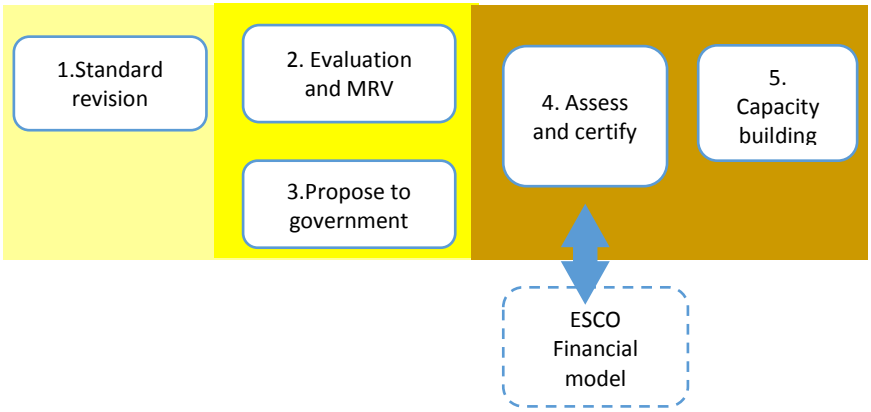
United Nations
Framework Convention on
Climate Change

NAMA for Recognition

A Overview

A.1 Party	Thailand
A.2 Title of Mitigation Action	Greening Thailand's Government Buildings
A.3 Description of mitigation action	According to Department of Alternative Energy Development and Efficiency Database, in 2015 government buildings accounted for 21 % of the total energy use by buildings in Thailand with grow projected at 3.3 % per year. [1] Building new energy efficient/green buildings or retrofitting existing government buildings is often economically viable and can further stimulate private investment in commercial and residential sectors. Current government policy plans retrofits based on the operational age of buildings and does not take into consideration the potential to achieve higher levels of energy efficiency. Further, there is no support to achieve standards beyond basic Building Energy Code requirements for new government buildings nor is there an existing system to assess and collect operational energy performance data of government buildings. The proposed NAMA engages the Pollution Control Department (PCD) to implement a green building standard and certification scheme for existing government buildings. It will support the National Pollution Control Committee in the development of an energy efficiency standard for existing government buildings. Additional activities include MRV, and capability-building.The financial support is expected via ESCO model (at a later stage). This NAMA seeks to stimulate private buildings to adopt green building standards through public sector leadership.



	The actions proposed in this NAMA will support Thailand's INDC of 20% emissions reduction from BAU by 2030. It is also in line with Thailand's national goal of reducing energy intensity by 30% by 2036, compared to 2010 levels.

A.4 Sector

- ☐ Energy supply
- ☐ Transport and its Infrastructure
- ☒ Residential and Commercial buildings
- ☐ Industry
- ☐ Agriculture
- ☐ Forestry
- ☐ Waste management
- ☐ Other <Pls enter Other text here>

A.5 Technology

- ☐ Bioenergy
- ☐ Cleaner Fuels
- ☒ Energy Efficiency
- ☐ Geothermal energy
- ☐ Hydropower
- ☐ Solar energy
- ☐ Wind energy
- ☐ Ocean energy
- ☐ Carbon Capture and Storage
- ☐ Low till / No till
- ☐ Land fill gas collection
- ☐ Other <Pls enter Other text here>

A.6 Type of action

- ☐ National/ Sectoral goal
- ☐ Strategy
- ☒ National/Sectoral policy or program
- ☐ Project: Investment in machinery
- ☐ Project: Investment in infrastructure
- ☐ Project: Other
- ☐ Others: <Pls enter Other text here>

A.7 Greenhouse gases covered by the action

- ☒ CO_2
- ☐ CH_4
- ☐ N_2O
- ☒ HFCs
- ☐ PFCs
- ☐ SF_6
- ☐ Other <Pls add in text here>

B National Implementing entity

B.1.0 Name	Pollution Control Department (PCD)
B.1.1 Address	92 Soi Phahon Yothin7, Phahon Yothin Road, Sam Sen Nai Phayathai District, Bangkok 10400
B.1.2 Contact Person	Ms. Mothinee Aopreeya
Alternative Contact Person	Ms.Jarinporn Tippamongkol
B.1.3 Phone	0 298 2091
Alternative Phone	0 2298 2310
B.1.4 Email	mothinee.a@pcd.go.th
Alternative Email	jarinpcd@gmail.com

C. Expected timeframe for the implementation of the mitigation action

C.1 Number of years for completion	4 years

C.2 Expected start year of implementation 2018

D.1 Used Currency Thai Baht
Conversion to USD 35 Baht = 1 USD

E Cost

E.1.1 Estimated full cost of preparation 490,000 baht
Conversion to USD 14,000 USD

E.1.2 Comments on estimated full cost of preparation
The preparation cost corresponds to the revision of the Green Building Standard Report and evaluation submission to Government Capacity Building activities. Details in the attached files.

E.2.1 Estimated full cost of implementation 190,000,000 baht
Conversion to USD 5,428,571 USD

E.2.2 Comments on estimated full cost of implementation
The full implementation cost covers maintenance cost of participating buildings during 10 year time. Details in the attached files.

E.3.1 Estimated incremental cost of implementation 9,200,000 baht
Conversion to USD 262,858 USD

E.3.2 Comments on estimated incremental cost of implementation
The incremental cost of the project covers Policy making, MRV and Capacity Building.

Policy making	200,000 baht	(5,714 USD)
MRV system	8,200,000 baht	(234,286 USD)
Capacity building	800,000 baht	(22,858 USD)

F Estimated emission reductions

F.1 Amount 1,634

F.2 Unit tCO2/ years

F.3 Additional information (e.g. if available, information on the methodological approach followed):
The estimated emission reduction is divided into (1) project emission reduction based on the assumption that 10 buildings per year will join the project and (2) whole potential reduction which targets all large government buildings joining under government policy

- Project potential 1,634 tCO2/yrs
- All large government bldg (639 Bldg.) 98,808 tCO2/yrs

G.1 Other indicators of implementation :

1. Green building labelling scheme is set up and applied to existing government buildings.
2. Percentage of designated government buildings to achieve green building label by 2020.

	3. Develop MRV framework for collection and reporting of operational energy use in buildings. 4. Develop sustainable financing framework for energy efficiency buildings. 5. No. of trained personnel for the green government buildings.
H.1 Other relevant information including co-benefits for local sustainable development	
	Economic: (1) Reduced utility cost of government budget; (2) Increased energy security from demand-side reductions; (3) Increased market demand for energy efficiency products and business; (4) Increased productivity from a greener and healthier work environment. **Environmental:** (1) Reduced GHG emissions from reduced electricity generation; (2) Reduced use of water and other natural resources; (3) improved government building environment. **Social:** (1) Positive health effects from better air quality; (2) Job creation and economic development; (3) Capacity building and skills development.
I Relevant National Policies strategies, plans and programmes and/or other mitigation action	
I.1 Relevant National Policies	Energy Efficiency Plan (2015-2036) Thailand Climate Change Masterplan (2011-2050)
I.2 Links to other mitigation actions	DEDE Building label
J Attachments	
J.1 Attachment description	the attachment includes 2 files: 1.cost and potential 2.Project plan
J.2 File	1.cost_and_potential.pdf 2.project plan.pdf

1. http://www.eppo.go.th/index.php/th/component/k2/item/11342-energy-statistics-2559 ,Energy report,EPPO,Ministry of energy.