall be verified by the Validation and Verification Body (VVB). VVB shall identify the amount of buffer credits required to deposit in the pooled buffer account of the registry system according the the applicable non-permanence risk in order to guarantee the potential carbon loss from the project's non-permanence.

The project participants shall receive a verification report from the VVB. In addition, the project participants shall prepare a SD & Safeguards Monitoring Report which shall be reviewed

by TGO. The final version of the GHG monitoring report and the SD & Safeguards Monitoring Report shall be used for requesting for carbon credits issuances.

6.2.1 Carbon credits issuance process

The Premium T-VER carbon credits issuance is shown in Figure 6-3 and details are as follows.

1) The project participants prepare GHG monitoring report and SD & Safeguards Monitoring Report and Non-permanence Risk Report (if any).

2) The Validation and Verification Bodies (VVBs) contracted by the project participants perform verification of the GHG Monitoring Report and the Non-performance Risk Report (if any); and TGO reviews the SD & Safeguards Monitoring Report. The project participants need to revise the report as requested.

3) The project participants submit request for credits issuance and all required documents to TGO and pay the carbon credits issuance fee.

4) Upon receiving the request for credits issuance, TGO conducts a completeness check and notifies the project participants the result within 15 working days after the date on which the secretariat found the incompleteness, incorrectness or non-compliance of the documents and data. The project participants shall revise and re-submit the documents and evidences within 15 working days from the date of the receipt of the notification from TGO. The resubmission date on which the secretariat found that the documents and evidence are deemed complete is recognized as the date of receipt of the request.

In case that the project participants do not re-submit documents and evidences within the date, TGO has rights to revoke the request and return the project documents to the project participants.

5) TGO reviews the correctness of the documents and the materiality of the project by considering whether it complies with the Premium T-VER carbon credits issuance criteria. TGO may notify the project participants to correct the documents or send additional information. TGO may conduct an on-site visit as deemed necessary.

6) Upon the positive conclusion of the completeness check, TGO proposes the project to the Subcommittee on Consideration of GHG Mitigation Projects and Activities within 30 working days of receipt of the request. If the subcommittee agrees, the project will be proposed to the Board of Directors of TGO for approval. 7) Board of Directors of TGO shall make a decision on the request within 60 working days of receipt of the request. The meeting date is recognized as the carbon credits issuance date.

8) TGO notifies the project participants of the carbon credits issuance and buffer credits needed to be deposited into the pooled buffer account (if any).

Processing and consideration of request for carbon credits issuance shall be in accordance with the regulations set by TGO.

Carbon Credits Issuance Process



Figure 6-3 Carbon credits issuance Process

6.2.2 Carbon credits certification criteria

- 1) The project activities shall not go against to relevant laws or regulations. It must be a voluntary action to reduce GHG emissions in addition to the law.
- 2) The project activities are in line with this Guideline (Guideline for Premium Thailand Voluntary Emission Reduction Program: Premium T-VER).
- 3) The project participants shall monitor parameters as specified in the registered Project Design Document (PDD). If the project has been changed from the registered PDD, the project participants shall follow the procedures set by TGO.
- 4) The project participants shall monitor the results of mitigation measures implemented to avoid negative impacts.
- 5) The project participants shall monitor the contribution of project activities to Sustainable Development Goals (SDGs).
- 6) The project participants shall monitor the non-permanence risks of the projects (if any).
- 7) The amount of GHG emission reduction is calculated following the applied T-VER Methodology as specified in the registered Project Design Document (PDD). If there is any change, the project participants shall follow the procedures set by TGO
- 8) The GHG Monitoring Report and Non-permanence Risk Report shall be verified by the VVB registered with TGO.

7. Greenhouse gas reporting for Premium T-VER project

The amount of GHG emission reductions as stated in the Project Design Document (PDD) and the GHG monitoring report shall be entered as an integer.

However, two decimal places number is used for calculation of GHG emission reductions and the results shall be rounded down to the nearest integer. Example is as follow:

Baseline Emission	1,505.85
Project Emission	245.20
Leakage Emission	0
Emission Reduction/Carbon Sequestration	1,260.65
Displayed value (round the decimal and display it as an integer)	1 ,260

8. Validation and verification

Validation is a systematic, independent and documented process for the evaluation of a GHG assertion in a GHG project plan and GHG calculation in Project Design Document (PDD) against agreed Premium T-VER project validation criteria and in accordance with ISO 14064-3. Validation is performed by a Validation and Verification Body (VVB). VVB shall issue a validation report after completion of the validation process to certify that the GHG emission reduction project meets the Premium T-VER project registration criteria set by TGO.

Verification is a systematic, independent and documented process for evaluating GHG assertion in GHG Monitoring Report against agreed verification criteria and conformed to ISO 14064-3. VVB shall issue a verification report after completion of the verification process to certify the amount of GHG emission reductions according to the carbon credits certification criteria set by TGO.

Validation and verification procedures can be found in the "Manual for T-VER Validation & Verification" (T-VER-PS-SD-002-MNVV) which can be downloaded from the website:

https://ghgreduction.tgo.or.th/en/validation-and-verification-body/guideline-for-validationand-verification-procedure.html

9. Renewal of crediting period

The requests for renewal of the crediting period of registered Premium T-VER project shall be submitted at least 180 days before the project's expiration date. The expected amount of GHG emission reductions stated in the registered Project Design Document (PDD) shall be recalculated according to the latest version of the applied methodology in order to reflect the actual situation at the time of renewal. The revised PDD shall be validated by a VVB. The crediting period for each Component Project Activities (CPA) is based on the type of project activity. The number of years and the number of times that the project is eligible for renewable classified by project type as shown in the table.

Project Type	Renewal of Crediting Period		Duration of the
	Number of years/time	Number of times	framework (years)
Number 1-12 and some 13 that	5	2	20
only reduce Methane or			
Nitrous oxide from agriculture			
Number 13 and 14	15	2	60

10. Changes to registered project

10.1 Type of changes

After the project was registered, if there is a change in the details of activities that are different from those stated in the Project Design Document (PDD), the project participants shall notify TGO prior to submitting a request for carbon credits issuance. Changes are classified into 2 types as follows:

- 1) General change is a change that does not affect the amount of GHG emission reductions, for example:
 - Change in project participant
 - Change in project owner
 - Change in project coordinator
 - Change in crediting period

The crediting period of the project can be changed but the crediting start date shall not exceed 2 years from the next day after the project registration date.

- 2) Change that required revalidation is a change that affect the amount of GHG emission reductions including;
 - Addition of project activity/methodology
 - Increase of the amount of GHG emission reductions to more than 60,000 $tCO_2 eq/y$ or the increase compared to the expected GHG emission reductions stated in the registered Project Design Document (PDD) is more than 15%.

The project participants shall identify all changes that have occurred in the GHG monitoring report so that a Validation and Verification Body (VVB) can monitor the changes. Evidences concerning to the change shall be provided to VVB and TGO.

10.2 Revalidation Process

In the case of a registered project requiring revalidation, the project participants shall revise the Project Design Document (PDD) according to the actual implementation. The revised PDD shall be validated by a Validation and Verification Body (VVB) following the "Guidelines for Validation and Verification of Thailand Voluntary Emission Reduction Program" (T-VER-VVG). The project participants shall request for registration following the process as shown in Figure 6-2.

The project participants can download the Post-Registration Changes Request Form from the website:

https://ghgreduction.tgo.or.th/en/premium-t-ver-download/172-premium-t-ver-download-form.html Remarks: Requesting post-registration changes shall be in accordance with the procedure for request for registration stated in item 6.1.1.

10.3 Request for deviation

In the case of the implementation of activities of a registered project is different from what stated in the Project Design Document (PDD), the project participants notify TGO for consideration and obtain the approval from TGO before the completion of verification. Such changes consist of

- 1) Change in the value of non-monitored parameter
- 2) Change in the monitoring method
- 3) Change in the equations used in the calculations.
- 4) Change in the constant value used in the calculation.

11. Monitoring by TGO

Monitoring of the Premium T-VER project is one of the important steps in the project management process to achieve the specified objectives of the project. Monitoring of the registered project by TGO will enhance the continuity of project implementation. TGO provides advices, suggestions, and hears problems/challenges incurred from project development process. The registered T-VER projects shall be monitored by TGO annually throughout the project crediting period.

11.1 Objectives of Monitoring by TGO

- 11.1.1 To check the results of the Premium T-VER project implementation whether it is in accordance with the Project Design Document or the GHG monitoring report.
- 11.1.2 To collect information on changes in project details and to provide correct guidelines in the event of a change in the project activities.
- 11.1.3 To examine information on results of management or prevention of significant environmental impacts arising from the implementation of the Premium T-VER project.

11.1.4 To acknowledge problems and obstacles in the implementation of the PremiumT-VER project, including answering inquiries from the project owners and/or the project participants.

11.2 Procedures of monitoring

Monitoring of the Premium T-VER project can be done by the agencies as follows:

- 11.2.1 TGO as a program administering organization assigns TGO staffs to monitor the project.
- 11.2.2 Third Parties that have cooperation agreements with TGO in carrying out monitoring of the Premium T-VER project.

(Currently, the Regional Environmental and Pollution Control Office 1-16 has a cooperation agreement with TGO in carrying out the monitoring of the Premium T-VER project instead of TGO.)

The monitoring processes conducted by TGO and the Third Parties are shown in Figure 11-1 and 11-2, respectively.



Figure 11-1 Premium T-VER project monitoring by TGO

TGO

Assign projects and inform contact name/details

start





Figure 11-2 Premium T-VER project monitoring process by the third party

12. Carbon credits exchange

Project participants or those wishing to exchange carbon credits from Premium T-VER projects, can only exchange the credits through the T-VER Registry. Carbon credits transfers can be carried out in the registration system by the account holder or the account holder can assign TGO to carry out the transactions on its behalf following the steps as below.

- The user authorized by the account holder informs TGO the name, account number of the account holder wishing to purchase and the amount of carbon credits
- 2) TGO considers the accuracy and completeness of the documents
- 3) TGO transfers the carbon credits to users or retires the carbon credits for offsetting purpose after checking the documents successfully.



Figure 12-1 Options for carbon credits transfer

12.1 Procedures for opening an account in registry

The project participants or those wishing to exchange carbon credits shall open account with TGO registry before proceeding to exchange carbon credits in the registry with the following steps:

12.1.1 The project participants or persons wishing to open an carbon credit account shall send documents for opening an account to TGO. The details of the documents are as follows.

In the case of person

1) Letter requesting to open an account specifying the user's email address

2) A copy of the ID card or passport

In the case of a juristic person

- 1) Letter requesting to open an account specifying the user's email address
- Name, address and juristic person certificate issued by the Department of Business Development, Ministry of Commerce for not more than 3 months
- 3) Power of Attorney (System user)

4) A copy of the ID card or passport of the authorized person.

5) A copy of the ID card or passport of the attorney.

6) Work certificate issued by the company

In the case of a government agency, government organization, state enterprise or state agency

1) Letter requesting to open an account specifying the user's email address

2) Name, address and a copy of an act or relevant evidences demonstrating the establishment of the agency.

- 3) Power of Attorney (System user)
- 4) A copy of the ID card or passport of the authorized person.
- 5) A copy of the ID card or passport of the attorney.

Remarks: In case that a person, a juristic person or a government agency, a government organization, a state enterprise and a state agency wants to request an administrative officer of TGO to do the transaction in the registry system (T-VER Registry), a letter of intent shall be sent to TGO.

12.1.2 TGO shall consider the accuracy and completeness of the request and evidence submitted for account opening and notifying the users of the results within 15 working days.

12.2 Procedures for carbon credits exchange



Note: If the project participants require a Trading Certificate for tax deduction, the project participants shall submit the proof of trading to TGO within 1 year from the trading date.

13. Channels for documents submission to TGO

Requests and documents can be submitted to TGO through 3 channels as follows:

- By electronic mail to saraban_tgo@tgo.or.th
- Via the online system through the website:

https://ghgreduction.tgo.or.th/en/application-for-premium-t-ver.html

in electronic form (only for request for registration and credit issuance).

- By post to TGO office:

Thailand Greenhouse Gas Management Organization (Public Organization)

The Government Complex Ratthaprasasanabhakti Bldg. 9th Floor, 120 Chaengwattana Road, Lak Si, Bangkok 10210, THAILAND

14. Review of this guideline

This guideline can be reviewed at any time in order to improve the rules, methodology and specifications in line with the current situation and more effective.

Appendix

1. Premium T-VER Methodology

Premium T-VER Methodology is a guideline for estimating the amount of GHG emission reductions of each Premium T-VER project activity. Each methodology consists of the specification of applicable activities and project conditions, equation and nonmonitored/monitored parameters

To calculate the amount of GHG emission reductions from the Premium T-VER project, the project participants shall follow the latest version of Premium T-VER Methodology and Tool announced by TGO. The reference values used in the calculation must be in accordance with the methodology or as specified by TGO.

Table A-1 Approved Premium T-VER Methodologies

(as of 27 December 2022)

No.	Meth No.	Title
1	T-VER-METH-01-01	Grid Connected Renewable Electricity Generation
2	T-VER-METH-01-02	Renewable Electricity Generation for Independent Power Supply
3	T-VER-METH-01-03	Electricity and Thermal Energy Cogeneration from Biomass for Reselling
4	T-VER-METH-13-01	Afforestation/Reforestation of lands except wetlands
5	T-VER-METH-13-02	Afforestation/Reforestation of degraded mangrove habitats
6	T-VER-METH-13-03	Reducing Emissions from Deforestation and Forest Degradation and
		Enhancing Carbon Sequestration in Forest Area Project Level: P-REDD+
		(Except Wetlands)
7	T-VER-METH-13-04	Mangrove and Seagrass Restoration
8	T-VER-METH-13-05	Improved Forest Management
9	T-VER-METH-13-06	Enhanced Good Practices in Agricultural Land
10	TVER-METH-04-01	Switching from internal combustion engine vehicles to battery electric
		vehicle
11	TVER-METH-09-01	Municipal solid waste management to replace landfills
12	TVER-METH-12-01	Methane Capture from Anaerobic Wastewater Treatment for Utilization
		or Flaring

A list of Premium T-VER Methodology, tools and methodological development procedures can be found at the website:

https://ghgreduction.tgo.or.th/en/premium-t-ver-methodology/procedure-for-development-of-

methodology.html

2. Validation and Verification Body: VVB

A Validation and Verification Body (VVB) is a juristic person who is responsible for validation and verification of Premium T-VER project. A VVB shall have the following qualifications according to the announcement of the Board of Directors of TGO. Details are as follows.

- 2.1 A juristic person submits an application form for designation as a VVB and supporting documents according to the announcement of TGO. TGO conducts a preliminary review, considering the completeness of all documents. If not complete, TGO will notify the juristic person to submit additional documents or evidences.
- 2.2 TGO reviews the correctness of the documents to determine whether it meets the criteria for designation as a VVB. If there is a lack of important information, TGO will inform the juristic person to submit additional documents or evidences.
- 2.3 TGO presents details of the application to the Subcommittee on Consideration of GHG Mitigation Projects and Activities. The recommendations of the subcomittee will be proposed to the Board of Directors of TGO for approval.
- 2.4 TGO notifies the juristic person of the result of consideration.

Page 44

Table A-2 List of registered VVB members for Premium T-VER project

(as of 27 December 2022)

No.	Name of Agency
1	Centre of Excellence on "environmental strategies for GREEN business", Kasetsart University
2	Greenhouse Gas Management Certification Body, University of Phayao
3	College of Renewable Energy and Smart Grid Technologies, Naresuan University
4	SGS (Thailand) Co., Ltd.
5	Industrial Development Foundation for ISO Certification Institute
6	Bureau Veritas Certification (Thailand) Co., Ltd.
7	ECEE Company Limited
8	Research Unit for Energy Management and Ecology Institute of Science and Technology Research, Chiang Mai University
9	GHG Certification Unit, Mae Fah Luang Foundation under Royal Patronage

Regulation of the Board of Directors of Thailand Greenhouse Gas Management Organization re: criteria for considering the registration of validation and verification bodies, B.E. 2564 can be found at the website:

https://ghgreduction.tgo.or.th/en/rules/rules-for-vvb-requirements.html

List of all VVBs can be found at the website:

https://ghgreduction.tgo.or.th/en/validation-and-verification-body/list-of-registered-vvb.html

Page 45

Premium	T-VER	Guideline	Record
---------	-------	-----------	--------

Version	Revision No.	Enforcement Date	Revision details
number			
1	0	26 July 2022	
2	1	27 December 2022	- Revision and addition according to the
			Thailand Greenhouse Gas Management
			Organization (TGO) Board of Directors
			Regulations on the Criteria, Methods
			and Conditions for Consideration of
			T-VER Project B.E. 2565 (2022)
			O Revision of the definition of "project
			participant" and "project owner"
			o Addition of the definition of "T-VER
			methodology" and crediting period
			of project type number 15
			- Revision of the title of validation and
			verification manual
			- Addition of approved T-VER
			methodologies and designated Validation
			and Verification Bodies