

**Announcement of the Board
of Directors of Thailand Greenhouse Gas Management Organization
re: Criteria for Demonstration of Additionality under Premium Thailand Voluntary
Emission Reduction (Premium T-VER) Program, B.E. 2566 (2023)**

The Board of Directors of Thailand Greenhouse Gas Management Organization (Public Organization) deems it appropriate to prescribe criteria for demonstration of additionality under Premium Thailand Voluntary Emission Reduction Project (Premium T-VER) Program.

By virtue of Section 20 (2) and Section 45/2 of the Royal Decree on the Establishment of Thailand Greenhouse Gas Management Organization (Public Organization) B.E. 2550 (2007), as amended by the Royal Decree on the Establishment of Thailand Greenhouse Gas Management Organization (Public Organization) (No. 2), B.E. 2562 (2019), together with Article 16 (4) of the Regulation of the Board of Directors of Thailand Greenhouse Gas Management Organization re: rules, procedures, and conditions for considering Thailand Voluntary Emission Reduction (T-VER) projects, B.E. 2566 (2023), and the Resolution from the meeting of the Board of Directors of Thailand Greenhouse Gas Management Organization No.13/2022 on 27 December 2022, The Board of Directors therefore hereby makes an announcement as follows:

No.1 This Announcement is called the “Announcement of the Board of Directors of Thailand Greenhouse Gas Management Organization on Criteria for Demonstration of Additionality under Premium Thailand Voluntary Emission Reduction Project (Premium T-VER) Program, B.E. 2566 (2023).”

* Translation by Advantage Consulting Co., Ltd. under contract for Thailand Greenhouse Gas Management Organization (Public Organization) – Provisional version – subject to final authorization by Thailand Greenhouse Gas Management Organization (Public Organization). Version as of 2 March 2023. Edited by Legal Affairs Unit, Thailand Greenhouse Gas Management Organization (Public Organization).

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No.2 This Announcement comes into force from the day following the date of its announcement.

No.3 In this Announcement:

“Additionality” means a demonstration of additional greenhouse gas emission reduction, compared to business-as-usual scenario, in which the project participant must conduct according to specified criteria prescribed in this Announcement.

“Technology Positive List” means a list of advanced greenhouse gas emission reduction technology and/or those requiring higher cost than general, commonly used technology, or technology which is not widely adopted and/or those with restrictions on their use, as listed below in this Announcement.

No.4 Projects which shall be eligible for consideration to register as T-VER projects are:

- (1) Projects in the category of renewable energy or fossil fuels replacement;
- (2) Projects in the category of improvement of efficiency of electricity and heat generation;
- (3) Projects in the category of public transportation system;
- (4) Projects in the category of electric vehicle;
- (5) Projects in the category of improvement of efficiency of engine;
- (6) Projects in the category of improvement of efficiency of energy consumption in buildings and factories, and in households;
- (7) Projects in the category of natural refrigerant;
- (8) Projects in the category of clinker substitutes;
- (9) Projects in the category of solid waste management;
- (10) Projects in the category of household wastewater management;
- (11) Projects in the category of methane recovery and utilization;
- (12) Projects in the category of industrial wastewater management;
- (13) Projects in the category of reduction, absorption, and removal of greenhouse gases from the forestry and agriculture sectors;
- (14) Projects in the category of carbon capture, storage and/or utilization of greenhouse gases; and

(15) Projects in other categories as may be additionally prescribed by the Board of Directors supported by scientific reasons.

No.5 Any project that intends to be developed as a Premium T-VER project shall be a project which employs a technology within the scope of Technology Positive List, or a project which has demonstrated additionality in accordance with the criteria prescribed under this Announcement, with an exception for the projects in the category of No. 4 (13), which shall carry out demonstration of additionality in accordance with the guideline set out in the Regulation of Thailand Voluntary Emission Reduction (T-VER) for such category of projects.

No.6 Criteria for considering the size of Premium T-VER projects that project participants shall comply with is prescribed in No.7.

(1) Types of projects under No. 4 (1) to (12) and (14) are as follows:

(a) Micro T-VER project is a project where the amount of the expected total reduction or removal of is not exceeding 20,000 tCO₂e per year.

T-VER project category under No.4 (1) with renewable energy activities, the amount shall not exceed 5 megawatts.

T-VER project category under no.4 (2) and (6) with improvement of energy efficiency activities, the amount shall not exceed 20 gigawatt-hours.

(b) Small-scale T-VER project is a project where the total amount of the expected total reduction or removal of greenhouse gases is over 20,000 tCO₂e per year but not exceeding 60,000 tCO₂e per year.

T-VER project category under No. 4 (1), with renewable energy activities, the amount shall be over 5 megawatts but not exceeding 15 megawatts.

T-VER project category under No. 4 (2) and (6), with energy efficiency activities, the amount shall be over 20 Gigawatt-hours but not exceeding 60 gigawatt-hours,

(c) Large-scale T-VER project is a project where the total amount of the expected total reduction or removal of greenhouse gases is over 60,000 tCO₂e per year .

T-VER project category under No. 4 (1), with renewable energy activities, the amount shall be over 15 megawatts.

T-VER project category under No. 4 (2) and (6), with energy efficiency activities, the amount shall be over 60 gigawatt-hours.

(2) Types of projects under No. 4 (13) which are forestry and agricultural projects shall be considered as follows:

(a) Micro T-VER project is a project where the total amount of the expected reduction or removal of greenhouse gases is not exceeding 1,000 tCO₂e per year.

(b) Small-scale T-VER project is a project where the total amount of the expected reduction or removal of greenhouse gases is over 1,000 tCO₂e per year but not exceeding 16,000 tCO₂e per year.

(c) Large-scale T-VER project is a project where the total amount of the expected reduction or removal of greenhouse gases is exceeding 16,000 tCO₂e per year.

No.7 The project participant shall demonstrate additionality by proving the project activity is additional to what is required by the law and shall comply with the following requirement:

- (1) The project falls within the scope of Technology Positive List, or
- (2) The project has demonstrated additionality.

No.8 When considering whether a project falls within the scope of Technology Positive List, the project participant shall refer to the following technologies.

- (1) Green hydrogen energy
- (2) Energy from waves (Tidal energy)
- (3) Offshore wind power
- (4) Geothermal energy
- (5) Bio-energy with Carbon Capture and Storage: BECCS
- (6) Solar thermal energy for electricity generation (Concentrating solar power)
- (7) Carbon Capture and Utilization (CCU)
- (8) Carbon capture and storage (CCS)

The Organization shall periodically review the Technology Positive List at least every five years, in accordance with national policies, and shall propose to the Board for consideration.

No.9 When it appears that a project does not fall under the technology prescribed under No.8, a project participant shall demonstrate additionality according to the following.

- (1) Common practice
- (2) Investment analysis
- (3) Barrier analysis

No.10 Common Practice

(1) The project participant shall determine the capacity of project activities by specifying a range of more than and less than 50 percent from the mean or the average, according to machine specifications or the project design

(2) The project participant shall identify other projects that fall under the same category by considering the following details

(a) Projects located in Thailand;

(b) Projects not registered or in the process of filing for registration with any national or international greenhouse gas reduction schemes/mechanisms;

(c) Projects applying the same standards as proposed in the project activities by the project developer for a Premium T-VER project registration;

(d) Projects using the energy sources, fuels and raw materials proposed in the project activities by the project developer for a Premium T-VER project registration;

(e) Factories implementing such projects produce goods or services with quality, properties and functionality comparable to those offered by the factory under the proposed project;

(f) The capacity to implement such project activities are within the same range as proposed project under (1)

(g) Projects commencing operation prior to the project commencement date proposed by the project participant for a Premium T-VER project registration.

(3) The project participant shall consider the projects under (2) as projects similar to the project applying for registration under the Premium T-VER, with the number of projects equal N_{all}

(4) When completing (3), the project participant shall separate the projects using different technology from the one the project participant propose for a Premium T-VER project registration, with the number of projects using different technology equal N_{diff}

(5) The project participant shall demonstrate the proportion of projects similar to the project which the project participant requests for a registration under Premium T-VER (F)

The project developer shall demonstrate the proportion of projects similar to the project which the project participant requests for a registration under Premium T-VER, according to the following calculation and methods prescribed by the Organization as follows:

$$F = 1 - \frac{N_{diff}}{N_{all}}$$

The proposed project activity is a “common practice” if the factor F is greater than 0.2 and $N_{all-Ndiff}$ is greater than 3.

No.11 When the project participant has completed no. (7), (8) and (9), the project participant shall demonstrate additionality according to the following, where the size of the project shall be considered in accordance with No.6.

(1) Large project: the project participant shall assess whether the project activity is implemented differently from the common practice, as specified in No.10. If it appears that the project activity is implemented differently from the common practice, the project participant shall conduct investment analysis and barrier analysis to prove its feasibility, as specified in No.12 and 13.

(2) Small and micro project: the project participant shall assess whether the project activity is implemented differently from the common practice, as specified in No. 10. If it appears that the project activity is implemented differently from the common practice, the project participant shall conduct investment analysis and barrier analysis to prove its feasibility, as specified in No.12 and 13.

No.12 The project participant shall conduct the investment analysis in accordance with one of the following guidelines:

(1) The project participant shall be able to prove that the project internal rate of return (PIRR) is lower than or equal to the minimum lending rate (MLR), or

(2) The project participant shall be able to prove that the project internal rate of return (PIRR) is lower than or equal to the weight average cost of capital (WACC), or

(3) The project participant shall be able to prove that the equity internal rate of return (EIRR) is less than or equal to 10% by referring to the initial cost of equity (expected rate of return on equity) in Thailand, or the value declared by the key authorities in Thailand.

No.13 The project participant shall perform barrier analysis in accordance with one of the following guidelines:

(1) The project participant shall be able to demonstrate cases of operational problems and obstacles from direct experience, or from reasonable analysis, or from a case study in the context of an appropriate period of reference; or

(2) The project participant shall be able to demonstrate a case study of the same type of project, which the project participant requests for registration under the T-VER, where such project was operable due to technological support, financial incentives, or other types of support.

No.14 The Executive Director shall act in accordance with this Announcement.

In the event that there is a problem in complying with this Announcement, the Executive Director shall have the power to interpret and make decisions in accordance with this Announcement and the Executive Director's decision shall be considered final.

Announced on 9th January B.E. 2566 (2023)

(Mr. Wijarn Simachaya)

Chairman of the Board of Directors

Thailand Greenhouse Gas Management Organization (Public Organization)