

Country Name	Capacity Development and Institutional Strengthening for GHG Mitigation
Kingdom of Thailand	

I. Project Outline

Background	Although Thailand was not mandated to reduce greenhouse gas (GHG) emission under the Kyoto Protocol, it was actively tackling climate change. The Thailand Greenhouse Gas Management Organization (TGO) was established in 2007 and the “National Strategic Plan on Climate Change” (2008-2012) was developed in 2008. TGO was initially responsible for promoting and providing support to all GHG reduction activities but its work had so far been centered mainly on examination, awareness raising, training and information management regarding the Clean Development Mechanism (CDM). The role of TGO expected to perform were many. However, because it was a young organization, it did not have sufficient human resources and knowledge.												
Objectives of the Project	Through (1) training on climate change mitigation for TGO staff, (2) developing training curriculum and materials and conducting training by TGO, (3) conducting monitoring of selected pilot projects, and (4) improving website and database, the project aimed at developing capacity of human resources and strengthening institutional capacity on GHG mitigation, and thereby contributing to promoting GHG mitigation activities.												
	<ol style="list-style-type: none"> Overall Goal: GHG mitigation activities will be promoted in Thailand. Project Purpose: Capacity development for human resources and institutional strengthening on GHG mitigation for TGO will be achieved. 												
Activities of the project	<ol style="list-style-type: none"> Project site: Bangkok Main activities: (1) Training on CDM, credit transfer, GHG mitigation in the relevant sector, UNFCCC (the United Nations Framework Convention on Climate Change) structure, carbon footprint, and GHG inventory to TGO staff, (2) Developing training curriculum and materials and conducting training, (3) Conducting monitoring of selected pilot projects, and (4) Improving website and database. Inputs (to carry out above activities) <table border="0" style="width: 100%;"> <tr> <td style="width: 50%;">Japanese Side</td> <td style="width: 50%;">Thai Side</td> </tr> <tr> <td>1) Experts: 10 persons</td> <td>1) Staff allocated: 52 persons</td> </tr> <tr> <td>2) Trainees received in Japan: 30 persons</td> <td>2) Provision of spaces: office spaces for experts and training spaces</td> </tr> <tr> <td>3) Equipment: photocopying machine, projector, PCs</td> <td>3) Local cost: training expenses, office equipment, etc.</td> </tr> <tr> <td>4) Local cost: training expenses</td> <td></td> </tr> </table> 			Japanese Side	Thai Side	1) Experts: 10 persons	1) Staff allocated: 52 persons	2) Trainees received in Japan: 30 persons	2) Provision of spaces: office spaces for experts and training spaces	3) Equipment: photocopying machine, projector, PCs	3) Local cost: training expenses, office equipment, etc.	4) Local cost: training expenses	
Japanese Side	Thai Side												
1) Experts: 10 persons	1) Staff allocated: 52 persons												
2) Trainees received in Japan: 30 persons	2) Provision of spaces: office spaces for experts and training spaces												
3) Equipment: photocopying machine, projector, PCs	3) Local cost: training expenses, office equipment, etc.												
4) Local cost: training expenses													
Project Period	January 2010-February 2012	Project Cost	(ex-ante) 240 million yen, (actual) 225 million yen										
Implementing Agency	Thailand Greenhouse Gas Management Organization (TGO)												
Cooperation Agency in Japan	Oriental Consultants Co., Ltd.												

II. Result of the Evaluation

< Special Perspectives Considered in the Ex-Post Evaluation >

- Continuation status of Indicator 2 for Project Purpose was not confirmed as the indicator was set to measure the progress during the project implementation.

1 Relevance
<p><Consistency with the Development Policy of Thailand at the Time of Ex-Ante Evaluation and Project Completion></p> <p>The project was consistent with the development policy of Thailand. At the time of ex-ante evaluation “the 10th National Economic and Social Development Plan” (2007-2010) highlighted the need for controlling GHG emission. Strategies under “the National Strategic Plan on Climate Change” (2008-2012) included capacity development for human resources and strengthening institutional capacity for mitigation of GHG emission. At the time of project completion, draft 11th National Economic and Social Development Plan (2012-2016) highlighted the need for controlling GHG emission, and “the National Strategic Plan on Climate Change” (2008-2012) states that reduction of GHG emission was one of the goals.</p> <p><Consistency with the Development Needs of Thailand at the Time of Ex-Ante Evaluation and Project Completion ></p> <p>The project was also consistent with the development needs for reduction in GHG emissions in Thailand. At the time of ex-ante evaluation, TGO was responsible for promoting all activities for reduction in GHG emissions in Thailand. However, TGO had lack of human resources and capacity. At the time project completion, the subjects selected for intervention, i.e., CDM, carbon trading, UNFCCC and international negotiations, GHG mitigation measures, carbon footprint and GHG inventory corresponded with the core business and interests of TGO.</p> <p><Consistency with Japan’s ODA Policy at the Time of Ex-Ante Evaluation></p> <p>The project was consistent with Japan’s ODA Policy to Thailand. Under “Japan’s Economic Cooperation Program for Thailand” (May 2006), areas for technical cooperation included “responses to issues that emerge with maturity of society”. Environmental management was one of the areas under this category.</p> <p><Evaluation Result></p> <p>In light of the above, the relevance of the project is high.</p>
2 Effectiveness/Impact
<p><Status of Achievement of the Project Purpose at the time of Project Completion></p> <p>The Project Purpose was mostly achieved at project completion. At the time of project completion, through the training courses “GHG</p>

Mitigation and Low Carbon Society” in the Climate Thailand Conference 2011 (CTC 2011)¹ conducted by TGO, capacity of human resources on GHG mitigation was enhanced (Indicator 1), although other than the above-mentioned CTC 2011, no regular training courses were conducted (indicator 3) by the time of the terminal evaluation. However, after the completion of the project TGO/CITC has conducted regular trainings every year. Capacity Assessment Tests conducted under Output 1 showed substantial advancement of knowledge level among TGO staff (indicator 2).

<Continuation Status of Project Effects at the time of Ex-post Evaluation>

The effects of the project have continued after the project was completed. TGO has provided technical instruction via conducting CDM projects, and activities related to National Greenhouse Gas Inventories, particularly 1996 IPCC (Intergovernmental Panel on Climate Change) Guidelines. After the completion of the project, TGO set up the Climate Change International Technical and Training Center (CITC) and continued to provide training courses. In recent years, more than 12 training courses were provided per year, and around 500 trainees attended the courses. They have updated curriculum and materials. JICA conducted two succeeding technical cooperation projects, one from 2010/01 to 2012/02, the other from 2013/06 to 2016/05 and these succeeding projects contributed for the continuation of the effects.

<Status of Achievement for Overall Goal at the time of Ex-post Evaluation>

The Overall Goal was achieved. TGO has promoted various projects including CDM projects. TGO has especially been promoting the Thailand Voluntary Emission Reduction (TVER) and the number of registered projects has been steadily increasing. The project as well as the above-mentioned succeeding projects contributed to the increase in numbers as a part of capacity building providers.

It is noticed that the knowledge or skills which were taught by TGO training have been applied and contributed to climate change policies, particularly as in the Climate Change Economic training, the Mitigation training, the Climate Change and the Negotiation session. For example, idea/opinion exchange in many training classes from various experts has increased the awareness on climate change issues of policy makers.

<Other Impacts at the time of Ex-post Evaluation>

No negative impact on natural environment has been observed and there were no land acquisition and no resettlement under the project.

<Evaluation Result>

Therefore, the effectiveness/impact of the project is high.

Achievement of Project Purpose and Overall Goal

Aim	Indicators	Results																																																																																			
(Project Purpose) Capacity development for human resources and institutional strengthening on GHG mitigation for TGO will be achieved.	Indicator 1: TGO can provide technical instruction, and can promote awareness of climate change mitigation policy to the other stakeholders.	Status of the Achievement: achieved (continued) (Project Completion) Training course “GHG Mitigation and Low Carbon Society” was implemented in CTC 2011 and 11 presentations were made. (Ex-post Evaluation) TGO has provided technical instruction via conducting CDM projects, and activities related to National Greenhouse Gas Inventories, particularly 1996 IPCC Guidelines.																																																																																			
	Indicator 2: Capacity Development Progress Evaluation Check List on GHG Mitigation Policy, Carbon trading, UNFCCC individual sector	Status of the Achievement: achieved (Project Completion) - Number The number of TGO officials who can confidently give presentations to various audiences increased. Nine TGO officials presented at CTC 2011 and received fairly good feedbacks. - Capacity Assessment Tests conducted under Output 1 showed substantial advancement of knowledge level among TGO staff. Comparison of two test results of 11 TGO staff indicates substantial improvement in understanding on most if not all subjects. Understanding level classified under 5-grade evaluation improved by more than one grade in average.																																																																																			
	Indicator 3: Number of training course provided by TGO	Status of the Achievement: partially achieved (continued) (Project Completion) Other than CTC2011, no regular training courses were conducted. (Ex-post Evaluation) No. of training and attendants																																																																																			
		<table border="1"> <thead> <tr> <th rowspan="2">Courses</th> <th colspan="2">2015</th> <th colspan="2">2016</th> <th colspan="2">2017</th> </tr> <tr> <th>No. of training</th> <th>No. of attendants</th> <th>No. of training</th> <th>No. of attendants</th> <th>No. of training</th> <th>No. of attendants</th> </tr> </thead> <tbody> <tr> <td>Greenhouse Gas Inventory (Thailand)</td> <td>1</td> <td>96</td> <td>1</td> <td>58</td> <td>2</td> <td>81</td> </tr> <tr> <td>Greenhouse Gas Inventory (ASEAN)</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>1</td> <td>41</td> </tr> <tr> <td>Climate Change and Sustainable Development (Thailand)</td> <td>3</td> <td>111</td> <td>2</td> <td>71</td> <td>4</td> <td>148</td> </tr> <tr> <td>Climate Change and Sustainable Development (ASEAN)</td> <td>-</td> <td>-</td> <td>1</td> <td>39</td> <td>-</td> <td>-</td> </tr> <tr> <td>Mitigation Mechanism (Thailand)</td> <td>1</td> <td>81</td> <td>-</td> <td>-</td> <td>1</td> <td>45</td> </tr> <tr> <td>Mitigation Mechanism (ASEAN)</td> <td>-</td> <td>-</td> <td>1</td> <td>40</td> <td>-</td> <td>-</td> </tr> <tr> <td>Climate Change Economics (Thailand)</td> <td>1</td> <td>54</td> <td>1</td> <td>49</td> <td>2</td> <td>87</td> </tr> <tr> <td>Climate Change Economics (ASEAN)</td> <td>-</td> <td>-</td> <td>1</td> <td>56</td> <td>-</td> <td>-</td> </tr> <tr> <td>Train The Trainer</td> <td>2</td> <td>74</td> <td>1</td> <td>15</td> <td>-</td> <td>-</td> </tr> <tr> <td>E-Learning Course on Climate Change Economics</td> <td>-</td> <td>-</td> <td>4</td> <td>156</td> <td>-</td> <td>-</td> </tr> </tbody> </table>	Courses	2015		2016		2017		No. of training	No. of attendants	No. of training	No. of attendants	No. of training	No. of attendants	Greenhouse Gas Inventory (Thailand)	1	96	1	58	2	81	Greenhouse Gas Inventory (ASEAN)	-	-	-	-	1	41	Climate Change and Sustainable Development (Thailand)	3	111	2	71	4	148	Climate Change and Sustainable Development (ASEAN)	-	-	1	39	-	-	Mitigation Mechanism (Thailand)	1	81	-	-	1	45	Mitigation Mechanism (ASEAN)	-	-	1	40	-	-	Climate Change Economics (Thailand)	1	54	1	49	2	87	Climate Change Economics (ASEAN)	-	-	1	56	-	-	Train The Trainer	2	74	1	15	-	-	E-Learning Course on Climate Change Economics	-	-	4	156	-	-
Courses	2015			2016		2017																																																																															
	No. of training	No. of attendants	No. of training	No. of attendants	No. of training	No. of attendants																																																																															
Greenhouse Gas Inventory (Thailand)	1	96	1	58	2	81																																																																															
Greenhouse Gas Inventory (ASEAN)	-	-	-	-	1	41																																																																															
Climate Change and Sustainable Development (Thailand)	3	111	2	71	4	148																																																																															
Climate Change and Sustainable Development (ASEAN)	-	-	1	39	-	-																																																																															
Mitigation Mechanism (Thailand)	1	81	-	-	1	45																																																																															
Mitigation Mechanism (ASEAN)	-	-	1	40	-	-																																																																															
Climate Change Economics (Thailand)	1	54	1	49	2	87																																																																															
Climate Change Economics (ASEAN)	-	-	1	56	-	-																																																																															
Train The Trainer	2	74	1	15	-	-																																																																															
E-Learning Course on Climate Change Economics	-	-	4	156	-	-																																																																															

¹ CTC is an international conference held in 2011. 1,149 participants attended including various ministries in Thailand, municipalities and universities, and also the representative from Ministry of Environment in Japan, Japan embassy in Thailand, EU and other countries, International organizations such as UNFCCC and World Bank, private companies and NGOs.

		Climate Change Adaptation	-	-	-	-	1	30																				
		Regional Workshop for Capacity Development on Low Carbon and Resilient Society in ASEAN Region	1	75	-	-	-	-																				
		3 rd CITC Regional Conference on Climate Change and Sustainable Development: “How to Accelerate Climate Actions in Asia through Capacity Building and Climate Finance”	-	-	1	115	-	-																				
		The SETA 2017 (Sustainable Energy and Technology Asia 2017) Side-Event On “Climate Change: Taking Challenges And Turning Into Opportunities Through Regional Collaboration”	-	-	-	-	1	40																				
		Total	9	491	13	599	12	472																				
(Overall Goal) GHG mitigation activities will be promoted in Thailand.	Indicator 1: Number of CDM projects submitted TGO for national approval.	(Ex-post Evaluation) achieved The number of CDM and other projects submitted to TGO <table border="1"> <thead> <tr> <th>Projects</th> <th>Registered (Projects)</th> <th>Expect (tCO₂eq/year)</th> <th>Issued (Projects)</th> <th>Expect (tCO₂eq/year)</th> </tr> </thead> <tbody> <tr> <td>TVER</td> <td>106</td> <td>2,892,692</td> <td>48</td> <td>1,909,220</td> </tr> <tr> <td>JCM*</td> <td>4</td> <td>-</td> <td>1</td> <td>-</td> </tr> <tr> <td>CDM</td> <td>154</td> <td>7,414,236</td> <td>64</td> <td>12,880,327</td> </tr> </tbody> </table> *Joint Crediting Mechanism							Projects	Registered (Projects)	Expect (tCO ₂ eq/year)	Issued (Projects)	Expect (tCO ₂ eq/year)	TVER	106	2,892,692	48	1,909,220	JCM*	4	-	1	-	CDM	154	7,414,236	64	12,880,327
Projects	Registered (Projects)	Expect (tCO ₂ eq/year)	Issued (Projects)	Expect (tCO ₂ eq/year)																								
TVER	106	2,892,692	48	1,909,220																								
JCM*	4	-	1	-																								
CDM	154	7,414,236	64	12,880,327																								

Source : Interview and Questionnaire with 2 TGO staff members

3 Efficiency

Although the project cost was within the plan (the ratio against the plan: 94%), the project period slightly exceeded the plan (the ratio against the plan: 108 %). Therefore, the efficiency of the project is fair.

4 Sustainability

<Policy Aspect>

There has been policy support for reduction in GHG emissions. At the 2015 United Nations Climate Change Conference, COP 21, held in Paris, Thailand committed to reduce greenhouse gas emissions by 20 percent by 2030; therefore, many government’s policies/plans have been established, such as “the Twelfth National Economic and Social Development Plan” (2017-2021), “the National Climate Change Master Plan” (2015-2030) and others.

<Institutional Aspect>

For smooth operation of providing training courses, TGO has established CITC. However, due to constraint in hiring new staff (their permanent staff has reached the limit number as stipulated by the government policy), CITC staff members are facing the increase of workload burden; Although the number of training courses has increased by more than 30% from 2015 level, the number of staff has been the same. This is partly because CITC put more emphasis on the number of training courses. At present, no activity has been affected. However, some kind of consideration might be needed.

<Technical Aspect>

TGO staff has capacity to plan, implement and evaluate the training courses. Although they can be a lecturer of their training courses (except Climate Finance), they would rather invite lecturers from other organizations who have expertise in such topic. Counterpart personnel of this project who have been still working at TGO is 12 persons (6 permanent staff and 6 contract staff). TGO has not had particular mechanism for TGO staff to systematically maintain the necessary technical level for providing the training/guidance on controlling GHG emission, however, TGO staff, for their own capacity building, can join the training courses on Mitigation Mechanisms that they organize, as well as Train of Trainer courses for TGO/CITC and key stakeholders.

Within TGO, there are various opinions on how to conduct the training courses, i.e. they do not determine whether to conduct the training courses by themselves or to be just a training course organizer by inviting lecturers from other organizations. That might affect the motivation for TGO staff to improve their capacity.

<Financial Aspect>

Budgets allocated to TGO in the past 3 years are seemed to be sufficient for their activities in Thailand. However, activities have been largely supported by the succeeding technical cooperation projects as mentioned above, and they are also looking for in-kind support (such as dispatching lectures) or co-organization from other organizations to get some financial support for their activities in ASEAN and their further activities.

Budget of TGO

	2015	2016	2017
Approved budget	10 million baht	11.7 million baht	12 million baht

<Evaluation Result>

Therefore, the sustainability of the effects through the project is fair.

5 Summary of the Evaluation

The Project Purpose was mostly achieved at project completion, as through training course, capacity of human resources on GHG mitigation was enhanced and TGO has continued to provide training courses after the project was completed. The Overall Goal was achieved as TGO has promoted various GHG emissions reduction projects. As to the sustainability, partial problems have been observed in

terms of the institutional, technical and financial aspects; however, no problem has been observed in the policy aspect. As to efficiency, the project period slightly exceeded the plan; however, the project cost was within the plan.

Considering all of the above points, this project is evaluated to be satisfactory.

III. Recommendations & Lessons Learned

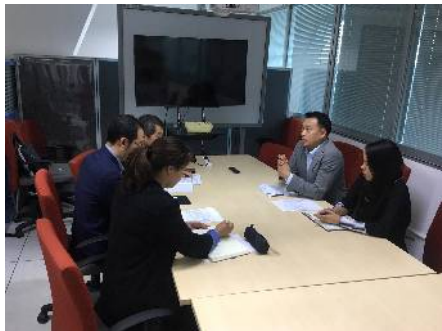
Recommendations for Implementing Agency:

- After the completion of the project, TGO set up CITC and continued providing training courses. CITC seems to be on a constant track towards the direction expected in terms of awareness raising of climate change and disseminating the knowledge to a wide range of stakeholders. In recent years, more than 12 training courses were provided per year, and as a result of many courses that are currently being conducted, CITC staff members are facing the increase of workload burden. It is recommended to put more emphasis on outcome from the training courses, not the number of the training courses, and improving the impact of the training.
- It is noticed that the knowledge or skills which were taught by TGO training have been applied and contributed to mitigation actions and climate change policies. However, it is recommended to conduct a follow up survey and quantitatively evaluate the extent to which the result of the training has contributed.
- TGO staff has sufficient capacity to plan, implement and evaluate the training courses. They can join the training courses for their own capacity building. However, to maintain their motivation, it is recommended to have particular mechanism for TGO staff to maintain the necessary technical level for providing the training/guidance on controlling GHG emission.

Also, TGO should clearly define the objective of their activities, so that they can know the direction they have to proceed in. They should determine whether to conduct the training courses by themselves or to be just a training course organizer (by inviting lecturers from other organizations.)

Lessons Learned for JICA:

- TGO has been very active in providing training courses and has promoted various GHG emissions reduction projects after the project was completed. Although TGO itself has a sufficient capacity in developing and managing training courses, and allocating budget, still TGO is partly dependent on JICA in terms of finance and contents for the ASEAN training program and further development of advanced programs. They are also looking for in-kind support or co-organization from other organizations to get some financial support for their activities in ASEAN and their further activities. Sustainability of the project shall depend on the national policy and budget allocation. At the completion of the project, it is important to urge the implementing agencies to secure their budget for further activities.



TGO staff answered and gave information.