

Market Mechanisms Country Fact Sheet : Thailand

National Climate Change Policy in Thailand

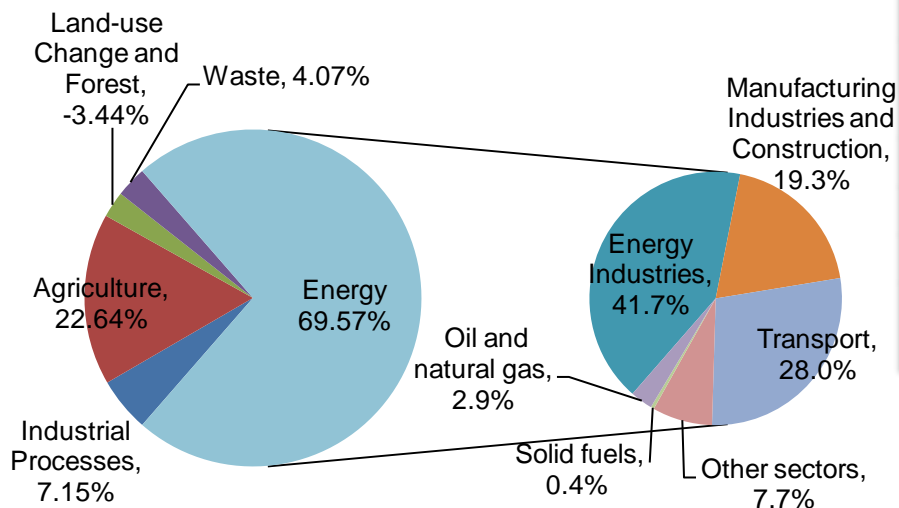
Name	National Strategic Plan on Climate Change
Objective	Promoting GHG mitigation activities to mitigate climate change
Target sectors	Energy, waste, agriculture and industries
Year implemented	2008-2012

Renewable Energy Policy

Name	National Renewable Energies Development Plan 2008-2022
Objective	<ul style="list-style-type: none"> •Bringing renewable energies to 20.3% of Thailand's total energy mix by 2022 •Advancing industrial competitiveness •Market transformation
Target sectors	Biofuels and co-generation from biomass and biogas (2008-2011), development of alternative energy technology industries and new R & D fields (2012-2016), and enhancement of the use of new alternative energies such as hydrogen
Year implemented	2008-2022 (enacted in 2009)

Source: <http://www.iea.org/textbase/pm/?mode=re&id=4785&action=detail>

Information on GHG



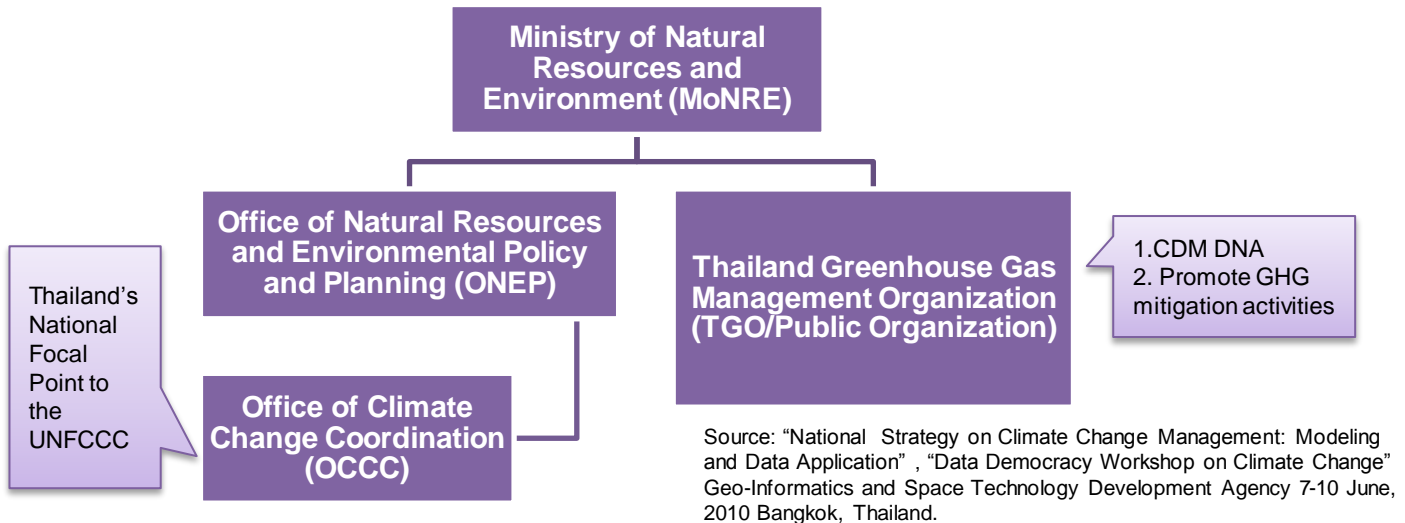
Overview of GHG Emissions(2000)

Sector	Mt CO2 eq
Energy	159.38
Industrial Processes	16.38
Agriculture	51.87
Land-use Change and Forest	-7.89
Waste	9.32
Total National Emission and Removals	229.09

Source: Thailand's second National Communication to UNFCCC
http://unfccc.int/files/national_reports/non-annex_i_natcom/submitted_natcom/application/pdf/snc_thailand.pdf

Institutional Framework

(1) Organisation Charts



(2) National Master Plan on Climate Change 2011-2050

(Drafting Stage)

Strategic goal

- ① Improve the development of socio-economic and ecosystem
- ② Initiate low-carbon development
- ③ Boost sustainable development

Phase 1 (2-5 years)

Urgent Actions

Phase 2 (6-20 years)

Project Base with long term

Phase 3 (20+ years)

Program Base with 20+ years continuance

Concerned Authorities

The Ministry of Environment, The Thailand Greenhouse Gas Management Organization (TGO) and other related ministries

Existing instruments related to climate change: Environmental labeling, Carbon Labeling, Green Procurement Policy, Tax incentive and Carbon Fund for CDM.

Source: Thailand – Climate Change – Proposed New Long Term Policy For Low Carbon Development
http://www.ukti.gov.uk/ja_jp/export/howwehelp/overseasbusinessrisk/premiumcontent/210640.html?null

Current Status of CDM in Thailand

Basic Information (as of 1 November 2011)

Project Status	No. of Projects
CDM projects registered at CDM executive board	60
CDM projects approved by the Thai DNA	146*
CDM projects at the validation stage	95

Source:

IGES CDM Project Database < http://www.iges.or.jp/en/cdm/report_cdm.html >, UNFCCC <<http://cdm.unfccc.int/>> ,

Thailand Greenhouse Gas Management Organization (TGO) . Last updated on 1 October 2011. <http://www.tgo.or.th/english/index.php?option=com_content&task=view&id=17&Itemid=29>

Note: * The Data was up to 1 November 2011.

Thailand Greenhouse Gas Management Organization (TGO) is the Designated National Authority (DNA) in Thailand and was established on 6 July 2007. Prior to the establishment of the TGO, the Office of Natural Resources and Environmental Policy and Planning (ONEP) was the DNA office.

So far, Thailand issued Letter of Approval (as of October 2011) to 146 projects. Among those projects, 60 projects had been registered at the CDM Executive Board. Most of the projects in Thailand are either biomass energy generation or biogas energy generation by utilizing waste water from pig farm, palm oil mill, and tapioca mill.

Basic Data on CDM Projects (as of 1 November 2011)

Project Type	Registered CDM Projects					Rejected
	No. Of Projects	Average Annual Emission Reduction (tCO ₂)	Total ERs by 2012 (tCO ₂)	Amount of Issued CERs (tCO ₂)	Review Conducted	
Biogas (Wastewater Treatment)	39	58,214	7,003,852	732,420	3	
Biogas (Animal Waste)	4	25,684	435,426		1	
Biomass (Bagasse)	3	85,690	1,965,827		2	
Biomass (Rice Husk)	4	43,460	761,944	111,055		1
Landfill gas recovery & utilization	5	140,674	2,685,861	21,594		
Waste heat utilization	3	34,010	283,973		1	1
N ₂ O reduction	1	142,402	504,719		1	
Biomass (EFB)	1	106,592	422,929			
Total	60	54,929*	14,064,530	902,491	8	2

Source: IGES CDM Project database < http://www.iges.or.jp/en/cdm/report_cdm.html >

* This value is not the total of average annual emission reduction of each project type, but average annual emission reduction of all the seven project types.

Designated National Authority (DNA) Information

(1) DNA Structure

TGO's Organisation Chart

The TGO (Thailand Greenhouse Gas Management Organization) Board:

Responsible for a final decision making procedure on CDM project approval and issuing Letters of Approval (LoA) to CDM project proponents that fulfil Thailand's sustainable development criteria. The chairman of the TGO Board is nominated by the Cabinet.

The Thai Designated National Authority Person

Permanent Secretary of the Ministry of Natural Resources and Environment
Member of the Board of Thailand Greenhouse Gas Management Organization

TGO Board's Advisors

TGO Board of Directors

Internal Audit

Executive Director

Administrative Office

Deputy Executive Director

Deputy Executive Director

Strategy Office

Carbon Business Office

Approval and Monitoring Office

GHG Information Center

Capacity Building and Outreach Office

The TGO Board Representatives

(1) Government (5 representatives)

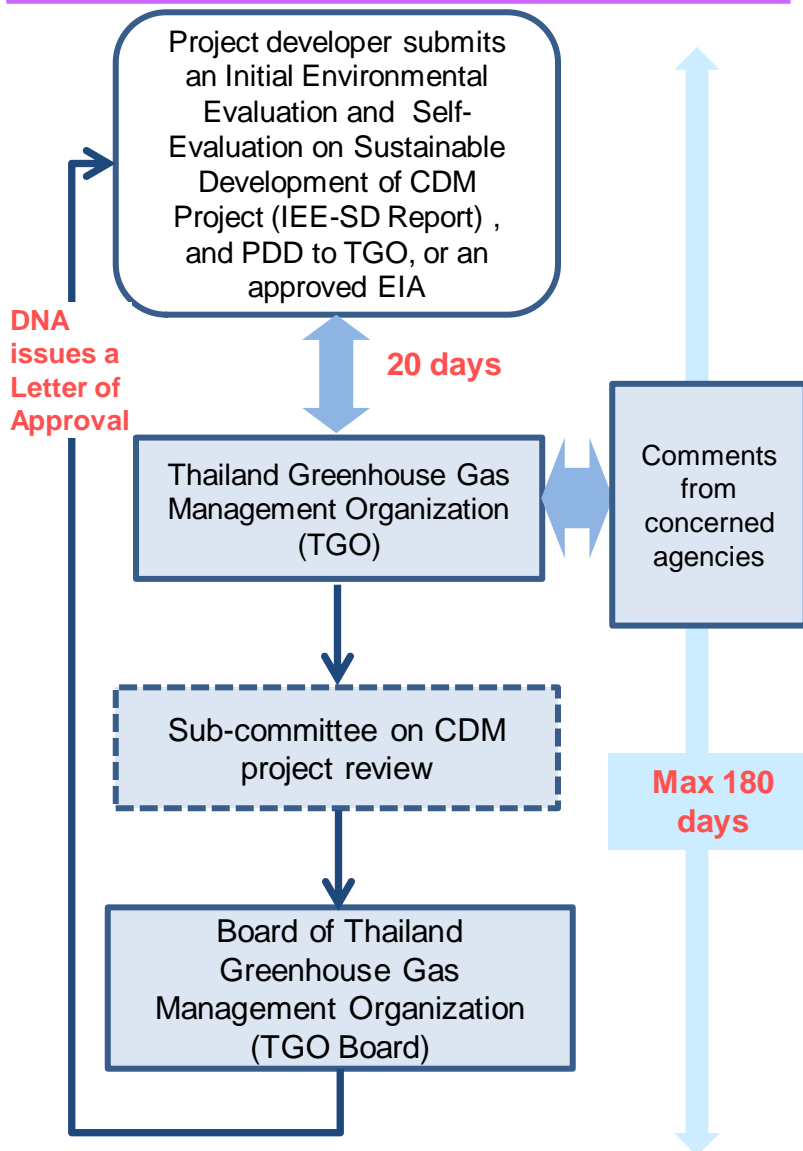
- Ministry of Natural Resources and Environment (Permanent Secretary)
- Office of Natural Resources and Environmental Policy and Planning
- Department of Alternative Energy Development and Efficiency
- Office of Transportation and Traffic Policy and Planning
- Thailand Greenhouse Gas Management Organization

(2) Private sector experts (5 representatives)

- energy expert
- business administrative expert
- forestry expert
- industrial expert
- technology expert

The DNA CDM office and secretariat, which is based at TGO, is responsible for administrative the work that coordinates CDM implementation in Thailand and hear the comments from concerned Ministries.

(2) DNA Approval Procedure



CDM Project Approval in Thailand

1. Project proponent submits the project design document (PDD) and all necessary documents below to TGO.
 - Project Design Document (PDD)
 - Approved Environmental Impact Assessment (EIA) or Initial Environmental Evaluation and Self-Evaluation on Sustainable Development of CDM Project (IEE-SD Report)
2. Should submission of all documents be complete, TGO distributes the above documents to relevant Ministries. At this stage, the relevant ministries are requested to assess the project eligibility.
3. Based on the collective comments, TGO evaluates whether or not the Letter of Approval (LoA) shall be issued.
4. TGO reports the final decision made on each project to the project proponent. If the project is proven to promote sustainable development in the country and meets all necessary requirements, the LoA is to be issued by the Permanent Secretary of the Ministry of Natural Resources and Environment.
5. Upon issuance of the LoA, the DNA-CDM notifies the National Board on Climate Change (NBCC) for acknowledgement.

CDM Project Approval Fee

- For projects reducing less than 15,000 tons of CO₂e/year: 75,000 Thai Baht (THB) per project
- For projects reducing more than 15,000 tons of CO₂e/year: 10 THB per ton of CO₂e (but not exceeding 900,000 THB per project)

Source: Thailand Greenhouse Gas Management Organization (TGO)

<http://www.tgo.or.th/english/index.php?option=com_content&view=category&id=27&Itemid=45>

Carbon Credit Tax Waiver

In February 2011, the Revenue Department enacted the Royal Decree (No.514) to exempt companies or juristic partnerships from a corporate income tax on the net profit derived from the sale of CERs and VERs for CDM projects that received the approval from TGO or for voluntary projects that registered by the TGO prior to the end of 2012. The exemption will apply for three consecutive accounting years starting from the issuance date of CERs from CDM EB for CDM projects and the issuance date of certified letter from TGO for voluntary projects.

(3) DNA Approval Criteria

Self Evaluation:

Project developers evaluate the project by themselves based on following Sustainable Development (SD) criteria and indicators

DNA Evaluation:

The TGO Board evaluates proposed projects based on the following SD criteria and indicators;

Scoring

- 1 : Negative impact to the area
- 0 : No impact to the area, or equivalent to the baseline scenario
- +1, +2: Positive impact on the area, or shows contribution to the surrounding area of the project

For the project to be considered as a CDM project and receive a Letter of Approval from Thailand, the project must have a positive score in each group of criteria and the total score must be positive. **The SD criteria is under improvement.**

1. Natural Resources and Environment Indicators

Indicators
Environmental Indicators
Reduction of greenhouse gases under the Kyoto Protocol
Air pollution
Noise pollution
Odor
Wastewater management
Waste management
Soil contamination
Underground water contamination
Hazardous waste management
Natural Resources Indicators
Water demand and utilization efficiency
Soil / coastal / river bank erosion
Green areas
Other indicators that have significant impact

2. Social Indicators

Indicators
Public participation
Support of social, cultural, and sufficiency economy development activities
Workers and nearby community health

3. Technology Development and/or Technology Transfer Indicators

Indicators
Technology development
End of project life plan or end of crediting period plan that the project activity has adopted
Capacity building for personnel

4. Economic Indicators

Indicators
Employment
Additional stakeholder income
Renewable energy utilization
Energy efficiency
Local content

Source: Thailand Greenhouse Gas Management Organization (TGO)

http://www.tgo.or.th/english/index.php?option=com_content&view=article&id=24:sustainable-development-criteria&catid=27:approval-process&Itemid=45

Crown Standard for Thai CDM Projects



Thailand Greenhouse Gas Management Organization (TGO) launched its own Crown Standard for Thai CDM Projects after consulting with the Gold Standard Foundation. TGO expects the Crown Standard to become an incentive for Thai CDM projects to contribute more to the environment and to society. In addition, the Thai CERs will be internationally recognised and gain more value added.

Application: The projects requesting for the Letter of Approvals (LoAs) will be autonomously considered for its eligibility to the Crown Standard. Projects approved and given LoAs before 1 December 2009 can apply for the Crown Standard without any fee.

Validity: The Crown Standard is valid for 3 years from the issuance date and TGO reserves the right to revoke the Crown Standard should the project fail to meet any of the specifications as required by the Crown Standard. In addition, the project will be closely monitored by TGO's network to ensure the sustainable development taken place on the society and environment as well as maximum benefits to local communities according to the requirements of the Crown Standard.

Criteria for Thai CDM Projects Eligible to Crown Standard

Crown Standard will be given to Thai CDM projects that meet the following criteria of the sustainable development criteria assessment.

1. The project that earns a total score and the score of environmental category equal to or higher than "B" level.
2. The project has to organise a stakeholder consultation in the form of public participation process (not just to inform the public), and the project must demonstrate that it contributes benefit from income from carbon credits to local communities, or the project perform CSR. In conclusion, the project must earn a social category score in Item 1 equal to or higher than 1.
3. The project that earns the score of social category in Item 2 (supporting social activities, culture and self-sufficient economy) equal to or higher than 1, or the project earns the score of social category in Item 3 (health and sanitation of workers and nearby communities) equal to or higher than 2.

List of Crown Standard CDM Projects (As of November 1, 2011)

Project Type	Number of Projects			Average Annual Emission Reduction (tCO ₂)
	Approved	Registered	Total	
Waste heat utilization	6	3	9	51,575
Biomass		1	1	70,772
Biogas	4	1	5	63,887
Fuel switch	1		1	419,759
Hydro power	1		1	4,375
Total	12	5	17	75,207*

Note: The latest update on TGO website was 8 March, 2011.

Source: Thailand Greenhouse Gas Management Organization (TGO)

<http://www.tgo.or.th/english/index.php?option=com_content&task=category§ionid=8&id=34&Itemid=55>

* This value is not the total of average annual emission reduction of each project type, but average annual emission reduction of all the seven project types.

CDM Relevant Information

Kyoto Protocol Ratification Status

Date of signature of Climate Change Convention	12 June 1992
Date of ratification of Climate Change Convention	28 December 1994
Date of signature of Kyoto Protocol	02 February 1999
Date of ratification of Kyoto Protocol	28 August 2002
Establishment of DNA (TGO)	06 July 2007

Source: Interview with TGO, UNFCCC <<http://maindb.unfccc.int/public/country.pl?country=TH>>

CDM Relevant Regulation

Type* and Sizes of Projects Requiring EIA (Environmental Impacts Assessment) Report

Type	Size
Thermal power plant	10MW or more
Oil refinery	All sizes
Cement industry	All sizes
Pulp industry	Production capacity of 50 tons/day or more
Iron and/or steel industry	Production capacity of 100 tons/day or more

Type	Size
Oil and gas pipeline system	All sizes
Mining	All sizes
Sugar production	All sizes
Chemical fertiliser industry using chemical process	All sizes
Central waste treatment plant as defined by the Industry Act	All sizes

Source: Office of Natural Resources and Environmental Policy and Planning

<http://www.onep.go.th/eia/index.php?option=com_content&view=article&id=67:2010-10-04-22-39-53&catid=4:2010-09-16-04-32-17&Itemid=10>
(Thai only)

* Excerpt of projects types which are relevant to CDM.

Contact Information

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References

- Thailand Greenhouse Gas Management Organization (TGO) :
<http://www.tgo.or.th>
- Market Mechanism Group, Institute for Global Environmental Strategies (IGES)
<http://www.iges.or.jp/en/cdm/index.html>

Nozomi Okubo and Miaomiao Zhang, IGES Market Mechanism Group **December 2011**

Acknowledgement

Data and information on Thailand CDM projects for DNA approval was provided by the TGO. The valuable information and comments to this issue of CDM Country Fact Sheet received from TGO were greatly appreciated.