



ASSEMBLY — 39TH SESSION

EXECUTIVE COMMITTEE

Agenda Item 22: Environmental Protection – International Aviation and Climate Change – Policy, Standardization and Implementation Support

THAILAND VOLUNTARY EMISSIONS REDUCTION (T-VER) PROGRAM

(Presented by Thailand)

EXECUTIVE SUMMARY

Under the Resolution A38-18, the Assembly set an aspirational goal for global aviation industry as carbon-neutral growth from 2020, and also decided to develop a global market-based measure (GMBM) scheme for international aviation. Thailand has been dedicated to move ahead with the ICAO action towards the implementation of the ambitious goal. In 2013, Thailand established a Voluntary Emissions Reduction program (T-VER) as one of the greenhouse gas emission reduction mechanisms under Thailand's voluntary carbon market. As a carbon offset program, T-VER uses baseline and credit approach to calculate greenhouse gas emission reductions from an emission reduction project similar to the Clean Development Mechanism (CDM) of the UNFCCC, but with simpler methodologies, less transaction costs, and a creditable MRV system. Currently, there are 25 approved methodologies from five eligible project types, with more to be added in the future.

The Assembly is invited to:

- a) acknowledge the importance of T-VER principles outlined in this paper as one of the greenhouse gas emission reduction mechanisms;
- b) acknowledge the commitment of Thailand to reduce CO₂ emissions from international aviation; and
- c) support T-VER credits to be used as an offset credit for the GMBM scheme.

<i>Strategic Objectives:</i>	This working paper relates to Strategic Objective E - <i>Environmental Protection</i> .
<i>Financial implications:</i>	Not applicable
<i>References:</i>	<i>Assembly Resolution A38-18</i>

1. INTRODUCTION

1.1 The resolution A38-18 which constitutes the statements of ICAO policies and practices related to climate change has set an aspirational goal for global aviation industry. Its goal is to level off CO₂ emissions by 2020 (also known as “carbon-neutral growth from 2020”). Amongst the set of measures, Market-Based Measures (MBMs) and Global Market-based Measures Technical Task Force (GMTF), have been of particular interest to Thailand. Some progress has been made and the study on the effectiveness of MBMs is to be reported within this paper to the 39th ICAO assembly.

1.2 Thailand Greenhouse Gas Management Organization (TGO), a public organization, was introduced to MBMs by a member of GMTF and Thai Airways. TGO has developed Thailand Voluntary Emissions Reduction (T-VER) program since 2013, as an implementing greenhouse gas reduction organization in Thailand. Currently, TGO is in the process to propose T-VER credits to be used as an offset credit for the GMBM scheme.

1.3 The T-VER program entails numerous co-benefits. As the program works to stimulate innovation in sectors not subject to emission reduction requirements, the program provides important environment benefits that may not occur otherwise. The program ensures that it maintains environmental integrity by granting offsets only to activities that are additional to the business-as-usual (BAU), thus fulfilling the additionality requirement in any offset program. While encouraging stakeholders and project developers to embrace clean and green technologies, overall, the program ultimately leads Thailand to a low-carbon pathway.

1.4 Hence, the paper provides a detailed information on T-VER methodologies, project types, eligibility criteria and procedures as relevant to comply itself for possible ICAO’s consideration on using T-VER credits as offset credits in the scheme.

2. DEVELOPMENT OF THAILAND VOLUNTARY EMISSIONS REDUCTION SCHEME (T-VER)

2.1 The T-VER program was established in October 2013. It is one of the greenhouse gas emission reduction mechanisms under Thailand’s voluntary carbon market. It uses “baseline and credit” approach to calculate greenhouse gas emission reductions from an emission reduction project similar to the Clean Development Mechanism (CDM) of the UNFCCC. However, it utilizes simpler methodologies, less transaction costs, and a more creditable MRV system.

2.2 The eligibility criteria for participating in T-VER program are as follow:

Attributes	Descriptions
1. Project Type	1) Energy Efficiency 2) Alternative Energy 3) Renewable Energy 4) Waste and Residuals Management 5) Transportation Management 6) Forestry and Green Area 7) Agriculture 8) Others (with approval from TGO)
2. Greenhouse Gas Coverage	1) Carbon Dioxide (CO ₂) 2) Methane (CH ₄) 3) Nitrous Oxide (N ₂ O)

Attributes	Descriptions
3. Project Size	No Limitation nor Threshold
4. Operational Type	Project-based, operated either by a single entity (Single Project), or bundled projects, or Program of Activities.
5. Project Implementation Criteria	The eligible project shall be voluntary, new, or less than 3 years old prior to submitting all documents to TGO, with exception of Forestry Projects and Projects submitted in the time-frame of 2014-2016.
6. Project Starting Date	The first date for recording reduction activities according to the methodology.
7. Crediting Period	<p>(1) <i>If the project has not started:</i></p> <p>7 years for normal project, 20 years for forestry project. The crediting period shall be started no later than 2 years after completely submitting the project registration documents.</p> <p>(2) <i>If the project is under implementation:</i></p> <p>7 years for normal projects, and 20 years for forestry projects. The crediting period can be started 1 year before the date when project owner completely submits project registration documents to TGO.</p>
8. Unit of Carbon Credit	T-VERs (Thailand Voluntary Emission Reduction)
9. Demonstration of Additionality and Co-benefits	Assess the Additionality and Co-benefits criteria by using TGO's guideline.
10. Avoidance of Double Use and Double Counting	<p><i>10.1 Avoidance of Double Counting from Project Registration Process</i></p> <p>1) Project developers and participants shall not apply for project registration if the project “with the same operational boundary” has been registered by any other emission reduction program.</p> <p>2) In case many projects separately request for the registration to belong to an area owned by the same individual or legal entity. Each of the project developers shall identify in the application form (under “Avoidance of Double Counting” section) whether other projects in the same area has been registered to T-VER or other emission reduction programs, and shall provide the evidences for avoiding double counting.</p> <p><i>10.2 Avoidance of Double Counting from Reporting of Emission Reduction Activities</i></p> <p>After T-VER credit has been verified and transferred to the third party, project developers and participants shall not be able to hold the right to that T-VER credit.</p>

3. GUIDANCE FOR DEMONSTRATION OF ADDITIONALITY FOR VOLUNTARY EMISSION REDUCTION PROJECTS

- 3.1 Microscale and small scale projects may are not subjected to Additionality demonstration.
- 3.2 Large-scale projects should demonstrate the Additionality criteria.
- 3.3 Any project which has a payback period longer than 3 years are not subjected to

Additionality demonstration.

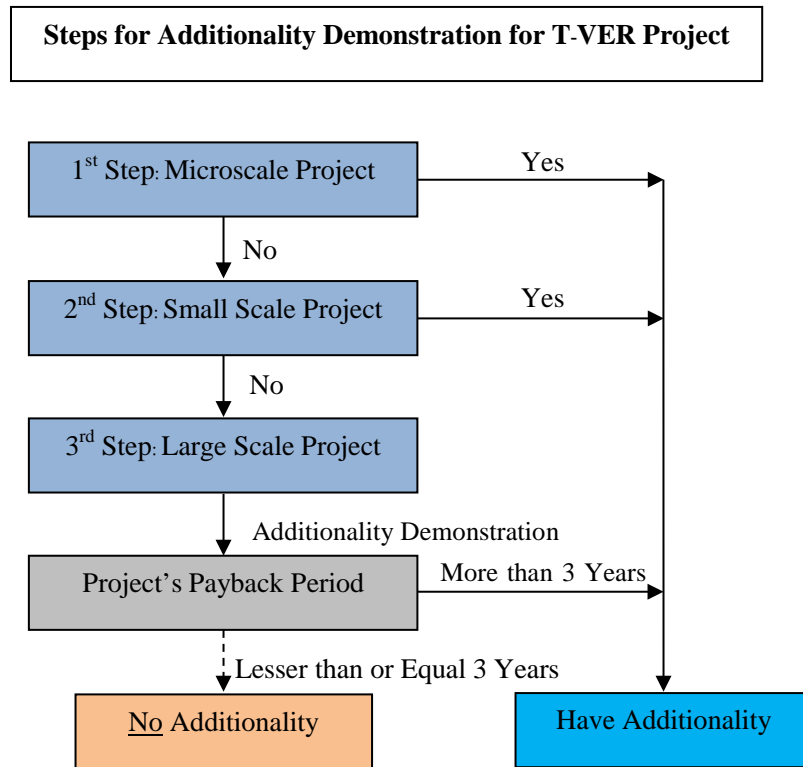


Fig 1: Process to check for Additionality

3.4 In near future, TGO plans to strengthen the T-VER Additionality criteria by:

- Requiring large-scale projects to follow standardized baseline (SBL) to meet requirements by 2017;
- Having a “positive list” of preferred technologies which the adopters will use to automatically qualify for the Additionality criteria. TGO has also been undergoing other studies to strengthen the operation.

4. PROJECT CYCLES AND PROCEDURES OF T-VER

4.1 The MRV system of T-VER is designed to be in line with ISO 14064-2, 14064-3, and 14065. It is also emphasized on six principles, namely, Transparency, Relevance, Accuracy, Completeness, Consistency, and Conservativeness. These principles aim to ensure reliability and creditability of T-VER credits. TGO also implements several simplified methodologies based on CDM as a mean to achieve its goals. As of now, twenty-five methodologies from five eligible project types have been approved, with more to be added in the near future.

4.2 Approved methodologies include those on Energy Efficiency, Waste Heat Recovery, Renewable Electricity Generation, Biodiesel Production, Methane Capture and Recovery, Sustainable Forestation, Reducing Emissions from Deforestation and Forest Degradation (REDD+), and Carbon Sequestration.

4.3 Project cycle of T-VER is similar to the other project-based program. Project Developer has to develop the Project Design Document (PDD) first. PDD will be submitted to the validation/verification body registered by the Greenhouse Gas Emission Reduction Sub-Committee. Once validated, project developer may submit the application form, PDD and other required documents along with the validation report and validation statement to TGO. The Sub-Committee will approve and register the project as a T-VER project if all found in compliance, refer to Figure 2. The project developer may get T-VER credits by sending monitoring report and verification report and verification statement to the Sub-Committee for approval and issuance of T-VER credits. Figure 3 shows the process to get T-VER credits from the Sub-Committee.

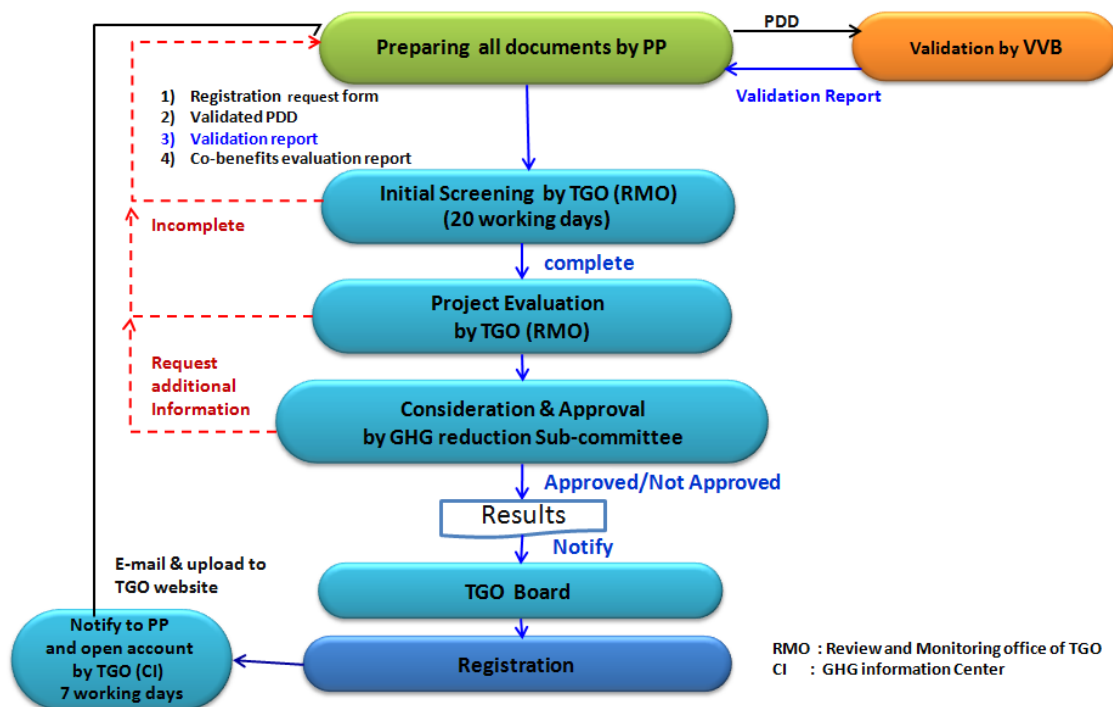


Fig 2: Procedures for request for registration as T-VER project

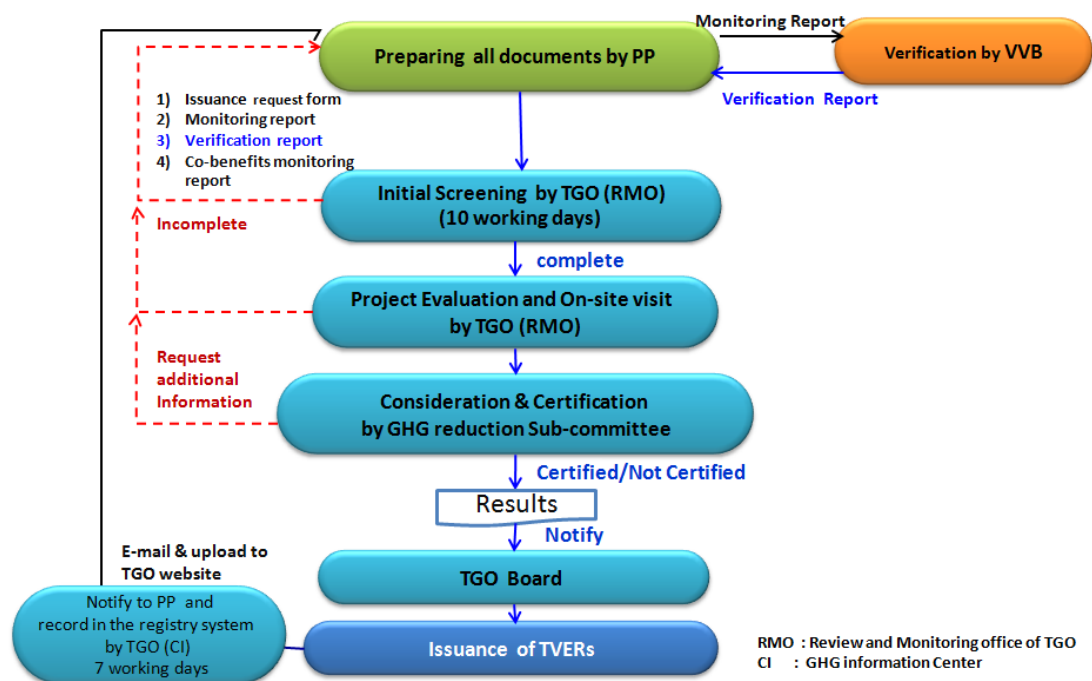


Fig 3: Procedures for request for issuance of T-VERs

5. CURRENT STATUS OF T-VER PROJECTS (AS OF SEPTEMBER 12, 2016)

Project Status	The number of Projects
T-VER Projects registered by TGO Board	36
T-VER projects that received TVERs	12

* see in detail at website: <http://tver.tgo.or.th/2015/thai/index.php>

5.1 There are 36 T-VER Project registered by TGO at the moment. The expected greenhouse gas reduction is 1,045,236 ton CO₂e/year. In this regard, TVERs credits have been issued to eight projects, with greenhouse gas reductions of 410,853 tonCO₂e/year.

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