

ANNUAL WORK PLAN 2019

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 2019

This is the fourth year of the project implementation with intensive activities implemented and key outputs expected to be delivered. Overall, the 2019 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 development of testing standards and norms; (ii) delivery of in-depth training to building practitioners in energy efficiency in buildings; (iii) development of guidelines for design of energy efficiency and beyond code buildings and (iv) energy efficient measures applied to selected buildings.

Expected Results

- At least 05 standards related to EE properties of building materials are developed and submitted for review and approval;
- Specific energy consumption profiles (SEC) and related national energy consumption benchmarks will be determined for 5 typologies of buildings in 2 climate zones as a result of analysed energy consumption survey data;
- An EE labeling scheme for building in operation will be defined and tested.
- Building energy consumption M&V scheme and Information Disclosure programme will be established.
- At least 04 technical training courses organized for at least 100 beneficiaries;
- Technical support is provided to 07 selected new and at least 07 existing buildings;
- EE design and beyond code guidelines is drafted and consulted;
- Key lessons are recorded and shared nationwide.

Programme Period:	2012-2016	Estimated annualized budget: US\$ 855,000
Atlas Award ID:	00084022	Allocated resources: US\$ 855,000
Project ID:	00092225	<input type="radio"/> GEF: US\$ 855,000
PIMS #	5245	<input type="radio"/> Government
Start date:	05 April 2016	<input type="radio"/> Others:
End Date	05 April 2020	
Management Arrangements	NIM	

Agreed by Executing Entity:  Date: 15/2/2019

Vu Ngoc Anh
National Project Director
Director General, Department of Science, Technology and
Environment, MOC

Agreed by UNDP:  Date: 18/2/2019

Akiko Fujii
Deputy Resident Representative
United Nations Development Programme

ANNUAL WORK PLAN 2019

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

Currency Rate: \$ 23.329,00

EXPECTED OUTPUTS And baseline, associated indicators and annual targets	PLANNED ACTIVITIES	TIMEFRAME				RESPONSIB LE PARTY	PLANNED BUDGET			Challenges, solutions and other issues			
		Q1	Q2	Q3	Q4		Funding Source	Budget Description	Amount 2019 (USD)		Commitme nt 17-18 (USD)	Total (USD)	
1	2	3	4	5	6	7	8	9	10	10	10	11	
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													
COMPONENT 1: Improvement and Enforcement of Energy Efficiency Building Code													
Activity Result 1.0 : All output results planned in this year are well guided.													
Act.1: Procure national peer review experts		x	x	x	x	UNDP	MOC	GEF	71300	Local Consultants	7.500	7.500	To increase the quality of deliverables in related activities.
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													
2. Number of policies/ roadmaps and regulations on EE issued etc.													
Baseline 2018: 1. There is neither study on actual energy performance data nor technical and economic justifications of high-rise buildings at project outset.													
2. A law, decree No.21 and related circulars, especially EE building code of construction sector promulgated but need improvements for better application. MOC promulgated QCVN 09:2017/BXD as a replacement of the 2013 version in late 2017. The new code has been in act since June 2018.													
Target 2019: 1. A database of building construction materials and end-use equipment was published on MOC's website in QII.2019 for building practitioners' reference.													
2. Drafts of 05 standards and 01 technical and economic norm of EE in building are submitted to MOC in QIV.2019 for promulgation.													
MoV:													
1.2 Technical reports;													
1.2. Annual Progress Report													
Activity Result 1.1.1.1: Developed compliance guidelines and toolkits													
Activity Result 1.1.1.2: Compiled energy performance data for selected building construction materials and end-use equipment													
Act.1: Finalize the report of the digital database covering building materials, M&E equipment with instructions on how to update, upgrade, manage and migrate data		x				UNDP	MOC	GEF	71300	Local Consultants	7.356	7.356	The expert was contracted in 2018. Contract value: \$18,888 Last payment in 2019: \$7,356
Act. 2: Develop the training document and carry out the training.		x	x			UNDP	MOC	GEF				0	
Act 3: Develop the final report featuring database content, structure as well as training and maintenance materials			x	x		UNDP	MOC	GEF				0	
Activity Result 1.1.1.3: Prepared technical and economic justifications of EE promotions in the building sector in Viet Nam													
Act.1: Develop the report to justify technical and economic benefits of EE promotions in buildings					x	UNDP	MOC	GEF	71200	International Consultants	15.000	15.000	To be developed by the IE on EE in buildings with inputs from new and retrofit consultants. Estimated: 20 mandays plus 1 mission.
Activity Result 1.1.1.4: A completed roadmap and action plan to strengthen EE promotions in the building sector in Viet Nam													
Act. 1: Consult with relevant stakeholders for promulgation. - Result consultation WS (50 pax);		x				MOC	GEF	75700	75700	Training, Workshops and Conference	2.500	2.500	Supported by the policy expert (Mr. Hoa). Cost for the expert covered in 1.1.1.6.
Activity Result 1.1.1.5: Developed standards for promotion of EEBC application													
Act. 1: Develop the methodologies and draft reports on 05 standards on construction materials		x	x	x	x	UNDP	MOC	GEF	72100	Contractual services - Companies	45.000	45.000	Contract signed in 2018. Value: 57,615\$. Estimated disbursement in 2019: \$45,000
Act. 2: Upgrade the existing technical and economic norms of energy efficiency buildings		x	x	x	x	UNDP	MOC	GEF	72100	Contractual services - Companies	27.840	27.840	Contract signed in 2019. Value: \$ 27,840. Estimated disbursement in 2019: \$14,000

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	Act. 3: Consult with relevant stakeholders to finalize the reports; - Result consultation WS for Act. 1 (30 pax); - Result consultation WS for Act. 2 (50 pax)			x	x	MOC	GEF	75700	Training, Workshops and Conference	6.000		6.000	Cost covered by PMU.	
	Activity Result 1.1.1.6: Analysed and defined scope to support the drafting and revision of related laws and decree													
	Act.1: Provide continued support to identification of legal documents to be adjusted/ amended or newly developed	x	x	x	x	UNDP	MOC	GEF	71300	Local Consultants	25.260	5.773	31.033	\$5,773 remaining out of \$23,000 contract value signed in 2018 25,260 for new period (May - Dec 2019). The NC will also support to upgrade the questionnaire for lisensing the construction work permit, peer review policy drafts (standards, norms, etc.)
	Act 2. Procure international expert(s) to support the development of Green Building policies	x	x	x	x	UNDP	MOC	GEF	71200	International Consultants	20.000		20.000	
	Act 3. Procure national firms to to support the development of Green Building policies	x	x	x	x	UNDP	MOC	GEF	72100	Contractual services - Companies	25.000		25.000	
	Act. 4: Organize a consultation workshop on the amendment of Construction Law		x			MOC	GEF	75700	Training, Workshops and Conference	7.000		7.000	The workshop will be hosted by a MOC department, inviting 60 - 70 pax nationwide.	
	Total for Output No. 1.1.1										128.600	58.129	186.729	
Output 1.1.2: Established and operational EE certification scheme for buildings.	Activity Result 1.1.2.1: An EE certification, labeling methodology for buildings developed													
Indicators: 1. Availability of a building certification/labelling scheme 2. Number of buildings tested.	Act.1: Develop the report on M&V and labelling systems and guide the piloting process of the energy certification for finalization of the systems	x	x	x		UNDP	MOC	GEF	71300	Local Consultants		17.996	17.996	Contract signed in 2017: \$33,000. Remaining instalments of appr. 18,000 in 2019.
Baseline 2018: 1&2. No EE certification scheme for buildings established and operated at the project outset. Intenrational experience in EE labeling was summarized.	Act 2: Consult the final results of the energy labeling system for finalization of the related report (40 pax)				x	UNDP	MOC	GEF	75700	Training, Workshops and Conference	4.500		4.500	There will be 5-7 participants from HCM to be invited.
Target 2019: 1. The EE certification system is tested and approved by PMU in QIV.2019. 2. 05 buildings tested in QIII.2019.	Act 3: Develop a report on recommendations of next steps for a comprehensive SEC profiles and energy benchmark for Viet Nam		x	x		UNDP	MOC	GEF		Local consultants			0	A methodology to cover the residential building.
	Activity Result 1.1.2.2: A building certification, labeling scheme tested													
MoV: 1.1 Related report; 1.2. Annual Progress Report	Act.1: Procure one national expert for testing the labeling scheme	x	x			UNDP	MOC	GEF	71300	Local Consultants	8.640		8.640	UNDP may extend the contract with Ms. Ha to support this work.
	Act. 2: Carry out the testing and develop the testing report			x	x	UNDP	MOC	GEF						Results to be reported in the WS mentioned at 1.1.2.1.
	Total for Output No. 1.1.2										13.140	17.996	31.136	
	Total for Outcome 1.1										141.740	76.125	217.865	
Outcome 1.2: Strengthened compliance of the energy efficiency building code for commercial and high-rise residential buildings in Hanoi and HCMC	ATLAS ACTIVITY 2													
Output No. 1.2.1 Approved guidelines that support EE building initiatives and market	Activity Result 1.2.1: Beyond-code guidelines for a higher level of EE in building designs and operations developed													

EXPECTED OUTPUTS And baseline, associated indicators and annual targets	PLANNED ACTIVITIES	TIMEFRAME				RESPONSIBLE PARTY	PLANNED BUDGET				Challenges, solutions and other issues				
		Q1	Q2	Q3	Q4		Funding Source	Budget Description	Amount 2019 (USD)	Commitment 17-18 (USD)		Total (USD)			
1	2	3	4	5	6	7	8	9	10	10	10	11			
Indicators: 1. # EE design guideline developed. Baseline 2018: 1. 1No EE design guideline available at the project outset. Target 2019: 1. Draft EE design guideline available in QIII.2019 M&V: 1. Draft technical guideline; 2. Annual Progress Report.	Act 1. Procure an international expert to develop the design guidelines and beyond-code guidelines	x	x			UNDP	MOC	GEF	71200	International Consultants	30.000		30.000	35 - 40 man-days estimated plus 02 return flights.	
	Act 2. Develop the guidelines			x	x										
	Total for Output No. 1.2.1											30.000	0		30.000
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 2018: 1. A final Project M&E tool available at mid-2018. 2. International practice on building M&V scheme available in 2018. Target 2019: 1. Mid-term review report available in QII.2019 2. A building M&V scheme approved by PMU at end of 2019. M&V: 1. Annual and Mid-term M&E reports. 2. A building M&E Tool approved by PMU; 1.2. Annual Progress Report	Activity Result 1.2.2.2: EE Building M&V scheme developed												Same expert as 1.1.2.1. Payment included in the 1.1.2.1.		
	Activity Result 1.2.2.3: The M&V scheme tested on selected EE buildings												Combined in 1.1.2.2.		
	Activity Result 1.2.2.4: A project M&E tool established and applied.														
	Act. 1: Carry out data collection for project M&E results at MTR phase	x	x	x	x		UNDP	MOC	GEF	72100	Contractual services - Companies		14.017	14.017	Contract signed in 2018: \$28,513, Estimated disbursement for 2019: \$14,017
	Act. 2: Guide the data collection team and finalize the MTR M&E report	x	x					MOC	GEF	71300	Local Consultants	5.615		5.615	
	Act. 3: Develop the 2019 project M&E report				x			MOC	GEF						Payment combined above.
Total for Output No. 1.2.2											5.615	14.017	19.632		
Output No. 1.2.3 Established and implemented building energy benchmarking system that is linked to the certification scheme Indicators: 1. Availability of a building energy benchmarking system that is linked to the certification scheme Baseline 2018: 1. No building energy benchmarking system and an information disclosure program available at the project outset. A energy consumption database of	Activity Result 1.2.3.1: SEC profiles for buildings developed														
	Act. 1: Develop the testing report of the survey templates for data collection and Develop the SEC profile for buildings. - Consult with relevant stakeholders;	x					UNDP	MOC	GEF	71300	Local Consultants	3.890	15.558	19.448	Contract signed in 2018: VND 453,702,600 (19,448). Of which 15,558 committed in 2018 and \$3,890 to be committed in 2019
		x					UNDP	MOC	GEF	71200	International Consultants		39.325	39.325	- Contract signed in 2017: \$31,350, remaining amount: \$15,675 - Contract value added in 2018: \$13,650
Act. 2: Develop the standard on SEC profiles and energy benchmark system for Viet Nam	x	x	x			UNDP	MOC	GEF	72100	Contractual services - Companies		20.938	20.938	A new contract with an institution.	

EXPECTED OUTPUTS And baseline, associated indicators and annual targets	PLANNED ACTIVITIES	TIMEFRAME				RESPONSIB LE PARTY	PLANNED BUDGET			Commitme nt 17-18 (USD)	Total (USD)	Challenges, solutions and other issues	
		Q1	Q2	Q3	Q4		Funding Source	Budget Description	Amount 2019 (USD)				
1	2	3	4	5	6	7	8	9	10	10	10	11	
255 buildings available at MOC. Target 2019: 1. SEC and building energy benchmarking system is defined in QIV.2019 MoV: 1. Technical report; 1. Annual Progress Report	Act 3: Procure one international expert on further development of SEC profiles and energy benchmark, M&V and energy labeling for Viet Nam in future	x	x			UNDP MOC	GEF	71200	International Consultants	0		0 To be determined in mid-year.	
	Act.4: Organize consultation WS on results (30 pax)			x		MOC	GEF	75700	Training, Workshops and Conference	2.400	2.400		
	Activity Result 1.2.3.2: A building energy benchmarking system developed and implemented										Developed this year only.		
	Act. 1: Develop the building energy benchmarking system			x	x	MOC	GEF					Cost combined in 1.2.3.1. The workshop is combined in 1.2.3.1.	
	Activity Result 1.2.3.3: Information Disclosure Program developed for commercial and high-rise residential buildings												
	Act. 1: Procure a national expert to help develop the information disclosure program			x	x	MOC	GEF	71300	Local Consultants	10.000	10.000		
	Total for Output No. 1.2.3									16.290	75.821	92.111	
Output No. 1.2.4 Completed energy consumption survey of selected commercial and high-rise residential buildings Indicators: 1. # buildings surveyed in the North, South and Centre 2. Availability of the survey reports. Baseline 2018: 1. 15 sets of survey results available in 2018 2. No survey report available yet. Target 2019: 1&2. 165 buildings studied and a filled database established in QIV.2019 MoV: 1. 165 sets of survey results and a filled database. 2. Technical draft reports; 1.2. Annual Progress Report	Activity Result 1.2.4.1: Studied energy consumption of selected buildings in the North implemented												
	Act.1. Carry out the studies in the North	x	x	x		MOC	GEF	72100	Contractual services - Companies	20.462	20.462	Remaining contract value.	
	Activity Result 1.2.4.2: Studied energy consumption of selected buildings in the South and Centre implemented												
	Act.2. Carry out the studies in the South and Centre	x	x	x		MOC	GEF	72100	Contractual services - Companies	30.091	30.091	Remaining contract value.	
	Total for Output No. 1.2.4									50.553	0	50.553	
	Total for Outcome 1.2									102.458	89.838	192.296	
	DSA and travel	x	x	x	x	MOC	GEF	71600	Travel Cost	4.500	4.500	For the PMU advisor, PMU staff and/ or consultants	
	Translation Cost	x	x	x	x	MOC	GEF	74200	Translation cost	500	500		
	Advertisement Cost	x	x	x	x	MOC	GEF	72100	Contractual services - Companies	500	500		
	Other Cost	x	x	x	x	MOC	GEF	74500	Miscellaneous	500	500		
	Total for Outcome 1									257.698	165.963	423.661	
COMPONENT 2: Building Market Development Support Activities													
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.												

EXPECTED OUTPUTS And baseline, associated indicators and annual targets	PLANNED ACTIVITIES	TIMEFRAME				RESPONSIB LE PARTY	PLANNED BUDGET				Commitme nt 17-18 (USD)	Total (USD)	Challenges, solutions and other issues	
		Q1	Q2	Q3	Q4		Funding Source	Budget Description	Amount 2019 (USD)					
1	2	3	4	5	6	7	8	9	10	10	10	11		
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 2018: 1&2. No innovative mechanisms and economic evaluation toolkits for EE buildings developed yet. Target 2019: 1. An innovative mechanism proposed to PMU in QIV. 2. A draft economic evaluation toolkit report submitted to PMU in QIV. MoV: 1. Draft mechanism. 2. Draft toolkits; 1&2. Annual Progress Report	Activity Result 2.1.1: Innovative Mechanisms for EE Buildings developed and approved													
	Act 1.: Review incentive mechanisms and develop appropriate one(s) for Viet Nam.	x	x	x		UNDP	MOC	GEF	71300	Local Consultants		14.330	14.330	Contract signed in 2018 by UNDP. Contract value: \$14,330.
	Act 2.: Procure an international expert to peer review the international incentive mechanisms applicable to Viet Nam.	x	x	x		UNDP	MOC	GEF	71200	International Consultants	15.000		15.000	20 man-day estimated plus 1 international return flight.
	Act 3: Organize a consultation workshop on the incentive proposed for Viet Nam (30 pax)				x		MOC	GEF	75700	Training, Workshops and Conference	2.400		2.400	
	Activity Result 2.1.2: Economic evaluation toolkits for EE building projects, data inputs and a detailed implementation plan developed													
Act 1: Develop economic evaluation toolkits for EE building projects, data inputs and a detailed implementation plan - Consult with relevant stakeholders;				x	x	UNDP	MOC	GEF	72100	Contractual services - Companies	0	0	0	
Total for Output No. 2.1										17.400	14.330	31.730		
Output No. 2.2: Fully operational centers for energy efficiency in buildings Indicators: 1. # energy systems installed for training service by EE centre. 2. No of staff/ assessors trained/ with enhanced capacity Baseline 2018: 1.2. 2/4 enery systems installed in 2018. Target 2019: 1. 2 remaining systems installed in Q1.2019. 2. At least 15 trainees benefitted from these systems. MoV: 1&2. Training report by the centre; 1.2. Annual Progress Report	Activity Result 2.2.1: Situation analysis and training needs of Energy Assessors & CEEBs in Hanoi and HCMC conducted.													
	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													
	Act 1. Purchase and install the equipment	x	x				MOC	GEF	72200	Equipment	24.112		24.112	Completion of installation, training and hand-over of two remaining systems.
	Act 2. Complete the operational plan		x	x			MOC	GEF						To be developed by ECC Hanoi.
	Total for Output No. 2.2										24.112	0	24.112	
Output No. 2.3: Trained CEEB staff to implement awareness and training programs to promote EE in the building sector Indicators: 1. Availability of training curriculum 2. No of staff/ assessors trained/ with enhanced capacity Baseline 2018: 1.2. CEEB's staff capacities are limited as assessed by PMU during 2017. Target 2019: 1. A training frameworks, plan and training curriculum available in Q1. 2. At least 50 target trainees trained in	Activity Result 2.3.1: Train Energy Assessors, construction practitioners 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	71300	Local Consultants	13.056	24.880	37.936	Costs for outsourced trainers.
	Act 2. Carry out the training courses			x	x		MOC	GEF	75700	Training, Workshops and Conference	66.305		66.305	There will be 06 technical training courses implemented in 2019 covering all provinces in Viet Nam with 2 participants/ province on average as shown in the training plan and cost estimation.
	Act 3. Conduct post-training assessment			x	x		MOC	GEF	71300	Local Consultants			0	
	Activity Result 2.3.3: Technical and Coordination support to project activities provided													


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		Q1	Q2	Q3	Q4		Funding Source	Budget Description	Amount 2019 (USD)					
1	2	3	4	5	6	7	8	9	10	10	10	11		
Q1.2019. MoV: 1&2. Reports/ plans; 1.2. Annual Progress Report	Act 1. Provide technical and coordination support to project activities	x	x	x	x	MOC	GEF	71800	Project Staff	63.201		63.201	PM, NSTS, PSO, Accountant February to December for PM and Accountant to be paid here.	
	Total for Output No. 2.3									142.562	24.880	167.442		
Output No. 2.4: Operational support program for ESCOs in the negotiation and implementation of building energy performance contracts	Activity Result 2.4.1: Operational support program for ESCOs in the negotiation and implementation of building energy performance contracts												Training for ESCO is combined in Activity 2.3.1	
	Activity Result 2.4.2: Design and implementation of a project communication program, especially an outreach program for ESCOs													
As described in Output No. 2.3	Act 1. Procure a national expert for writing and uploading news and articles on energy efficiency in buildings	x	x	x	x	MOC	GEF	71300	Local Consultants	8.448		8.448	This expert will also support the other two outcomes. A short-term lump-sum contract should be directly signed by PMU for a period of 06 first months (February - July) to avoid quality risks.	
	Total for Output No. 2.4									8.448	0	8.448		
	Translation Cost	x	x	x	x	MOC	GEF	74200	Translation cost	1.000		1.000		
	Advertisement Cost	x	x	x	x	MOC	GEF	72100	Contractual services - Companies	1.500		1.500		
	DSA and travel	x	x	x	x	MOC	GEF	71600	Travel Cost	4.500		4.500	For PMU staff and/ or consultants	
	Other Cost	x	x	x	x	MOC	GEF	74500	Miscellaneous	500		500		
Total for Outcome 2										200.022	39.210	239.232		
COMPONENT 3: Building EE technology applications and replications														
OUTCOME 3: Increased use of EE building materials and application of EE building technologies in HCMC and Hanoi														ATLAS ACTIVITY 4
Same as in Outcome 1	Activity Result 3.0. International Technical Advisor providing technical inputs and advice to project activities.													
	Act 1. Provide technical and coordination support to demonstration activities	x	x	x	x	MOC	GEF	71800	Contractual Services-Imp Partn	11.000		11.000	As decided by PSC, there will be a full-time staff in charge of close coordination and management of demonstration projects.	
	Act. 2: Provide PMU and consultants with guidances for implementation of Com. 2 activities; Act. 3: Report the overall progress, quality of related activities and recommend next steps.	x	x	x	x	UNDP MOC	GEF	71200	International Consultants	120.000	49.700	169.700	6 months for the full-time ISTA in 2019 Contract value added for part-time STA in 2018: \$29,400 Remaining unpaid amount in 2017-18: 20,300	
Output No.3.2: Completed demonstrations of the design, application and operation of EE equipment, building materials and - design	Activity Result 3.2.1: Demonstration of EE in buildings of new buildings (4-6 new buildings) implemented												Target this year: 02-04 buildings	
Indicators: 1. % of new and retrofitted commercial and high-rise residential buildings that are partly or entirely based on EE building materials and applications being promoted and	Act 1. Develop progress reports on technical support to the demonstration buildings	x	x	x	x	MOC	GEF	71300	Local Consultants	36.031	16.868	52.899	02 instalments of the long-termed demo and the whole contract value of the short-termed.	
	Act 2. Develop the technical support reports for for the demonstration projects during construction and running test		x	x	x	MOC	GEF	71300	Local Consultants				Risk: some new buildings (Goldern Lotus and Yen Thuong Training Centre) may delay	

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		Q1	Q2	Q3	Q4		Funding Source	Budget Description	Amount 2019 (USD)	Commitme nt 17-18 (USD)	Total (USD)		
1	2	3	4	5	6	7	8	9	10	10	10	11	
and applications being promoted and demonstrated	Act 3. Organize a contest on EE in building/ Green building design.			x		MOC	GEF	75700	Training, Workshops and Conference	20.000		20.000	This new idea needs to be further consulted with potential partners such as Hanoi Architecture University, Hanoi Civil Engineering Universit, etc.. The cost therefore will be determined later.
2. No. of demonstration projects that adopted EE equipment, building materials and building energy monitoring and management/control systems promoted by the EECB project ;	Activity Result 3.2.2: Demonstration of EE in buildings of existing buildings (10 - 12 existing buildings) implemented.												
3. No. of completed M&V exercises in accordance with the guidelines proposed by the project;	Act 1. Develop the guidance reports for demonstration buildings selected in 2017 & 2018 and seek potential existing buildings (at least 08)		x	x		UNDP	MOC	GEF	72100	Contractual services - Companies		0	Target this year: 05 - 07 buildings
4. No. of new EE building projects designed based on or influenced by, the results of the demonstration projects.	Act 2. Develop energy survey reports, feasibility study report, technical support reports for each selected buildings and related progress reports.			x	x	MOC	GEF	72100	Contractual services - Companies	34.698		34.698	Instalments 3rd and 4th.
Baseline 2018: 1.2.3&4. 5%, 13, 0, 5 respectively as baseline indicators at the project outset. 05 new buildings selected with compliance check reports completed in 2017. 13 existing buildings selected with energy survey/ energy compliance check reports completed for 12 buildings.	Activity 3.2.3 :Purchased and installed monitoring equipment for demonstration projects												
Target 2019: 1. 15% this year. 2.3 21&2 this year.	Act 1. Design the M&V equipment systems	x	x			UNDP	MOC	GEF	71300	Local consultants	5.000	5.000	
4. 05 designs with associated action plans approved in Q1. Support reports submitted every 03 months.	Act 2. Purchase and installation of monitoring equipment for demonstration projects.		x	x	x	UNDP	MOC	GEF	72100	Contractual services - Companies	20.000	20.000	Estimated. It can be increased based on the actual needs of the buildings.
MoV: 3. Technical support reports. 4. Designs with action plans approved by PMU and UNDP;	Total for Output No. 3.2									115.729	16.868	132.597	
4. Annual Progress Report	Activity Result 3.3.1: Documented results and lessons from the demonstration projects												
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:	Act 1. Support demonstration activities and collect, analyze and summarize all related lessons.	x	x	x	x	MOC	GEF	71200	International Consultants	70.000	31.920	101.920	To be done by IE on EE in buildings and inputs to be provided by NEs and NF. Cost covers inputs for 3.2.1
1. # lessons documented and shared;	Act 2. Organize a demo result dissemination workshop (50 pax)		x			MOC	GEF	75700	Training, Workshops and Conference	10.000		10.000	Both in Hanoi and HCM. \$5,000 each.
Baseline: 1. 06 demo buildings implemented by USAID, DANIDA and IFC and 13 selected buildings can be lessons learnt for project demo.	Total for Output No. 3.3									80.000	31.920	111.920	
Target: 1. A lesson-learnt report submitted to PMU in QII.	Communication (including a video clip on EE buildings)			x	x	MOC	GEF	74200	Audio Visual & Print Prod Costs	12.500		12.500	Including cost for maintenance and operation of EECB website: 200\$/ month.
MoV: 1. Lesson-learnt report; 1. Annual Progress Report	DSA and travel	x	x	x	x	MOC	GEF	71600	Travel Cost	10.000		10.000	For PMU staff and/ or individual consultants
	Advertisement Cost	x	x	x	x	MOC	GEF	72100	Contractual services - Companies	500		500	
	UNDP Direct technical services	x	x	x	x	UNDP	GEF	71300	UNDP direct technical service	20.000		20.000	
	Other Cost	x	x	x	x	MOC	GEF	74500	Miscellaneous	500		500	
Total for Outcome 3										370.229	98.488	468.717	
Project Management													

EXPECTED OUTPUTS And baseline, associated indicators and annual targets	PLANNED ACTIVITIES	TIMEFRAME				RESPONSIB LE PARTY	PLANNED BUDGET					Challenges, solutions and other issues		
		Q1	Q2	Q3	Q4		Funding Source	Budget Description	Amount 2019 (USD)	Commitme nt 17-18 (USD)	Total (USD)			
1	2	3	4	5	6	7	8	9	10	10	10	11		
Indicators: 1. % disbursement rate; 2. # management/ field review reports submitted timely; Baseline: 1&2 1 PM, 1 NTS and 1 accountant/ admin recruited in 2016. Target: 1. 80% budget disbursed this year and all management/ field reports submitted timely; 2. 100% management report submitted timely. MoV: 1&2. Project records 1. Annual Progress Report	Salary for Project Staff	x				MOC	GEF	71800	Project Staff	2.799		2.799	January salary for Admin/ Accountant and PM	
	Office's equipment	x	x	x	x	UNDP	MOC	GEF	72200	Equipment and Furniture	1.000		1.000	Contingency.
	Office supplies	x	x	x	x		MOC	GEF	72500	Office supplies	5.752		5.752	
	Project Management Meeting Cost	x	x	x	x		MOC	GEF	75700	Training, Workshops and Conference	1.000		1.000	PMU/UNDP/PSC Meeting costs
	Project Mid-term Review (MTR)	x	x	x		UNDP		GEF	71200	International Consultants		13.908	13.908	Contract signed in 2018: \$13,908
		x	x	x		UNDP		GEF	71300	Local Consultants		2.880	2.880	Contract signed in 2018: \$ 2,880
	UNDP cost recovery charges	x	x	x	x	UNDP	MOC	GEF	74500	UNDP cost recovery charges	13.000		13.000	
	Audit				x	UNDP	MOC	GEF	74100	Audit	2.500	2.042	4.542	
	DSA and travel	x	x	x	x		MOC	GEF	71600	Travel Cost	500		500	
	Others	x	x	x	x		MOC	GEF	74500	Miscellaneous	500		500	Cost for office electricity, telephone and office IT maintenance.
Total for Outcome 4										27.051	18.830	45.881		
TOTAL FOR YEAR 2019										855.000	322.491	1.177.491		


Date:

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