

## ANNUAL WORK PLAN 2020

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 tCO<sub>2</sub>e. The cumulative direct reduction in GHG emissions over the lifetime of the project is envisioned to be 236,382 t CO<sub>2</sub>e.

### Brief Summary of the AWP 2020

This is the fourth year of the project implementation with key project outputs expected to be delivered. Overall, the 2020 annual work plan aims at providing Ministry of Construction and related beneficiaries with technical assistance in (i) improvement of the policy framework for promotion of energy efficiency (EE) use in buildings i.e. revision of relevant legal documents and promulgation of EE construction material standards and updated technical – economic cost norm; (ii) finalization and publication of established specific energy consumption profiles and energy benchmarks for different categories of high-rise buildings; (iii) continued development of related training materials and delivery of in-depth training to building practitioners in energy audit for high-rise buildings; (iv) development of guidelines for design of energy efficiency buildings and (v) measurement and verification of actual energy consumption of demonstration buildings.

### Expected Results

- At least 05 standards related to EE properties of building materials are promulgated;
- Specific energy consumption profiles (SEC) and related national energy consumption benchmarks are published for 5 typologies of buildings in 2 climate zones;
- Energy labeling is piloted for selected buildings and information disclosure programme is prepared.
- At least 02 technical training courses organized for at least 60 beneficiaries regarding energy efficient use in high-rise buildings;
- Technical support is provided to 08 selected new and 12 existing buildings, and Monitoring and verification equipment is well installed in at least 06 supported buildings;
- EE design guidelines is drafted and consulted;
- Key lessons are recorded and shared nationwide through national workshops.

Programme Period:	2012-2016	Estimated annualized budget: US\$ <b>902,000</b>
Atlas Award ID:	00084022	Allocated resources: US\$ <b>902,000</b>
Project ID:	00092225	○ GEF: US\$ <b>902,000</b>
PIMS #	5245	○ Government
Start date:	05 April 2016	○ Others:
End Date	05 April 2020	
Management Arrangements	NIM	

Agreed by Executing Entity: 

Date: \_\_\_\_\_

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

Agreed by UNDP: 

Date: 11 Feb. 2020

Sitara Syed  
Deputy Resident Representative  
United Nations Development Programme



ANNUAL WORK PLAN 2020

Project code & title:  
Implementing Partner:

00092225; Energy Efficiency Improvement in Commercial and High-Rise Residential Buildings in Viet Nam  
Ministry of Construction

Currency Rate: \$ 23.329,00

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 2020 (USD)	Commitment 17-19 (USD)		Total (USD)		
		1	2	3	4		5	6	7	8		9	10	11
<b>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</b> <b>Output Indicator 1: Number of sub-sectors/ cities/ towns/ provinces with NAMAs developed and submitted to an international register</b>														
<b>COMPONENT 1: Improvement and Enforcement of Energy Efficiency Building Code</b>														
<b>Activity Result 1.0 : All output results planned in this year are well guided.</b>														
<b>Act. 1: Provide PMU and consultants with guidances for implementation of Com. 1 activities;</b> <b>Act. 2: Report the overall progress, quality of related activities and recommend next steps.</b>														
		x	x	x	x	UNDP	MOC	GEF	71200	International Consultants	0	0	0	Cost to be covered in Component 3.
<b>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</b> <b>Indicator:</b> % of DOCs and building practitioners nationwide that reference EEBC compliance toolkits and guideline developed by the baseline and the projects; % of applications for new commercial and high-rise residential building constructions submitted to DOCs comply with EEBC 2013; # of national testing standards for energy performance of building construction materials promulgated; # of existing and new commercial buildings and high-rise residential buildings in Viet Nam certified as EE buildings: <b>Baseline:</b> • 30% of DOCs nationwide and 20% of building practitioners; No standard and high-rise buildings in Vietnam certified as EE buildings; <b>Target:</b> • 30% of DOCs nationwide and 20% of building practitioners; 05 standards and 01 cost norm submitted to MOC. 05 high-rise buildings in Vietnam certified as EE buildings by EECB project. <b>MoV:</b> N/A														
<b>ATLAS ACTIVITY 1</b>														
<b>Output 1.1.1:</b> <b>Improved and enforced implementing policy framework and regulations on EE in buildings</b> <b>Indicators:</b> 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. <b>Baseline 2019:</b> 1. Energy performance data of construction materials and end-use equipment has been uploaded to MOC website. 2. 05 draft standards on energy characteristics of construction materials were drafted and approved by MOC; 01 draft technical and economic cost norm of EE in buildings consulted widely with MOC experts; <b>Target 2020:</b> 2. 05 standards and 01 technical and economic norm of EE in building published in QIII.2020. <b>MoV:</b>														
<b>Activity Result 1.1.1.1: Developed compliance guidelines and toolkits</b>														
<b>Activity Result 1.1.1.3: Prepared technical and economic justifications of EE promotions in the building sector in Viet</b>														
<b>Act. 1: Develop the report to justify technical and economic benefits of EE promotions in buildings</b>														
			x	x	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.
<b>Act. 2: Peer review the report</b>														
				x	x	UNDP	MOC	GEF	71300	Local Consultants	1.500		1.500	
<b>Activity Result 1.1.1.4: A completed roadmap and action plan to strengthen EE promotions in the building sector in Viet</b>														
<b>Act. 1: Update the roadmap and action plans with inputs from project results and</b>														
		x				UNDP	MOC	GEF	71300	Local Consultants	6.000		6.000	To be advised by ISTA
<b>Act. 1: Consult with relevant stakeholders for promulgation.</b> - Result consultation WS (50 pax);														
		x				UNDP	MOC	GEF	75700	Training, Workshops and Conference	2.500		2.500	
<b>Activity Result 1.1.1.5: Developed standards for promotion of EEBC application</b>														
<b>Act. 1: Ensure 05 standards on construction materials promulgated.</b>														
		x	x	x	x	UNDP	MOC	GEF	72100	Contractual services - Companies		45.000	45.000	Contract signed in 2018. Value: 57,615\$. Disbursed: \$44,991 Estimated disbursement in 2020: \$11,248
<b>Act. 2: Ensure the upgraded existing technical and economic norms of energy efficiency buildings promulgated.</b>														
		x	x	x	x	UNDP	MOC	GEF	72100	Contractual services - Companies		26.784	26.784	Contract signed in 2019. Value: \$ 27,840. Disbursed:\$6696 Estimated disbursement in 2020:



EXPECTED OUTPUTS And baseline, associated indicators and annual targets	PLANNED ACTIVITIES	TIMEFRAME				RESPONSIBLE PARTY	Funding Source	PLANNED BUDGET			Total (USD)	Challenges, solutions and other issues			
		Q1	Q2	Q3	Q4			Budget Description	Amount 2020 (USD)	Commitment 17-19 (USD)					
		3	4	5	6								7	8	9
1.2 Technical reports (& standards); 1.2. Annual Progress Report	Act. 3: Consult with relevant stakeholders to finalize the reports and then disseminate them; - Result consultation WS for Act. 1 (30 pax); - Result consultation WS for Act. 2 (50 pax)			x	x	UNDP	MOC	GEF	75700	Training, Workshops and Conference	5.000		5.000	Cost covered by PMU.	
<b>Activity Result 1.1.1.6: Analysed and defined scope to support the drafting and revision of related laws and decree</b>															
	Act.1: Provide inputs to the formulation of new/amended policies (i.e. Assess the impacts of policy changes recommended by EECB Project (Decree 21, Law of Construction, Labeling scheme, etc.)	x	x	x	x	UNDP	MOC	GEF	71300	Local Consultants	25.000		25.000		
	Act. 2: Organize consultation workshops on the inputs to amendments of policies.		x			UNDP	MOC	GEF	75700	Training, Workshops and Conference	10.000		10.000	A ministerial level workshop to improve existing policies.	
<b>Total for Output No. 1.1.1</b>											65.000	71.784	136.784		
<b>Output 1.1.2: Established and operational EE certification scheme for buildings.</b>	<b>Activity Result 1.1.2.1: An EE certification, labeling methodology for buildings developed</b>														
<b>Indicators:</b> 1. Availability of a building certification/labelling scheme 2. Number of buildings tested. <b>Baseline 2019:</b> 1&2.EE certification scheme for buildings developed but not yet operated at the project outset. Intenrational experience in EE labeling was summarized. <b>Target 2020:</b> 1. EE certification scheme for buildings established operated at the project outset 2. 10 buildings tested with energy labeling in QHII.2020. <b>MoV:</b> 1.1 Related report; 1.2. Annual Progress Report	Act.1: Define an energy labeling ranking system based on available SECs and energy benchmarks	x	x	x		UNDP	MOC	GEF	71300	Local Consultants	3.456	9.164	12.620	Contract signed in 2017: \$33,000. Disbursed: \$23,551 Estimated disbursement in 2020:	
	Act.2: Test the labeling system at a number of selected buildings based on recommended SECs and energy benchmarks recommended by EECB project	x	x			UNDP	MOC	GEF	72100	Contractual services - Companies	15.000		15.000		
	Act 3: Consult the final results of the energy labeling system for finalization of the related report (40 pax)			x	x	UNDP	MOC	GEF	75700	Training, Workshops and Conference	5.000		5.000	Organized in both Hanoi and HCM	
	Act 4: Develop an energy labeling circular to enable the application of established SEC profiles and energy benchmark system.	x	x	x	x	UNDP	MOC	GEF	72100	Contractual services - Companies	0		0		
	Act 5: Develop a report on recommendations of next steps for comprehensive SEC profiles and energy benchmarks for Viet Nam	x	x	x		UNDP	MOC	GEF	71200	International Consultants			0	Combined in the cost for international expert in 1.2.3.1.	
<b>Total for Output No. 1.1.2</b>											23.456	9.164	32.620		
<b>Total for Outcome 1.1</b>											88.456	80.949	169.405		
<b>Outcome 1.2: Strengthened compliance of the energy efficiency building code for commercial and high-rise residential buildings in Hanoi and HCMC</b>														ATLAS ACTIVITY 2	
<b>Output No. 1.2.1</b>	<b>Activity Result 1.2.1: Beyond-code guidelines for a higher level of EE in building designs and operations developed</b>														
<b>Approved guidelines that support EE building initiatives and market</b>	Act 1. Procure an international expert to develop the design guidelines for code compliance guidelines	x	x	x		UNDP	MOC	GEF	71200	International Consultants	30.000		30.000	35 - 40 man-days estimated plus 02 return flights.	
<b>Indicators:</b> 1. # EE design guideline developed. <b>Baseline 2019:</b> 1. No EE design guideline available at the project outset. <b>Target 2020:</b> 1. 01 EE design guideline available in QHII.2020 <b>M&amp;V:</b> 1. Draft technical guideline; 2. Annual Progress Report.	Act 2. Develop the guidelines			x	x										
<b>Total for Output No. 1.2.1</b>											30.000	0	30.000		
<b>Output No. 1.2.2</b>	<b>Activity Result 1.2.2.3: The M&amp;V scheme tested on selected EE buildings</b>														Combined in 1.1.2.2.
<b>Established and implemented building and</b>															



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 2020 (USD)	Commitment 17-19 (USD)		Total (USD)			
		3	4	5	6		7	8	9	10		11	12	13	
<b>project measurement &amp; verification (M&amp;V) scheme</b> <b>Indicators:</b> 1. Number of buildings tested with M&V scheme; <b>Baseline 2019:</b> 1. The building M&V scheme available at project level in 2019. <b>Target 2020:</b> 1. 10 buildings tested with energy M&V in QIII.2020.. <b>M&amp;V:</b> 1. Technical report. 2. Annual Progress Report	<b>Activity Result 1.2.2.4: A project M&amp;E tool established and applied.</b>														
	Act. 1: Carry out data collection for project M&E results at final phase	x	x	x	x	UNDP	MOC	GEF	72100	Contractual services - Companies	1.881	19.659	21.540	Contract signed in 2018: \$28,513, Disbursed:\$17,056 Estimated disbursement in 2020:	
	Act. 2: Guide the data collection team and finalize the final M&E report	x	x			UNDP	MOC	GEF	71300	Local Consultants	5.615		5.615	Incremental cost for annual M&E report 2020: 1,890\$.	
	Act. 3: Develop the 2020 project M&E report				x	UNDP	MOC	GEF						Payment combined above.	
	<b>Total for Output No. 1.2.2</b>										7.496	19.659	27.155		
<b>Output No. 1.2.3</b> <b>Established and implemented building energy benchmarking system that is linked to the certification scheme</b> <b>Indicators:</b> 1. Availability of a building energy benchmarking system that is linked to the certification scheme <b>Baseline 2019:</b> 1. No building energy benchmarking system and an information disclosure program available at the project outset. An energy consumption database of 165 buildings available at MOC. <b>Target 2020:</b> 1. SEC and building energy benchmarking system is established in QI.2020. <b>MoV:</b> 1. Technical report; 1. Annual Progress Report	<b>Activity Result 1.2.3.1: SEC profiles for buildings developed</b>														
	Act. 1: Finalize the SEC and energy benchmark report	x				UNDP	MOC	GEF	71200	International Consultants	25.000	8.873	33.873	Contract signed in 2018: \$28,513, Disbursed: \$35,320 Estimated disbursement in 2020: Cost to be added for an extended SEC: 15.000	
	Act.2: Organize consultation WS on results (30 pax)			x		UNDP	MOC	GEF	75700	Training, Workshops and Conference	5.000		5.000		
	Act. 3: develop 04 standards on SEC profiles and energy benchmark system for Viet Nam.	x	x	x	x	UNDP	MOC	GEF	71300	Local Consultants		55.510	55.510	Contract signed in 2019: 55,510\$, Disbursed: 5,551 Estimated disbursement in 2020: 49,9559\$	
	Act 4: Develop an online SECs and energy benchmark system & information disclosure for public application.	x	x	x		UNDP	MOC	GEF	72100	Contractual services - Companies	50.000		50.000		
	<b>Activity Result 1.2.3.2: A building energy benchmarking system developed and implemented</b>														
	Act. 1: Develop the building energy benchmarking system			x	x	UNDP	MOC	GEF					0	0	Developed this year only.
	<b>Activity Result 1.2.3.3: Information Disclosure Program developed for commercial and high-rise residential buildings</b>														
	Act. 1: Procure a national expert to help develop the information disclosure program		x	x	x	UNDP	MOC	GEF	71300	Local Consultants	3.000		3.000		
	Act 2: Peer review the recommended disclosure program			x	x	UNDP	MOC	GEF	71300	Local Consultants	2.000		2.000		
<b>Total for Output No. 1.2.3</b>										85.000	64.383	149.383			
<b>Output No. 1.2.4</b> <b>Completed energy consumption survey of selected commercial and high-rise residential buildings</b> <b>Indicators:</b>	<b>Activity Result 1.2.4.1: Studied energy consumption of selected buildings in the North implemented</b>														
	Act. 1: Quality assure the surveys and related database	x	x			UNDP	MOC	GEF			0	0	0	NC on SEC's contract was signed in 2018.	
	Act.1. Carry out further studies on energy consumption of buildings in the North	x	x	x		UNDP	MOC	GEF	72100	Contractual services - Companies	25.000		25.000		
<b>Activity Result 1.2.4.2: Studied energy consumption of selected buildings in the South and Centre implemented</b>															



EXPECTED OUTPUTS And baseline, associated indicators and annual targets	PLANNED ACTIVITIES	TIMEFRAME				RESPONSIBLE PARTY	Funding Source	PLANNED BUDGET			Commitment 17-19 (USD)	Total (USD)	Challenges, solutions and other issues	
		Q1	Q2	Q3	Q4			Budget Description	Amount 2020 (USD)					
1	2	3	4	5	6	7	8	9	10	11	12	13		
<b>1. # buildings surveyed in the North, South and Centre</b> <b>Baseline 2019:</b> 1. 165 sets of survey results available in 2019 with all survey reports submitted and approved. <b>Target 2020:</b> 1. At least 15 additional building surveyed completed in II.2020 for finalization of the SEC and energy benchmarks for Viet Nam. <b>MoV:</b> 1. all additional sets of survey results. 2. Technical draft reports; 1.2. Annual Progress Report	Act.1. Carry out further studies on energy consumption of buildings in the South and Centre	x	x	x		UNDP MOC	GEF	72100	Contractual services - Companies	25.000		25.000		
	<b>Total for Output No. 1.2.4</b>									50.000	0	50.000		
	<b>Total for Outcome 1.2</b>									172.496	84.042	256.538		
	DSA and travel	x	x	x	x		UNDP MOC	GEF	71600	Travel Cost	4.500		4.500	For the PMU advisor, PMU staff and/ or consultants
	Translation Cost	x	x	x	x		UNDP MOC	GEF	74200	Translation cost	500		500	
	Advertisement Cost		x	x	x	x	UNDP MOC	GEF	72100	Contractual services - Companies	500		500	
	Other Cost	x	x	x	x		UNDP MOC	GEF	74500	Miscellaneous	500		500	
<b>Total for Outcome 1</b>									266.952	164.991	431.943			
<b>COMPONENT 2: Building Market Development Support Activities</b>														
<b>OUTCOME 2: Increased local capacity in the EE design, construction and operation of commercial and high-rise residential buildings</b>														
<b>ATLAS ACTIVITY 3</b>														
Same as in Outcome 1	<b>Activity Result 2.1.0. International Technical Advisor providing technical inputs and advice to project activities.</b>													
	Act. 1: Provide PMU and consultants with guidances for implementation of Com. 2 activities; Act. 2: Report the overall progress, quality of related activities and recommend next steps.	x	x	x	x		UNDP MOC	GEF	71200	International Consultants	0	0	0	
<b>Project Output No. 2.1: Increased local capacity in the EE design, construction and operation of commercial and high-rise residential buildings</b> <b>Indicators:</b> 1. # innovative mechanisms for EE buildings; 2. Availability of economic evaluation toolkits for EE building projects. <b>Baseline 2019:</b> 1&2. No innovative mechanisms and economic evaluation toolkits for EE buildings developed yet. <b>Target 2020:</b> 1. An innovative mechanism proposed to PMU in QII.2020. 2. A draft economic evaluation toolkit report submitted to PMU in QIII.2020. <b>MoV:</b> 1. Final mechanism. 2. Economic evaluation toolkits; 1&2. Annual Progress Report	<b>Activity Result 2.1.1: Innovative Mechanisms for EE Buildings developed and approved</b>													
	Act 1.: Review incentive mechanisms and develop appropriate one(s) for Viet Nam.	x	x	x			UNDP MOC	GEF	71300	Local Consultants		11.464	11.464	Contract signed in 2018: \$28,513, Disbursed: \$2,865 Estimated disbursement in 2020:
	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		5.420	5.420	Contract signed in 2018: \$5,420, Disbursed:0 Estimated disbursement in 2020: \$5,420
	Act. 3: Organize a consultation workshop on the incentive proposed for Viet Nam (30 pax)				x		UNDP MOC	GEF	75700	Training, Workshops and Conference	2.000		2.000	
	<b>Activity Result 2.1.2: Economic evaluation toolkits for EE building projects, data inputs and a detailed implementation</b>													
	Act 1: Develop economic evaluation toolkits for EE building projects, data inputs and a detailed implementation plan - Consult with relevant stakeholders;		x	x	x		UNDP MOC	GEF	71300	Local Consultants	10.000	0	10.000	
	Act 2: Provide inputs to the draft toolkits		x	x	x		UNDP MOC	GEF	71200	International Consultants	20.000		20.000	
Act 3: Peer review the recommended toolkit			x	x		UNDP MOC	GEF	71300	Local Consultants	1.500		1.500		
<b>Total for Output No. 2.1</b>									33.500	16.884	50.384			
<b>Output No. 2.3: Trained CEEB staff to implement awareness and training programs to promote EE in the building sector</b>	<b>Activity Result 2.3.1: Train Energy Assessors, construction practitioners to implement awareness and training programs to promote EE in the building sector</b>													



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 2020 (USD)	Commitment 17-19 (USD)		Total (USD)			
1	2	3	4	5	6	7	8	9	10	11	12	13			
<p>to promote EE in the building sector.</p> <p><b>Indicators:</b></p> <p>1. Availability of training curriculum</p> <p>2. No of trainees (building project developers, design &amp; appraisal consultants, appraisal officers of DOCs) that are trained on EE building designs, implementation and M&amp;V by EOP</p> <p><b>Baseline 2019:</b> 1.2. 261 trainees were trained on design, construction and appraisal of EE buildings (new buildings);</p> <p><b>Target 2020:</b> 1. A training frameworks, plan and training curriculum available in QIII. 2. At least 50 target trainees trained on energy audit for existing buildings in QIII.2020;</p> <p><b>MoV:</b></p> <p>1&amp;2. Reports/ plans;</p> <p>1.2. Annual Progress Report</p>	Act. 1: Develop the training curriculum framework and main outlines for energy audits.	x	x			UNDP	MOC	GEF	72100	Contractual services - Companies	35.000	0	35.000	Costs for outsourced trainers.	
	Act. 2: Develop training curriculum after the training courses on design, construction and acceptal of new buildings	x	x	x	x	UNDP	MOC	GEF	71300	Local Consultants	18.000			18.000	
	Act 3. Carry out the training courses			x	x	UNDP	MOC	GEF	75700	Training, Workshops and Conference	25.000			25.000	There will be 03 technical training courses implemented in 2020 covering all provinces in Viet Nam for energy assessors, energy consumption management agencies, energy consumption experts, etc.
	Act 3. Conduct post-training assessment			x	x	UNDP	MOC	GEF	71300	Local Consultants			0		Cost combined in above-mentioned training courses.
	<b>Total for Output No. 2.3</b>										<b>78.000</b>	<b>0</b>	<b>78.000</b>		
<b>Output No. 2.4: Operational support program for ESCOs in the negotiation and implementation of building energy performance contracts</b>	<b>Activity Result 2.4.2: Design and implementation of a project communication program, especially an outreach program</b>														
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	UNDP	MOC	GEF	71300	Local Consultants	10.000			10.000	1 year added to cover tasks of extended period.
	<b>Total for Output No. 2.4</b>										<b>10.000</b>	<b>0</b>	<b>10.000</b>		
	Translation Cost	x	x	x	x	UNDP	MOC	GEF	74200	Translation cost	1.000			1.000	
	Advertisement Cost	x	x	x	x	UNDP	MOC	GEF	72100	Contractual services - Companies	1.500			1.500	
	DSA and travel	x	x	x	x	UNDP	MOC	GEF	71600	Travel Cost	2.500			2.500	For PMU staff and/ or consultants
	Other Cost	x	x	x	x	UNDP	MOC	GEF	74500	Miscellaneous	500			500	
<b>Total for Outcome 2</b>											<b>127.000</b>	<b>16.884</b>	<b>143.884</b>		
<b>COMPONENT 3: Building EE technology applications and replications</b>															
<b>OUTCOME 3: Increased use of EE building materials and application of EE building technologies in HCMC and Hanoi</b>															
<b>ATLAS ACTIVITY 4</b>															
<b>Same as in Outcome 1</b>	<b>Activity Result 3.0. International Technical Advisor providing technical inputs and advice to project activities.</b>														
	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	2.000	93.900	95.900	Contract amendment signed in 2019: \$32,200 + 14,700 (previous amendment), New contract: 49,000\$ (2,000 to be added this year) Disbursed: 0 Estimated disbursement in 2020: 95,900\$	
<b>Output No.3.2: Completed demonstrations of the design, application and operation of EE equipment, building materials and - design</b>	<b>Activity Result 3.2.1: Demonstration of EE in buildings of new buildings (4-6 new buildings) implemented</b>														
<p><b>Indicators:</b></p> <p>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 demonstrated ;</p> <p>2. No. of demonstration projects that adopted</p>	Act 1. Develop progress reports on technical support to the demonstration buildings	x	x	x	x	UNDP	MOC	GEF	71300	Local Consultants	64.856	0	64.856	02 remaining instalments of the long-termed demo	
	Act 2. Develop the technical support reports for the demonstration projects during construction and running test		x	x	x	UNDP	MOC	GEF	71300	Local Consultants				Risk: some new buildings (Goldern Lotus and Yen Thuong Training Centre) may delay	
	<b>Activity Result 3.2.2: Demonstration of EE in buildings of existing buildings (10 - 12 existing buildings) implemented.</b>													Target this year: 05 - 07 buildings	



EXPECTED OUTPUTS And baseline, associated indicators and annual targets	PLANNED ACTIVITIES	TIMEFRAME				RESPONSIBLE PARTY	Funding Source	PLANNED BUDGET			Commitment 17-19 (USD)	Total (USD)	Challenges, solutions and other issues
		Q1	Q2	Q3	Q4			Budget Description	Amount 2020 (USD)	Total (USD)			
		3	4	5	6								
2. No. of demonstration projects that adopted EE equipment, building materials and building energy monitoring and management/control 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. <b>Baseline 2019:</b> 1,2,3&4. 5%, 13, 0, 5 respectively as baseline indicators at the project outset. 08 new buildings selected with compliance check reports completed in 2017, 2018&2019. 13 existing buildings selected with energy survey/ energy compliance check reports completed. <b>Target 2019:</b> 1. 15% this year. 2. 3 21&5 this year. 4. 05 designs with associated action plans approved in Q1. Support reports submitted every 03 months. <b>MoV:</b> 3. Technical support reports. 4. Designs with action plans approved by PMU and UNDP; 4. Annual Progress Report.	Act 1. Develop detailed audit reports and renovation & testing run plans		x	x		UNDP MOC	GEF	72100	Contractual services - Companies			0	
	Act 2. Develop energy survey reports, feasibility study report, technical support reports for each selected buildings and related progress reports.			x	x	UNDP MOC	GEF	72100	Contractual services - Companies	70.680		70.680	Instalments 3rd and 4th.
	<b>Activity 3.2.3 :Purchased and installed monitoring equipment for demonstration projects</b>												
	Act 1. Design integrated M&V and BMS equipment systems	x	x			UNDP MOC	GEF	71300	Local consultants	3.000		3.000	
	Act 2. Purchase and installation of monitoring equipment for demonstration projects.			x	x	UNDP MOC	GEF	72100	Contractual services - Companies	140.000		140.000	Estimated. It can be increased based on the actual needs of the buildings. In order to ensure the related progress, PMU will discuss and agree with UNDP on the M&V purchase and installation host entity (PMU/UNDP/ building owner) depending on actual situations arising during the project implementation process
	<b>Activity Result 3.3.2: Technical and Coordination support to project activities provided</b>												
	Act 1. Provide technical and coordination support to project activities	x	x	x	x	UNDP MOC	GEF	71800	Project Staff	119.800		119.800	PM, NSTA, NTS, PSO, Accountant February to December for PM and Accountant to be paid here.
	<b>Total for Output No. 3.2</b>									398.336	0	398.336	
<b>Output No.3.3: Documented and disseminated results and lessons from the demonstrations of implementing EEBC and EE&amp;C in new and existing buildings Indicators:</b> 1. # lessons documented and shared; <b>Baseline:</b> 1. 06 demo buildings implemented by USAID, DANIDA and IFC and 20 selected buildings can be lessons learnt for project demo. <b>Target:</b> 1. A lesson-learn report submitted to PMU in Q1L. <b>MoV:</b> 1. Lesson-learn report; 1. Annual Progress Report	<b>Activity Result 3.3.1: Documented results and lessons from the demonstration projects</b>												
	Act 1. Support demonstration activities and collect, analyze and summarize all related lessons.	x	x	x	x	UNDP MOC	GEF	71200	International Consultants		36.800	36.800	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 Contract amendment signed in 2019: \$55,300, Estimated disbursement in 2020: 36,800
	Act 2. Organize a demo result dissemination workshop (50 pax)		x	x		UNDP MOC	GEF	75700	Training, Workshops and Conference	8.000		8.000	Both in Hanoi and HCM. \$4,000 each.
	<b>Total for Output No. 3.3</b>									8.000	36.800	44.800	
	Communication (including video clips on EE buildings)		x	x	x	UNDP MOC	GEF	74200	Audio Visual & Print Prod Costs	15.000		15.000	A new procurement package.
	DSA and travel	x	x	x	x	UNDP MOC	GEF	71600	Travel Cost	7.000		7.000	For PMU staff and/ or individual consultants
	Advertisement Cost		x	x	x	UNDP MOC	GEF	72100	Contractual services - Companies	1.000		1.000	
	UNDP Direct technical services to link the project with broader climate change agenda	x	x	x	x	UNDP	GEF	71300	International Consultants	20.000		20.000	
	Other Cost	x	x	x	x	UNDP MOC	GEF	74500	Miscellaneous	500		500	
<b>Total for Outcome 3</b>										451.836	130.700	582.536	
<b>Project Management</b>												ATLAS ACTIVITY 5	



EXPECTED OUTPUTS And baseline, associated indicators and annual targets	PLANNED ACTIVITIES	TIMEFRAME				RESPONSIBLE PARTY	PLANNED BUDGET			Commitment 17-19 (USD)	Total (USD)	Challenges, solutions and other issues		
		Q1	Q2	Q3	Q4		Funding Source	Budget Description	Amount 2020 (USD)					
1	2	3	4	5	6	7	8	9	10	11	12	13		
<b>Indicators:</b> 1. % disbursement rate; 2. # management/ field review reports submitted timely; <b>Baseline:</b> 1&2 1 PM, 1 NTS and 1 accountant/ admin recruited in 2016. <b>Target:</b> 1. 80% budget disbursed this year and all management/ field reports submitted timely; 2. 100% management report submitted timely. <b>MoV:</b> 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	MOC	GEF	72200	Equipment and Furniture	3.500		3.500	Contingency. An accounting software contract: \$3000	
	Office supplies	x	x	x	x	MOC	GEF	72500	Office supplies	5.613		5.613		
	Project Management Meeting Cost	x	x	x	x	MOC	GEF	75700	Training, Workshops and Conference	800		800	PMU/UNDP/PSC Meeting costs	
	Project Final-term Review (FR)		x	x	x		UNDP	GEF	71200	International Consultants	20.000		20.000	
			x	x	x		UNDP	GEF	71300	Local Consultants	5.000		5.000	
	UNDP cost recovery charges	x	x	x	x	UNDP	GEF	74500	UNDP cost recovery charges	15.000			15.000	
	Audit				x	UNDP	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.
<b>Total for Outcome 4</b>									56.212	2.042		58.254		
<b>TOTAL FOR YEAR 2020</b>									<b>902.000</b>	<b>314.616</b>		<b>1.216.617</b>		


Date:

Prepared by:



Hoàng Thị Kim Cúc  
Project Manager

Approved by:



Vu Ngoc Anh  
National Project Director



