

ANNUAL WORK PLAN 2018

Country: Viet Nam

Project Title: Energy Efficiency Improvement in Commercial and High-Rise Residential Buildings in Viet Nam

UN One Plan III Focus area(s):

Focus area 1: Inclusive, Equitable and Sustainable Growth

Expected OP

Outcome(s)/Indicator(s):

Outcome 1.3: By 2016, key national and sub-national agencies, in partnership with the private sector and communities, have established and monitor multi-sectoral strategies, mechanisms and resources to support implementation of relevant multilateral agreements and effectively address climate change adaptation, mitigation and disaster risk management

Outcome Indicator 1: CO2 emissions, total, per capita and per \$1 GDP (PPP)

Expected OP Output(s) and Indicator(s):

Output 1.3.3: A national system for Reduced Emissions from Deforestation and forest Degradation (REDD), and Nationally Appropriate Mitigation Actions (NAMAs) for a number of strategically chosen sectors and localities are formulated and operationalized with clear potential benefits

Output Indicator 1: Number of sub-sectors/ cities/ towns/ provinces with NAMAs developed and submitted to an international register

Implementing Entity:

Ministry of Construction (MOC)

Brief Description

The Project has the goal to reduce intensity of GHG emissions from the building sector in Viet Nam. The project objective is to improve the energy utilization performance of commercial and high-rise residential buildings in Ho Chi Minh and Hanoi. Realization of this objective will be achieved through implementation of three components (1) Improvement and Enforcement of Energy Efficiency Building Code; (2) Building Market Development Support Initiatives, and (3) Building EE Technology Applications and Replications. Each component comprises a number of complementary activities designed to remove barriers to the stringent enforcement of the revised EEBC, and to the greater uptake of building energy efficiency technologies, systems, and practices in commercial and residential buildings. By EOP, the GEF investment will have catalysed direct GHG emission reduction of about 37,680 tCO₂e. The cumulative direct reduction in GHG emissions over the lifetime of the project is envisioned to be 236,382 t CO₂e.

Brief Summary of the AWP 2018

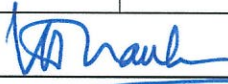
This is the third year of the project implementation with significant activities that are planned to strongly push up the implementation. Overall, the 2018 annual work plan aims at providing Ministry of Construction and related beneficiaries with technical assistance in (i) improvement of the policy framework for application of the revised energy efficiency building code QCVN 09:2017/BXD through consolidation of related database and development of testing standards; (ii) delivery of initial training to energy assessors and ESCOs; and (iii) energy efficient measures applied to selected buildings.

Expected Results

- Energy performance data for selected building construction materials and end-use equipment are fully established;
- At least 03 testing and/or technical specification standards are drafted;
- A national energy consumption benchmark is recommended as a result of analysed energy survey data;
- A building energy consumption M&V scheme is established.
- Training needs of energy assessors, ESCOs and CEEBs are identified;
- Technical support is provided to 05 selected new and at least 08 existing buildings;
- A communication program is implemented with relevant networks developed.

Programme Period:	2012-2016	Estimated annualized budget: US\$ 923,000
Atlas Award ID:	00084022	Allocated resources: US\$ 923,000
Project ID:	00092225	○ Regular: (GEF): US\$ 923,000
PIMS #	5245	○ Government
Start date:	05 April 2016	○ Others:
End Date	05 April 2020	
Management Arrangements	NIM	

Agreed by Executing Entity:


_____ Date: _____

Le Trung Thanh
National Project Director
Director General, Department of Science, Technology and
Environment, MOC

Agreed by UNDP:


_____ Date: 20/3/18

Akiko Fujii
Deputy Country Director
United Nations Development Programme

ANNUAL WORK PLAN 2018

Project code & title: 00092225; Energy Efficiency Improvement in Commercial and High-Rise Residential Buildings in Viet Nam
 Implementing Partner: Ministry of Construction

Currency Rate: \$22.772

EXPECTED OUTPUTS And baseline, associated indicators and annual targets	TIMEFRAME						RESPONSIBLE PARTY	PLANNED BUDGET		Challenges, solutions and other issues
	Q1	Q2	Q3	Q4	Funding Source	Budget Description		Amount (USD)		
1	3	4	5	6	7	8	9	10	11	
2										
UN One Plan Output 1.3.3: A national system for Reduced Emissions from Deforestation and forest Degradation (REDD), and Nationally Appropriate Mitigation Actions (NAMAs) for a number of strategically chosen sectors and localities are formulated and operationalized with clear potential benefits										
Output Indicator 1: Number of sub-sectors/ cities/ towns/ provinces with NAMAs developed and submitted to an international register										
Activity Result 1.0 : All output results planned in this year are well guided.										
Act.1: Procure one international senior expert on Strategic and Quality Advice (ISTA)										
	x					GEF				
Act. 2: Provide PMU and consultants with guidances for implementation of Com. 1 activities;										
	x	x	x	x		GEF	71200	International Consultants		0 Cost to be covered in Component 3
Act. 3: Report the overall progress, quality of related activities and recommend next steps.										
Outcome 1.1: Enforced, improved and comprehensive policy, legal, and regulatory frameworks on the energy efficient design, construction and operation of commercial and high-rise residential buildings										
Output 1.1.1:										
Improved and enforced implementing policy framework and regulations on EE in buildings										
Indicators:										
1. Availability of energy performance data for selected building construction materials and end-use equipment										
	x					GEF				To be procured by UNDP as agreed in 2017.
2. Number of policies/ roadmaps and regulations on EE issued										
Baseline 2017: 1. There is neither study on actual energy performance data nor technical and economic justifications of high-rise buildings at project outset.										
	x	x	x	x		GEF	71300	Local Consultants	18,888	The expert need to work with Institute of Construction Materials, ECC HCM, etc. who are experienced in building material market in Vietnam for establishment of related database. Contract value: \$18,888
2. A law, decree No.21 and related circulars, especially EE building code of construction sector promulgated but need improvements for better application.MOC issued the revised EE code 09/2017/BXD										
	x					GEF				A consultation workshop: \$2,400 (\$80/ pax x 30pax) To be advised by ISTA
Activity Result 1.1.1.3: Prepared technical and economic justifications of EE promotions in the building sector in Viet Nam										

project outset. Target 2018: 1&2 The EE certification approach is available in QIV. MoV: 1.1 Related report; 1.2. Annual Progress Report	Act 2: Draft the approach/ methodology	x	x	x	x	UNDP	MOC	GEF	71300	Local Consultants	15,116	The expert was contracted in 2017 contract value: \$33,601 The last instalment to be paid in 2019
	Activity Result 1.1.2.2: A building certification, labeling scheme tested											This activity will be continued in the next year. To be guided by ISTA
	Act 1: Procure one firm for testing and finalisation of building certification/ labeling scheme.				x		MOC	GEF				To be procured this year only. The firm will start performing the contract next year.
	Total for Output No. 1.1.2										15,116	
	Total for Outcome 1.1										96,228	ATLAS ACTIVITY 2
Outcome 1.2: Strengthened compliance of the energy efficiency building code for commercial and high-rise residential buildings in Hanoi and HCMC												
Indicator: % of building practitioners nationwide that reference the EE design guideline to achieve a higher level of EE than the EBBC requirements by EOP; % of commercial and high-rise residential buildings referencing M&V schemes in EE implementation; % of overall commercial and high-rise residential building stakeholders that are satisfied with availability and quality of energy benchmarking data Baseline: 20%, 0%, 20% respectively. Target: 20%, 0%, 20% respectively. (No assessment to be done this year) MoV: N/A												
Output No. 1.2.2 Established and implemented building and project measurement & verification (M&V) scheme Indicators: 1. Availability of assessment results of Project M&E targets; 2. Availability of assessment results of Building M&E targets; Baseline 2017: a draft M&V tool available at end of 2017. 2. No study on the building EE available at the project outset. Target 2018: 1. Annual and Mid-term assessment results available in late 2018. 2. A building M&V scheme established at end of 2018. M&V: 1. Annual and Mid-term M&E reports. 2. A building M&E Tool approved; 1.2. Annual Progress Report												
	Activity Result 1.2.2.2: Development and implementation of EE Building M&V scheme											This activity will be continued in the next year. To be guided by ISTA
	Act 1: Procure one national expert for development and implementation of EE building M&V scheme			x	x		MOC	GEF				Same expert as 1.1.2.1.
	Act 2: Draft and complete the building M&V scheme;			x	x		MOC	GEF			10,076	To be consulted with USAID during TOR development. This can become part of the EE certification approach as mentioned in
	Activity Result 1.2.2.3: Testing of the M&V scheme on selected EE buildings											
	Act. 1: Procurement of a Building M&V Testing Firm				x		MOC	GEF				
	Activity Result 1.2.2.4: A project M&E tool established and applied.											
	Act. 1: Develop the project M&E tool - Consult with relevant stakeholders;	x					MOC	GEF	71300	Local Consultants	9,610	
	Act. 2: Consult with relevant stakeholders to finalize the reports; - Result consultation WS (50 pars);		x				MOC	GEF				A consultation workshop: \$2,400 (\$80/ pax x 30pax)
	Act. 3: Carry out the M&E activities at mid-term phase and at end of the year		x	x			MOC	GEF	71300	Local Consultants	0	Cost covered in Activity 1, Result 1.2.2.4.

<p>Output No. 1.2.3 Established and implemented building energy benchmarking system that is linked to the certification scheme</p> <p>Indicators:</p> <p>1. Availability of a building energy benchmarking system that is linked to the certification scheme</p> <p>Baseline 2017: 1. No building energy benchmarking system and an information disclosure program available at the project outset. A energy consumption database of 255 buildings available at MOC.</p> <p>Target 2018:</p> <p>1. SEC and building energy benchmarking system report available in QIV.</p> <p>MoV:</p> <p>1. Technical report, 1. Annual Progress Report</p>	<p>Act.4: Carry out surveys, collect technical information for analysis of achieved results</p>	x	x	MOC	GEF	71300	Local Consultants	0	\$3500 as estimated.
<p>Total for Output No. 1.2.2</p>									
<p>Activity Result 1.2.3.1: SEC profiles for buildings developed</p>									
<p>Act.1: Procure one national expert on SEC profile and energy benchmarking.</p>	x		UNDP	MOC	GEF		Local Consultants		To be procured by UNDP. Total contract estimated: \$26,680
<p>Act. 2: Develop the SEC profile for buildings. - Consult with relevant stakeholders;</p>	x		UNDP	MOC	GEF	71300	Local Consultants	18,816	The International Expert on SEC profile was recruited in 2017. Contract value: \$31,350.
<p>Act.3: Organize consultation WS on results</p>	x		UNDP	MOC	GEF	71200	International Consultants	31,350	A consultation workshop: \$2,400 (\$80/ pax x 30pax)
<p>Activity Result 1.2.3.2: A building energy benchmarking system developed and implemented</p>									
<p>Act. 1: Develop the building energy benchmarking system</p>		x		MOC	GEF				Developed this year only. Cost combined in 1.2.3.1
<p>Total for Output No. 1.2.2</p>									
<p>Activity Result 1.2.4.1: Studies of overall and detailed energy consumption of selected buildings in the North implemented</p>									
<p>Act. 1: Procure a firm on energy consumption in the North</p>	x			MOC	GEF				IE on SEC was recruited by UNDP in 2017: \$31,350.
<p>Act.2. Develop the methodology for the studies of overall and detailed energy consumption of selected buildings in North (and the South)</p>	x	x	UNDP	MOC	GEF				80% to be paid this year.
<p>Act.3. Carry out the studies in the North</p>	x	x		MOC	GEF	72100	Contractual services - Companies	35,510	Paid by the contractor
<p>Act.4. Methodology and Result Consultation WSS</p>	x	x		MOC	GEF	72100	Contractual services - Companies	0	
<p>Activity Result 1.2.4.2: Studies of overall and detailed energy consumption of selected buildings in the South and Centre implemented</p>									
<p>Act. 1: Procure a firm on energy consumption in the Centre and South.</p>	x	x		MOC	GEF				

MoV:

1. Raw data collected;
2. Technical draft reports;

1.2. Annual Progress Report

Act.2. Carry out the studies in the South and Centre																				80% to be paid this year.
																				52,527
Act.3. Methodology and Result Consultation WSS																				0
																				Paid by the contractor.
Total for Output No. 1.2.2																				88,037
Total for Outcome 1.2																				157,889
Communication																				2,000
Workshop and Meeting																				6,600
																				As described in each activity, TOR consultation meetings and other technical meetings that cannot be defined now, at the planning period.
DSA and travel																				7,532
Translation Cost																				For PMU staff and/ or individual consultants
Advertisement Cost																				500
Other Cost																				500
Total for Outcome 1																				271,748
OUTCOME 2: Increased local capacity in the EE design, construction and operation of commercial and high-rise residential buildings																				
Same as in Outcome 1																				
Activity Result 2.1.0. International Technical Advisor providing technical inputs and advice to project activities.																				
Act. 1: Provide PMU and consultants with guidances for implementation of Com. 2 activities;																				0
Act. 2: Report the overall progress, quality of related activities and recommend next steps.																				
Activity Result 2.1.1: Development and Approval of Innovative Mechanisms for EE Buildings																				
Act. 1.1: Procure national consultants to help develop the technical norm for EE buildings and/ or review of existing financing support mechanisms.																				
Act. 1.2: Procure an international expert to develop the innovative mechanisms.																				
Project Output No. 2.1: Increased local capacity in the EE design, construction and operation of commercial and high-rise residential buildings																				
Indicators:																				
1. # innovative mechanisms for EE buildings;																				
2. Availability of economic evaluation toolkits for EE building projects.																				
Baseline 2017: 1&2. No innovative mechanisms and economic evaluation toolkits for EE																				

ATLAS ACTIVITY 3

Development and Approval of Innovative Mechanisms for EE Buildings

Local Consultants

International Consultants

MOC

UNDP

GEF

71300

71200

International Consultants

International Consultants

<p>buildings developed yet. Target 2018: 1. A draft innovative mechanism submitted to PMU in QIV. 2. A draft economic evaluation toolkits report submitted to PMU in QIV. MoV: 1. Draft mechanism. 2. Draft toolkits; 1&2. Annual Progress Report</p>	<p>Act. 2. Develop the methodology and draft the report.</p>	x	x	MOC	GEF	71300	Local Consultants	5,760	To be paid for the methodology (estimated).
<p>Total for Output No. 2.1</p>								5,760	
<p>Output No. 2.2: Fully operational centers for energy efficiency in buildings</p> <p>Indicators: 1. Availability of training curriculum 2. No of staff assessors trained/ with enhanced capacity Baseline 2017: 1.2. CEEB's staff capacities are limited as assessed by PMU during 2017. Target 2018: 1. The training need assessment report; frameworks and plan available in QIII. 2. 50 target trainees trained. MoV: 1&2. Reports/ plans; 1.2. Annual Progress Report</p>	<p>Activity Result 2.2.1: Situation analysis and training needs of Energy Assessors & CEEBs in Hanoi and HCMC conducted.</p> <p>Act.1: Procure national experts on EE Capacity Building Act. 2: Procure one international expert on EE Capacity Building Act 3: Develop a report on situation analysis of CEEBs and training needs of energy assessors, CEEBs and ESCOs in Hanoi and HCMC. Act. 4: Develop the training program. Act 5: Organize a consultation meeting - Methodology consultation; - Final Result Consultation; Act 6: Procure national teams of experts to develop training contents and deliver the training courses to the beneficiaries.</p>	x	x	MOC	GEF	71300	Local Consultants	0	All paid this year. TOR for training courses included. A WS with PMU, UNDP and target trainees. \$2,000
			UNDP	MOC	GEF	71200	International Consultants	10,136	
		x	x	MOC	GEF	71300	Local Consultants	25,152	
			x	MOC	GEF	71300	Local Consultants	13,824	The TGRs for national teams will be clarified after the need assessment completes.
	<p>Activity Result 2.2.2: Organizational frameworks and operational plans of energy assessors group and CEEBs enhanced.</p> <p>Act 1: Develop a report on organizational frameworks and operational plans of energy assessors group and CEEBs Act 2: Organize a consultation meeting with PMU, UNDP and target trainees on the training need assessment results and suggestion for training programme</p>	x	x	MOC	GEF	71300	Local Consultants		Same consultant as mentioned in 2.2.1. Cost covered in 2.2.1
	<p>Activity Result 2.2.3: The training and demonstration kits for EE technologies, systems and applications housed at the Hanoi Energy Management Staff Training Center of ECC in Hanoi</p>								\$2,400

Act 1. Purchase and install the equipment	x	x			MOC	GEF	72200	Equipment	50,000	IOR completed in 2017.	
Act 2. Complete the operational plan		x	x		MOC	GEF				To be developed by ECC Hanoi.	
Total for Output No. 2.2											
Activity Result 2.3.1: Trained Energy Assessors to implement awareness and training programs to promote EE in the building sector											
Act. 1. Develop the training curriculum framework and main outlines		x	x		UNDP	MOC	GEF	71200	International Consultants	The ISTA, NSTA shall guide the national consultant during the whole process. Cost covered in the activity 2.1.0	
Act 2. Develop training documents - Organize a consultation meeting - Methodology consultation (40 pairs);		x	x		MOC	GEF	71300	Local Consultants		Same consultant as mentioned in 2.2.1	
Act 3. Organize training courses			x	x	MOC	GEF				Draft available in 2017 only. Cost covered in 2.2.1	
Activity Result 2.3.2: Capacity building program for Energy Assessors, CEEB's and MOC's Staff implemented.											
Act 1. Organize an overseas study tour on EE building design and regulation framework - Develop the capacity building report after the study tour with findings and recommendations.				x	UNDP	MOC	GEF	71600	DSA and Travel Cost	QIII.2018. \$60,000 as expected.	
Activity Result 2.3.3: Technical and Coordination support to project activities provided											
Act 1. Provide technical and coordination support to project activities	x	x	x	x	MOC	GEF	71800	Local Consultants	85,299	PM, NSTS, PSO, Accountant February to December for PM and Accountant to be paid here.	
Total for Output No. 2.3											
Activity Result 2.4.1: Operational support program for ESCOs in the negotiation and implementation of building energy performance contracts											
Act. 1: Procure one international expert on Capacity Building Program for ESCOs			x		UNDP	MOC	GEF	International Consultants		To be procured by UNDP or combined in the tasks of ISTA.	
Act 2: Develop the program			x		MOC	GEF	71200	International Consultants	0	Combined in 2.2.1 above.	
Act 3. Develop a training need assessment.			x		UNDP	MOC	GEF	71300	Local Consultants	7,680	Combined in 2.2.1 above.
Activity Result 2.4.2: Design and implementation of a project communication program, especially an outreach program for ESCOs											
Act 1. Develop the project communication program	x	x			MOC	GEF	71300	Local Consultants	4,213	This expert will also support the other two outcomes.	
<p>Output No. 2.3: Trained CEEB staff to implement awareness and training programs to promote EE in the building sector</p> <p>Indicators:</p> <p>1. % of stakeholders in the building sector that are satisfied with services provided by Energy Assessors;</p> <p>2. % of CEEB trainees that are engaged in EE building designs, implementation and M&V; Baseline 2017: 1&2. 0%. Initial surveys indicate that CEEBs can be trained and capacity improved to implement the programs. However, beneficiaries can be energy surveyors also.</p> <p>Target 2018:</p> <p>1&2. Training documents available in QIII. 1&2. Experience gained from the study tour.</p> <p>MoV:</p> <p>1&2. Draft outline; 1&2. Study tour report. 1.2. Annual Progress Report</p>											
<p>Output No. 2.4: Operational support program for ESCOs in the negotiation and implementation of building energy performance contracts</p> <p>Indicators:</p> <p># Availability of a support program for ESCOs; # commercial and high-rise residential buildings that implement EE projects using the ESCO models</p> <p>Baseline 2017: 1. No support program for ESCO to negotiate and implement building energy performance contracts available at the project outset.</p>											

systems promoted by the EECB project ; 3. No. of completed M&V exercises in accordance with the guidelines proposed by the project, 4. No. of new EE building projects designed based on or influenced by, the results of the demonstration projects. Baseline 2017: 1.2.3&4. 5%, 5, 0, 5 respectively as baseline indicators at the project outset. 05 new buildings selected with compliance check reports completed in 2017. 08 existing buildings selected with energy survey reports completed for 07 buildings Target 2018: 1. 5% this year. 2.3 5&0 this year. 4. 05 designs with associated action plans approved in Q1. Support reports submitted every 03 months. MoV: 3. Technical support reports. 4. Designs with action plans approved by PMU and UNDP; 4. Annual Progress Report.	Act 3. Develop reports for the technical support during design phase and related progress reports	x	x	MOC	GEF	71300	Local Consultants	37,216	35% contract value paid this year.
	Activity Result 3.2.2: Demonstration of EE in buildings of existing buildings (10 - 12 existing buildings) implemented.								Target this year: 05 - 07 buildings
	Act 1. Procure a national firm on EE Building Demonstration for existing buildings	x		MOC	GEF				Under bid evaluation by PMU. The contract signing can happen in February 2018.
	Act 2. Develop the guidance reports for EE design of demonstration buildings selected in 2017 and seek potential existing buildings (at least 08)	x	x	UNDP MOC	GEF	71200	International Consultants		To be done by IE on EE in buildings. Cost covered in the activity 3.2.1
	Act 3. Develop energy survey reports, feasibility study report, technical support reports for each selected buildings and related progress reports.		x	MOC	GEF	72100	Contractual services - Companies	52,682	35% contract value paid this year.
	Activity 3.2.3: Purchase and installation of monitoring equipment for demonstration projects								
	Act 1. Purchase and installation of monitoring equipment for demonstration projects.	x	x	MOC	GEF	72100	Contractual services - Companies	10,000	Estimated. It can be increased based on the actual needs of the buildings.
	Total for Output No. 3.2							182,106	
	Output No.3.3: Documented and disseminated results and lessons from the demonstrations of implementing EEBC and EE&C in new and existing buildings								
Indicators: 1. # lessons documented and shared, Baseline: 1. 06 demo buildings implemented by USAID, DANIDA and IFC can be lessons learnt for project demo. Target: 1. A lesson-learn report submitted to PMU in QIV. MoV: 1. Lesson-learn report; 1. Annual Progress Report	Activity Result 3.3.1: Documented results and lessons from the demonstration projects								
	Act 1. Collect, analyze and summarize all lessons from the demonstration projects.	x		MOC	GEF	71200	International Consultants		To be done by IE on EE in buildings and inputs to be provided by NEs and NF. Cost covered in 3.2.1.
	Total for Output No. 3.3							0	
	Communication								Including cost for maintenance and operation of EECB website: 200\$/ month.
	Workshop and Meetings	x	x	MOC	GEF	74200	Audio Visual & Print Prod Costs	12,500	As described in each activity, TOR consultation meetings and other technical meetings that cannot be defined now, at the planning period.
	DSA and travel			MOC	GEF	75700	Training, Workshops and Conference	0	For PMU staff and/ or individual consultants
	Translation Cost	x	x	MOC	GEF	71600	Travel Cost	19,699	
		x	x	MOC	GEF	71300	Local Consultants	1,000	

