



2019 Project Implementation Review (PIR)



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EECB

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A. Basic Data

Project Information	
UNDP PIMS ID	5245
GEF ID	5365
Title	Energy Efficiency Improvement in Commercial and High-Rise Residential Buildings in Vietnam
Country(ies)	Viet Nam, Viet Nam
UNDP-GEF Technical Team	Energy, Infrastructure, Transport and Technology
Project Implementing Partner	Government
Joint Agencies	<i>(not set or not applicable)</i>
Project Type	Full Size

Project Description
<p>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 several 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 tCO₂e.</p>

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GEF Operational Focal Point	<i>(not set or not applicable)</i>
Project Implementing Partner	Mr. Ngoc Anh Vu (vungocanh@muce.edu.vn)
Other Partners	<i>(not set or not applicable)</i>

B. Overall Ratings

Overall DO Rating	Moderately Unsatisfactory
Overall IP Rating	Moderately Unsatisfactory
Overall Risk Rating	Moderate

C. Development Progress

Description					
Objective					
Improved energy utilization performance of commercial and high-rise residential buildings in Ho Chi Minh and Hanoi					
Description of Indicator	Baseline Level	Midterm target level	End of project target level	Level at 30 June 2018	Cumulative progress since project start
Cumulative energy savings from the commercial building by EOP (Year 2019), MWh	2528	<i>(not set or not applicable)</i>	61137	9,626 (target for year 2 is 10,117)	13,338 MWh estimated direct savings in demonstration buildings 42,340 MWh surveyed indirect savings in existing buildings (i) Direct energy savings as calculated from suggested EE measures in 17 demonstration buildings. (ii) Impacts on existing buildings: The energy saving is a composition of (i) area of existing commercial buildings extracted from the electricity consumption survey results of 163 buildings (the surveys were implemented by EECB project), the difference between the average volume of energy consumed in 2016 and that of 2018.
% of new buildings that are fully compliant with the revised Energy Efficiency Building Code by EOP	20	<i>(not set or not applicable)</i>	50	N/A. Data is not available; the project is doing the survey and data will be available in late 2018. (target for year 2 is 30)	45.5% <i>The value is calculated based on the number of new certified green buildings and demo buildings supported by the projects in 2018</i>

					<p><i>and 2019 (20% baseline + 25.5% in 2018-2019)</i></p> <p>With no data saved at DOCs to determine this percentage, below calculation is based on assumptions as guided in PRODOC for the baseline indicator.</p> <p>New buildings that are certified as green building and demonstration buildings are counted as EEBC fully compliant since the compliance with the building code is one of the criteria of these certificates.</p> <p>Based on survey of EEBC project on green buildings, there are 29, 17, 25 and 8 green buildings certified in 2016 & 2017, 2018 and 2019 respectively. In addition, four demonstration buildings supported by EEBC are under construction and will be completed in 2019. Thus, the total new EE compliant buildings is 29 in 2016 and 37 buildings in 2018 and 2019.</p>
% of existing commercial and high-rise residential buildings that adopt EE technologies and practices and achieve at least 10% electricity savings by EOP	Less than 5%	<i>(not set or not applicable)</i>	20%	N/A. Data is not available; the project is doing the survey and data will be available for Year 3. Besides, the project has been doing the database of EE equipment and appliances as well as demonstration of EE measures in retrofit buildings that	14% The value is the percentage of buildings out of 163 surveyed buildings that have energy saving of more than 10% in 2018 compared with their energy consumption in 2016. Based on survey data of energy consumption in 2016-2017-2018 by 163 buildings, 23 buildings

				will used as reference for existing buildings to be EE. (Target for year 2 is 10%)	achieved energy saving of more than 10%. This is a random sample selected at national scale for the specific energy consumption (SEC) and energy benchmark study implemented by the EECB project.
No. of people gainfully employed in the building sector in Viet Nam by EOP	20	(not set or not applicable)	60	N/A. Data is not available, the project is doing the survey and data will be available for Year 3 (target for year 2 is 40) Training programme is being developed to enable awareness raising and enhance capacity on EE in building for relevant experts and officials working in construction sector.	96 The value is calculated as the number of EE technical staff working for demonstration buildings and certified green buildings. There are 17 EE technicians working in 17 demonstration buildings supported by the project It is assumed that there are also at least 79 EE technicians working for 79 certified green buildings during 2016 - 2019
The progress of the objective can be described as:		On track			
Outcome 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					

Description of Indicator	Baseline Level	Midterm target level	End of project target level	Level at 30 June 2018	Cumulative progress since project start
% of DOCs and building practitioners nationwide that reference EEBC compliance toolkits and guideline developed by the baseline and the projects by EOP	30% of DOCs nationwide 20% of building practitioners	<i>(not set or not applicable)</i>	70% of DOCs nationwide (at least) 50% of building practitioners	N/A The updated EEBC has come into effect since 1st June 2018, MOC through IFC support has developed the compliance toolkits and guidelines. The reference to the updated toolkits and guideline will be assessed in Year 3. (Target for year 2 is 55% and 35%)	The guideline and toolkits are being developed with support by IFC after the updated building code was adopted in mid-2018. EEBC project has technically contributed to this process through peer review meetings held by IFC. The measurement of the impact will be done in Year 4 after the toolkits and guidelines are officially applied
% of applications for new commercial and high-rise residential building constructions submitted to DOCs comply with EEBC 2013 by EOP	20%	<i>(not set or not applicable)</i>	50%	N/A. Data is not available; the project is doing the survey and data will be available in Year 3 The project has been supporting 5 new buildings from design to construction stage to ensure EE compliance in their design and application (target for year 2 is 30%)	(no longer tracked as a result of Mid Term Review)
No. of national testing standards for energy performance of building construction materials promulgated by EOP	0	<i>(not set or not applicable)</i>	5	0 (target for year 2 is 0) 5 standards have been defined and to be developed in Year 3	0 5 standards related to energy efficiency properties of building materials in Viet Nam were drafted.

					They are expected to be promulgated in in Year 4.
No. of existing and new commercial buildings and high-rise residential buildings in Viet Nam certified as EE buildings by EOP	0	<i>(not set or not applicable)</i>	20	0 EE labeling and certification programme has been developed and will be available for piloting from year 3. (target for year 2 is 0)	0 Energy labeling and certification programme has been developed and will be ready for piloting in Quarter 4 of 2019. The piloting of this programme is based on the SEC profiles and energy benchmarks which are to be finalized in Q4.2019.

The progress of the objective can be described as:

On track

Outcome 2**Strengthened compliance of the energy efficiency building code for commercial and high-rise residential buildings in Hanoi and HCMC**

Description of Indicator	Baseline Level	Midterm target level	End of project target level	Level at 30 June 2018	Cumulative progress since project start
% of building practitioners nationwide that reference the EE design guidelines to achieve a higher level of EE than the EEBC requirements by EOP	20%	<i>(not set or not applicable)</i>	50%	N/A Data is not available, the project is doing the survey and data will be available. The guideline will be developed in Year 3 based on the results of the pilot EE for new buildings(target for year 2 is 35%)	N/A The EE in building code has come into effect since 01st June 2018. All new designs of new buildings supported by the project have been updated with this new code, and based on the lessons learnt from these demonstration projects, the guidelines will be developed in 2020.

% of commercial and high-rise residential buildings referencing M&V schemes in EE implementation by EOP	0%	<i>(not set or not applicable)</i>	70%	0% (target for year 2 is 0%)	0% Same as the energy labeling scheme, this scheme has been drafted, consulted and finalized in QII.2019. The pilot application of M&V and labeling scheme will start from Quarter IV 2019.
% of overall commercial and high-rise residential building stakeholders that are satisfied with availability and quality of energy benchmarking data by Year 4	20%	<i>(not set or not applicable)</i>	at least 70%	N/A (target for year 2 is 30%) The benchmark is being developed, so this target will be assessed in Year 3 and year 4, when the benchmark is available and disseminated. With the benchmark methodology developed in year 2, the survey and benchmark result will be carried out and available in year 3.	(no longer tracked as a result of Mid Term Review)

The progress of the objective can be described as:	On track
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Outcome 3

Increased local capacity in the EE design, construction, and operation of commercial and high-rise residential buildings

Description of Indicator	Baseline Level	Midterm target level	End of project target level	Level at 30 June 2018	Cumulative progress since project start
No. of supporting mechanisms and incentives for commercial and high-rise residential buildings approved and implemented by EOP	0	<i>(not set or not applicable)</i>	1	0 (target for year 2 is 0)	0 A list of international supporting mechanisms has been reviewed

					and identified. The most suitable mechanisms for Vietnam will be identified at the end of this year.
% of stakeholders in the building sector that are satisfied with services provided by CEEBs by EOP	0	<i>(not set or not applicable)</i>	at least 70%	0% (target for year 2 is 0%)	(no longer tracked as a result of Mid Term Review)
No of trainees (building project developers, design & appraisal consultants, appraisal officers of DOCs) that are trained on EE building designs, implementation and M&V by EOP	0	90	250	0% (target for year 2 is 0%) The pilot of EE in new building has engaged experts in building sector and architect in all stages from design to implementation and M&V	96 Two training courses on EE in building designs, implementation and M&V were organized for 13 provinces with 96 trainees of which 5 were females.
No. of commercial and high-rise residential buildings that implement EE projects using the ESCO models by EOP	5	<i>(not set or not applicable)</i>	10	N/A (target for year 2 is 7) Data is not available; the project is doing the survey and data will be available in Year 3. The ESCO market in Viet Nam including that for the EE building is faced with a number of challenges including financial constraint and limited human capacity. The project has discussed with a number of equipment/appliances suppliers such as air-con, lighting for their possible engagement in retrofit buildings utilising ESCO models.	(no longer tracked as a result of Mid Term Review)

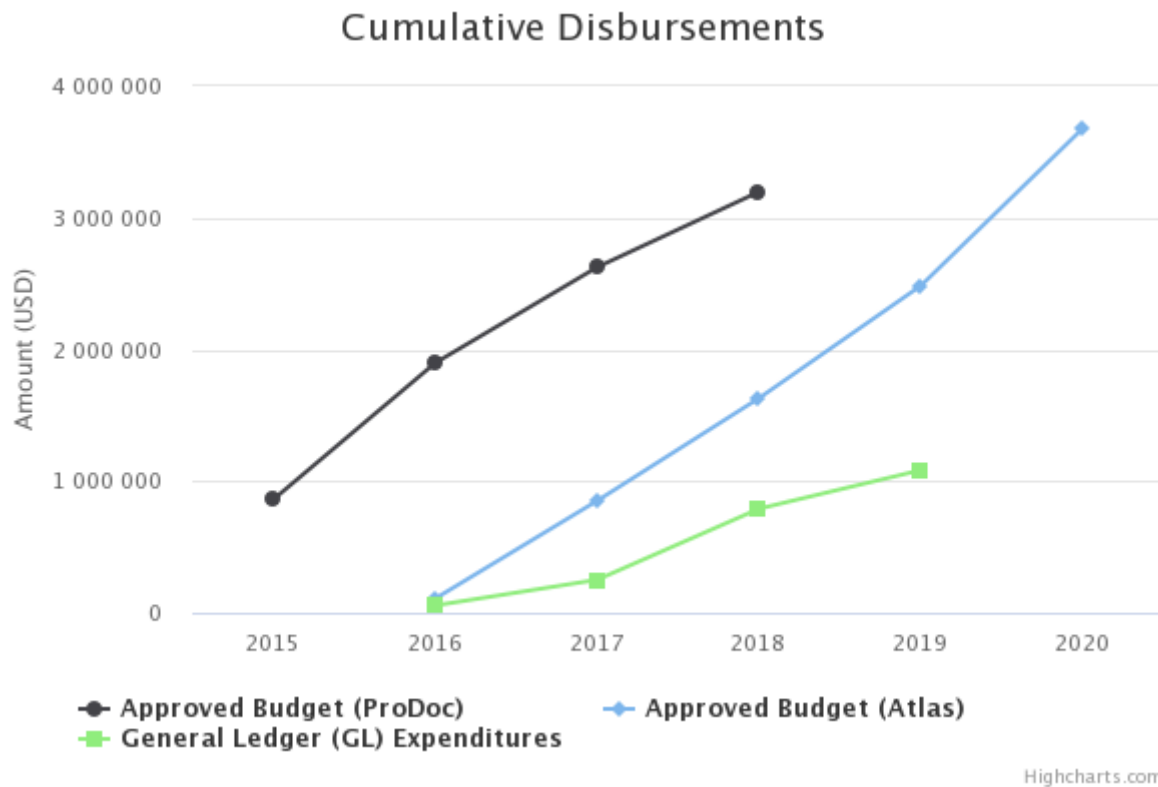
No of trainees (relevant officers of DOCs, energy auditors, building operation managers) that are engaged in building operation, M&V by EOP	(not set or not applicable)	0	70	(not set or not applicable)	0 <
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No. of demonstration projects that adopted EE equipment, building materials and building energy monitoring and management/control systems promoted by the EEBC project by EOP	5	(not set or not applicable)	21	12 Additional 05 new and 02 retrofit buildings have been technically supported by EEBC project in terms of EE technologies. (target for Year 2 is 13)	2 projects adopted EE measures 22 projects supported in design Additional 03 new and 07 retrofit projects have been technically supported by EEBC project in terms of EE technologies, making a total of 17 demonstration projects up to date As for new buildings, key recommendations are for the building envelop with sun shading devices, concrete masonry unit (CMU) blocks for walls, insulation layers of roofs, and low Solar Heat Gain Coefficient and Low-E double glazing for transparent surfaces recommended. In addition, regarding M&E systems usage of high Coefficient of Performance AC units, heat recovery units for the ventilation system, of geothermal energy for a radiant cooling system, and of high efficiency LED lighting, of Variable Speed Drives (VSD) for some of the electric motors, and finally the generation of Solar PV electricity on site are advised and adopted by the building owners. As regards retrofitting buildings, recommendations mainly focused on improving AC, lighting system, water heater boilers, by replacing
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					<p>them by higher efficiency, more adapted ones., and by advising the installation of solar PV systems for self-consumption.</p> <p>However, it should be noted that project recommendations have been actually applied in 1 new and 1 existing building. Other buildings are either under design/construction or under consideration of the building owners for renovation.</p>
No. of completed M&V exercises in accordance with the guidelines proposed by the project by EOP	0	<i>(not set or not applicable)</i>	16	<p>0</p> <p>M&V systems have been developed and recommended as part of demonstration at 1 existing building and 3 new buildings. Installation of the systems for existing buildings will be taken place in Year 3.</p> <p>(target for Year 2 is 2)</p>	<p>0</p> <p>Proposals for M&V system have been prepared based on the progress of the building construction and retrofits that received support from the project. M&V exercises will be undertaken in Year 4</p>
No. of new EE building projects designed based on or influenced by, the results of the demonstration projects, by EOP	5	<i>(not set or not applicable)</i>	50	<p>5</p> <p>(target for Year 2 is 15)</p> <p>Data is not available; the project is doing the survey and data will be available in Year 3. Based on the initial results of demonstration projects, documented best practice, benefits will be published and disseminated through workshops to be conducted in Year 3.</p>	(no longer tracked as a result of Mid Term Review)

The progress of the objective can be described as:	On track
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D. Implementation Progress



Cumulative GL delivery against total approved amount (in prodoc):	33.89%
Cumulative GL delivery against expected delivery as of this year:	33.89%
Cumulative disbursement as of 30 June (note: amount to be updated in late August):	1,083,708

Key Financing Amounts	
PPG Amount	99,991
GEF Grant Amount	3,198,000
Co-financing	16,030,000

Key Project Dates	
PIF Approval Date	Nov 15, 2013
CEO Endorsement Date	Jul 14, 2015
Project Document Signature Date (project start date):	Apr 22, 2016
Date of Inception Workshop	Aug 26, 2016
Expected Date of Mid-term Review	Apr 22, 2019

Actual Date of Mid-term Review	<i>(not set or not applicable)</i>
Expected Date of Terminal Evaluation	Jan 22, 2020
Original Planned Closing Date	Apr 22, 2020
Revised Planned Closing Date	<i>(not set or not applicable)</i>

Dates of Project Steering Committee/Board Meetings during reporting period (30 June 2018 to 1 July 2019)
2019-01-24

E. Critical Risk Management

Current Types of Critical Risks	Critical risk management measures undertaken this reporting period
Operational	<p>Proposed policy changes are not adopted or not sufficiently enforced: Although progress is made on the policy level and approval of the new EE building code and implementation standards, yet the enforcement is lacking capacities, resources and proper assessment tools on the level of the administrative governmental institutions (e.g. DOCs).</p> <p>Mitigation measures: While the PMU will have intensive training courses to increase the awareness and knowledge of construction practitioners including policy makers, the PMU will try hard to get relevant entities such as MOIT, MOST, etc. to involve in the institutional strengthening process, of which policy products recommended by the EECB project will be in line and included in the policy development plans of the Government (for example, construction material standards supported by EECB have been included in the standard development plan of MOC)</p>

F. Adjustments

Comments on delays in key project milestones

<p>Project Manager: please provide comments on delays this reporting period in achieving any of the following key project milestones: inception workshop, mid-term review, terminal evaluation and/or project closure. If there are no delays please indicate not applicable.</p>
<p>The mid-termed review mission was organized between January and March 2019, half year later than scheduled. This delay is the result of the late commencement of the EECB project, and technical activities were only implemented in late 2018. As such a delay in the MTR mission would be reasonable to ensure first project impacts reflected on beneficiaries.</p>
<p>Country Office: please provide comments on delays this reporting period in achieving any of the following key project milestones: inception workshop, mid-term review, terminal evaluation and/or project closure. If there are no delays please indicate not applicable.</p>
<p>The mid-term review was delayed due to the delay and slow progress in the 1st 2 years of project implementation as well as the availability of the selected international expert for the MTR mission in late 2018. The mission was postponed to February 2019.</p>
<p>UNDP-GEF Technical Adviser: please provide comments on delays this reporting period in achieving any of the following key project milestones: inception workshop, mid-term review, terminal evaluation and/or project closure. If there are no delays please indicate not applicable.</p>
<p>The project faced a delay in the early phase of project implementation and the Mid Term Review was consequently delayed as well. The project is in fact in the last year of implementation and it is questionable if it can achieve end of project targets within the foreseen time until project closure. It is commendable that the project team is dedicated to bring the project to a successful end and is therefore intending to request for a project extension. Although it is understandable that the project team wants to explore this possibility, it should be noted that a project extension request will need to be confirmed by the Implementing Partner and will need a strong justification. It will be important to explain the reasons for the delay and any project extension will have to be approved by the UNDP GEF Executive Coordinator where extension requests will be subjected to close scrutiny.</p>

G. Ratings and Overall Assessments

Role	2019 Development Objective Progress Rating	2019 Implementation Progress Rating
Project Manager/Coordinator	Moderately Satisfactory	- IP Rating provided by UNDP-GEF Technical Adviser and UNDP Country Office only -
Overall Assessment	<p>Overall, with a consolidated support by Project Steering Committee (PSC) and PMU and most of key technical inputs are well put in place in 2018, the project has reached the best performance ever with most of the Year 3 targets achieved as shown in the Section C- Development Progress.</p> <p>During the Year 3, the mid-term review was undertaken resulting in the update of the project log-frame. This PIR therefore presents the project progress based on the updated log-frame as described in the MTR report.</p> <p>The achievements of the project during the reporting period that contribute to project development progress are listed as below:</p> <p>Outcome 1:</p> <p>(i) the new version of the energy efficiency in buildings code (QCVN 09:2017/BXD) in act on the 1st June 2018 and the updated tool published on the MOC website in Quarter I.2019 as part of support by IFC.</p> <p>(ii) Inputs provided by the EECB project to the revision of the Law on Construction and the National Energy Efficiency Programme with regards to the energy efficiency in the construction sector.</p> <p>(iii) a database on EE equipment and materials established and disseminated on the Ministry of Construction website in Quarter I.2019.</p> <p>(iv) 05 standards related to energy efficiency properties of building materials in Viet Nam were drafted and submitted to MOC for review and approval. These standards are:</p> <ul style="list-style-type: none"> - ISO 6946:2017 Building components and building elements. Thermal resistance and thermal transmittance. Calculation methods. - ISO 12631:2017 Thermal performance of curtain walling. Calculation of thermal transmittance. - ISO 10456:2017 Building materials and products. Hygrothermal properties. Tabulated design values and procedures for determining declared and design thermal values. - ISO 13789:2007 Thermal performance of buildings. Transmission and ventilation heat transfer coefficients. Calculation method. - ISO 10211:2017 Thermal bridges in building construction. Heat flows and surface temperatures. Detailed calculations. <p>(v) an incentive mechanism for EE in building is being developed. Review of current related policies in Viet Nam and international practice on incentive mechanisms for development of EE buildings have been undertaken and recommendation of most appropriate policies suggested for Viet Nam will be made by the end of 2019.</p> <p>(vi) energy consumption surveys of 165 buildings in 03 climate regions of Vietnam (Hanoi, Da Nang and HCMC) completed and results are being used</p>	

	<p>as inputs for establishment of Specific Energy Consumption (SEC) profiles, energy benchmarking and voluntary energy labeling;</p> <p>Outcome 2:</p> <p>(vi) 02 training courses on integrated design, construction and acceptance of EE buildings provided to 14 provinces in the Southern region with 96 trainees who are building project developers, design & appraisal experts, appraisal officers of DOCs. Notably there were only 05 of the trainees being female which reflects the fact of construction sector in Vietnam where female technicians account for a very small percentage of the human resources. These are 02 among 05 training courses that have been conducted at nationwide scale. The training documents have analyzed the changes between the old and new versions of the QCVN 09:2017 with effective solutions for compliant and beyond-code design, construction and acceptance of buildings.</p> <p>Outcome 3:</p> <p>(vii) An additional 03 new building and 07 existing buildings have been selected during the reporting year, making a total of 17 demonstration projects supported by the EECB project (8 new building and 09 existing buildings). As a result, the direct energy saving from all demonstration projects is estimated to be 13,338Mwh, as part of to the cumulative total of 55,678Mwh reduced adding up direct and indirect impacts of the project to energy saving in Vietnam.</p> <p>Such positive changes in the EE in building sector have been well reflected through the Year 3 results as measured by the EECB project and MTR consultants. It also indicates a positive signal that committed project targets can be potentially achieved at end of the project with further efforts of related parties.</p> <p>With the results as mentioned above and evidenced in Section C – Development Progress, the Development Objective Progress Rating can be set as moderately satisfactory. The project can be foreseen to potentially achieve expected outputs as committed. But due to the delay and project slow progress in the first 1 and a half year, no cost extension of 1.5 years should be requested to give additional time for the project to fully realize it committed results.</p>	
Role	2019 Development Objective Progress Rating	2019 Implementation Progress Rating
UNDP Country Office Programme Officer	Moderately Satisfactory	Moderately Satisfactory
Overall Assessment	<p>In the 3rd year of the project implementation, the mid-term review (MTR) was undertaken during January – July 2019. Based on the MTR, the objective achievement of the project is rated as moderately satisfactory. The overall achievements of the Project are mainly considering the achievement of GHG emission reductions envisaged by the Project, and number of indicators proposed that cannot be assessed since data is not available for the MTR.</p> <p>This PIR is prepared based on the log-frame which was updated as the result from the MTR.</p> <p>In the 3rd year of project implementation, the project has made progress in day-to-day implementation of its activities thus contributing to the project results. Development progress should be rated at moderately satisfactory with well achievement of targets set for 5 indicators for a total 14 indicators. Results for the remaining 9 indicators are on track though the respective values are at</p>	

	<p>“0” or not available or slightly lower than the set targets, activities towards those 9 indicators are on-going or being prepared to enable results to be achieved for Year 4.</p> <p>For the objectives of improve energy performance of commercial and high-rise residential buildings, the project exceeded the targets set for cumulative energy saving and number of people gainfully employed in EE field of building sector thanks to the project support to integrate EE buildings in the Viet Nam Energy Efficiency Programme, EE building design and EE in retrofit buildings, and training on building code compliance. Achievement of 2 remaining indicators are slightly lower than the respective set target, but with the ongoing support to improve EE building design and EE building retrofit, the % of new building that are fully compliant with building code and % of EE buildings that achieve at least 10% energy saving will meet the target by EOP.</p> <p>Outcome 1.1 on strengthening policy and regulatory framework to support design, construction and operation of EE buildings is on track with on-going preparation and implementation of activities to deliver outputs that contribute the outcome's targets. The draft versions of 5 standards for energy performance of building materials development of certification and labeling scheme for EE buildings are submitted to MOC for their review and approval. In addition, EE labeling and certification programme was developed by the project for pilot implementation starting from Quarter 4, 2019.</p> <p>Outcome 1.2 is to enhance the compliance with the building code with expected outputs of design guidelines, M&V schemes, benchmark and SEC profiles to be delivered by end 2019. Energy survey was conducted for 165 buildings that will provide data inputs for development of EE benchmarks and SEC profile. M&V scheme was developed by the project and will be implemented in Quarter 4, 2019. The project has provided on-going support to 5 new buildings starting from the design stage. Lessons learnt from this exercise will inform the development of the EE design guidelines.</p> <p>Outcome 2 on capacity building on the EE design, construction and operation of EE buildings is on track with on-going review and development of an incentive mechanism to promote EE in buildings. The project has provided 2 training courses on EE building design for 93 people in Southern provinces in Viet Nam. 3 more similar training workshops will be conducted for the Northern and central provinces.</p> <p>Outcome 3 is on demonstration and replication of EE solutions for both new and retrofit buildings. Demonstration of EE design, construction and operation in 17 buildings is being implemented at different stages resulting in direct energy saving of 13,338 MWh for Year 3.</p> <p>The project has demonstrated improved implementation progress compared to the previous years and the annual work-plan for 2019. Cumulative financial delivery by end June 2019 is 44%, an increase of 32% compared to delivery rate of 12% at June 2018. The financial delivery of the 6 months of 2019 is 40% of annual budget 2019.</p> <p>Though the project has achieved good progress of the project objectives and outcomes in year 3, due to delay in the first 1 and a half year of project implementation, project extension might be needed for fully realize the project targets as committed.</p>	
Role	2019 Development Objective Progress Rating	2019 Implementation Progress Rating

GEF Operational Focal point	<i>(not set or not applicable)</i>	- IP Rating provided by UNDP-GEF Technical Adviser and UNDP Country Office only -
Overall Assessment	<i>(not set or not applicable)</i>	
Role	2019 Development Objective Progress Rating	2019 Implementation Progress Rating
Project Implementing Partner	<i>(not set or not applicable)</i>	- IP Rating provided by UNDP-GEF Technical Adviser and UNDP Country Office only -
Overall Assessment	<i>(not set or not applicable)</i>	
Role	2019 Development Objective Progress Rating	2019 Implementation Progress Rating
Other Partners	<i>(not set or not applicable)</i>	- IP Rating provided by UNDP-GEF Technical Adviser and UNDP Country Office only -
Overall Assessment	<i>(not set or not applicable)</i>	
Role	2019 Development Objective Progress Rating	2019 Implementation Progress Rating
UNDP-GEF Technical Adviser	Moderately Unsatisfactory	Moderately Unsatisfactory
Overall Assessment	<p>The project has passed the Mid-Term review and with less than a year of project implementation time remaining it is expected to show signs of results towards the end of project targets. Although certain results are positive, it is still difficult to see the contribution of the project towards the global environmental benefits since the direct energy savings reported so far seem to be based on assumptions and modeling but not on evidence. The project has made progress in regulatory developments and identification of potential pilot projects and is making steps in capacity building and training activities although this will have to be stepped up in order to guarantee enforcement of building energy codes in future. It is therefore deemed appropriate to rate the Development Objective Progress as Moderately Unsatisfactory.</p> <p>While the project has completed more than 3 years out of 4 years of implementation time frame, the overall delivery rate stands at 35% as of 30 August. With officially less than one year to go before project completion, it seems very challenging to increase delivery rates to satisfactory results and the project will have to step up its game to get the most out of the remaining time left for project implementation. The Implementation Progress rating is therefore assessed to be Moderately Unsatisfactory.</p> <p>DEVELOPMENT OBJECTIVE RATING</p> <p>Now that the project has completed its 3rd year of implementation, it was expected that certain challenges indicated in previous years would have been addressed. The challenge in monitoring of energy savings and GHG emissions was previously reported to be caused by the absence of a monitoring mechanism. During the Mid Term Review, this challenge was still present, therefore complicating the assessment of progress towards results. In the latest reporting of energy savings, direct and indirect savings are added up whereas the EOP target is based on direct savings only. the project should still improve</p>	

its monitoring mechanisms in order to be able to report on direct emission savings and should be clear in distinguishing direct and indirect energy savings.

Under Component 1, the project contributed to a number of useful technical standards and guidance for the implementation of the new Building Energy Code that was adopted in June 2018. A crucial next step in strengthening the policy and regulatory framework should consist of activities towards enforcement mechanisms for the Energy Building Code since any efficiency standard will only be effective when it is consistently enforced.

Under Component 2, two training courses on EE in building designs, implementation and M&V were organized for 13 provinces with 96 trainees. The project will now quickly have to step up the efforts in training and capacity building as this is a crucial part of the project and very important in preparing the market for more stringent enforcement of energy standards for buildings as well as to familiarize the relevant stakeholders in the building sector with compliance checking mechanisms. The project team mentions that out of 96 participants only 5 were female. This is a clear indication that the project should develop a Gender Analysis and Gender Action plan that can support the project in addressing this challenge.

Under Component 3, it is promising to see that the project managed to increase the number of demonstration projects supported by the project. Out of the 17 demonstration buildings, so far 2 buildings have decided to implement EE measures. In the remaining of the project implementation, it will be important to increase this number since new building development will have to comply with the new Building Energy Code standards and it would not be difficult nor very costly to increase the ambition beyond the Building Energy Code standards.

Based on considerations above and given the stage of implementation of the project with less than a year of implementation time remaining, the Project Development Progress was rated as Moderately Unsatisfactory.

IMPLEMENTATION PROGRESS RATING

The EECB Project has been operational for about 38 months (out of planned 48 months), with only about 35% of its budget expended. Even though there are circumstances that explain the slow start of the project, it seems unlikely that the project can catch up this delay in the short project implementation time remaining. The Implementation Progress of the project is therefore rated as Moderately Unsatisfactory.

RECOMMENDATIONS

It is commendable that the project team is dedicated to bring the project to a successful end and is therefore intending to request for a project extension. Although it is understandable that the project team wants to explore this possibility, it should be noted that a project extension request will need to be confirmed by the Implementing Partner and will need a strong justification. It

will be important to explain the reasons for the delay and any project extension will have to be approved by the UNDP GEF Executive Coordinator where extension requests will be subjected to close scrutiny.

The project currently does not have a Gender Analysis nor Gender Action Plan whereas it reported that there are clear gender inequality challenges in the building sector as concluded from very low female participation in trainings conducted by the project. It is therefore recommended that the project will conduct a Gender Analysis and develop a Gender Action Plan that could e.g. lead to higher participation of females in training and address broader gender inequality challenges in the sector.

The project may have to revisit its approach towards monitoring and evaluation of the project's contribution to global environmental benefits in order to be able to report correctly towards the project goal/project objective indicators. To some extent there may be interpretations that are over-complicated (e.g. reporting on energy savings in new buildings by monitoring consumption over several years) and to some extent there may be misunderstanding on interpretation of indicators (e.g. adding up direct and indirect emission savings). A clear monitoring guideline should help in coming to more transparent reporting on global environmental benefits in the remaining project implementation time.

It will be important for the project to concentrate its activities on enforcement and compliance with Building Energy Code standards, based on the standards and guidelines that the project already developed. This may also benefit from analysis of successful examples in other countries and selecting an approach that is most appropriate to Vietnam. Successful enforcement of the Energy Building Code will ensure the sustainability of project results and is considered to be essential in successful project completion. The project may thereby also need to speed up activities in training and capacity building as these will be essential for the market to become prepared for enforcement of the Building Energy Code standards.

H. Gender

Progress in Advancing Gender Equality and Women's Empowerment

This information is used in the UNDP-GEF Annual Performance Report, UNDP-GEF Annual Gender Report, reporting to the UNDP Gender Steering and Implementation Committee and for other internal and external communications and learning. The Project Manager and/or Project Gender Officer should complete this section with support from the UNDP Country Office.

Gender Analysis and Action Plan: <i>not available</i>
Please review the project's Gender Analysis and Action Plan. If the document is not attached or an updated Gender Analysis and/or Gender Action Plan is available please upload the document below or send to the Regional Programme Associate to upload in PIMS+. Please note that all projects approved since 1 July 2014 are required to carry out a gender analysis and all projects approved since 1 July 2018 are required to have a gender analysis and action plan.
<i>(not set or not applicable)</i>
Please indicate in which results areas the project is contributing to gender equality (you may select more than one results area, or select not applicable):
Contributing to closing gender gaps in access to and control over resources: No
Improving the participation and decision-making of women in natural resource governance: No
Targeting socio-economic benefits and services for women: No
Not applicable: Yes
Atlas Gender Marker Rating
GEN1: some contribution to gender equality
Please describe any experiences or linkages (direct or indirect) between project activities and gender-based violence (GBV). This information is for UNDP use only and will not be shared with GEF Secretariat.
N/A
Please specify results achieved this reporting period that focus on increasing gender equality and the empowerment of women.
Please explain how the results reported addressed the different needs of men or women, changed norms, values, and power structures, and/or contributed to transforming or challenging gender inequalities and discrimination.
As reported
Please describe how work to advance gender equality and women's empowerment enhanced the project's environmental and/or resilience outcomes.

N/A

I. Social and Environmental Standards

Social and Environmental Standards (Safeguards)

The Project Manager and/or the project's Safeguards Officer should complete this section of the PIR with support from the UNDP Country Office. The UNDP-GEF RTA should review to ensure it is complete and accurate.

1) Have any new social and/or environmental risks been identified during project implementation?
No
If any new social and/or environmental risks have been identified during project implementation please describe the new risk(s) and the response to it.
NA
2) Have any existing social and/or environmental risks been escalated during the reporting period? For example, when a low risk increased to moderate, or a moderate risk increased to high.
No
If any existing social and/or environmental risks have been escalated during implementation please describe the change(s) and the response to it.
NA
SESP: <i>not available</i>
Environmental and Social Management Plan/Framework: <i>not available</i>
For reference, please find below the project's safeguards screening (Social and Environmental Screening Procedure (SESP) or the old ESSP tool); management plans (if any); and its SESP categorization above. Please note that the SESP categorization might have been corrected during a centralized review.
<i>(not set or not applicable)</i>
3) Have any required social and environmental assessments and/or management plans been prepared in the reporting period? For example, an updated Stakeholder Engagement Plan, Environmental and Social Impact Assessment (ESIA) or Indigenous Peoples Plan.
No
If yes, please upload the document(s) above. If no, please explain when the required documents will be prepared.
NA
4) Has the project received complaints related to social and/or environmental impacts (actual or potential)?
No

If yes, please describe the complaint(s) or grievance(s) in detail including the status, significance, who was involved and what action was taken.

NA

J. Communicating Impact

Tell us the story of the project focusing on how the project has helped to improve people's lives.

(This text will be used for UNDP corporate communications, the UNDP-GEF website, and/or other internal and external knowledge and learning efforts.)

Project impacts have been gradually shown in the building sector through a number of important outputs having been achieved in the reporting period i.e a database of EE equipment and materials disseminated on the MOC website, newly installed equipment at Somerset building, the interest of investors in the demonstration projects and comments of trainees on the training courses, etc.

After the database is published on the MOC website, the PMU received a number of complements from building practitioners on its benefits. For example, Mr. Trần Ngọc Linh - IDEE Architects expressed his satisfaction on the benefits that the database can bring to its users. "With categorization and updating of technical specifications of EE materials and equipment, it is convenient for architects to seek information on appropriate EE materials and equipment for building energy modeling and bio-climatic solutions". Mr. Tran Anh Tuan from HUDLAND company also highly appreciated its applicability, saying that it will save time for project designers and increase the awareness of investors on the energy efficiency. This database is actually not only useful to high-rise buildings but serve as a good reference to individual investors, for example, households. Ms. Phan Thanh Huyen, a local people at Long Bien district, emphasizes her interest in the database. "I do not have to go to different showrooms, asking for advice on EE materials/ equipment. Instead of that, I seek information from the website which is more reliable and time saving to me".

Besides, the EECB project support to demonstration projects has produced the first sweet fruits i.e a complete renovation project of Somerset building in Ho Chi Minh city. Mr. Doan Nhat Ho who is the focal point of Somerset highly appreciated technical recommendations of the EECB project consultants which has resulted in the replacement of a chiller for the building in 2018. Continued to this success, Somerset has requested the project support in the 2nd phase when they renovate the remaining part of the building. A M&V system will be installed at Somerset to monitor and verify the actual energy saving in near future.

Finally, 02 training courses on the integrated design, construction and acceptance of EE buildings organized in June 2019 were successfully organized with great compliments of the trainees. Training contents include: the requirements of QCVN 09:2017/BXD, the difference between the old and new versions, detailed technical requirements and solutions, financial comparison of EE options for decision, lessons from demonstration projects and practical exercises. Such theoretical and practical knowledge is very useful to the trainees as commented by all of them. Mr. Nguyễn Văn Tân – Dai Nam construction consulting company, Can Tho province, expressed his high appreciation of training contents which helps him know how to check the compliance of his design with the new code. After the training, he also knows where to get information about EE materials and equipment for energy modeling tools provided by the training organizers. "We can easily calculate input costs, building lifecycle costs and payback period, etc. These are very important evidences to convince investors to apply EE solutions for their own benefits, contributing to environment protection", said he. Many of the trainees have expressed their wish that those significant training courses can be duplicated at their own local provinces in future.

Knowledge Management, Project Links and Social Media

Please describe knowledge activities / products as outlined in knowledge management approved at CEO Endorsement /Approval.

Please also include: project's website, project page on the UNDP website, blogs, photos stories (e.g. Exposure), Facebook, Twitter, Flickr, YouTube, as well as hyperlinks to any media coverage of the project, for example, stories written by an outside source. Please upload any supporting files, including photos, videos, stories, and other documents using the 'file library' button in the top right of the PIR.

Articles on the signing ceremony between the EECB PMU and building owners:

<http://www.baoxaydung.com.vn/news/vn/kinh-te/hop-tac-trinh-dien-cong-nghe-giai-phap-tiet-kiem-nang-luong-trong-cong-trinh-xay-dung.html>

<http://www.cuwc.edu.vn/TinTuc.aspx?page=tintuc&idtintuc=762&madonvi=0>

<http://anland.com.vn/tin-tuc/tin-tuc-chi-tiet/anland-duoc-chon-vao-danh-sach-trinh-dien-tiet-kiem-nang-luong-do-chuong-trinh-lien-hiep-quoc-tai-tro>

Articles on the PSC meeting 2018

<http://www.baoxaydung.com.vn/news/vn/thoi-su/hop-ban-chi-dao-du-an-eeeb.html>

<http://tietkiemnangluong.vn/d6/news/Du-an-EECB-phai-dam-bao-hieu-qua-va-tien-do-116-155-10513.aspx>

Articles on the land breaking ceremony of a new building supported by the EECB project:

<https://baomoi.com/dau-tu-hon-gan-100-ty-dong-xay-dung-trung-tam-nghien-cuu-dao-tao-ung-dung-va-chuyen-giao-cong-nghe-xay-dung-xanh/c/25294456.epi>

Articles on the selection of potential demonstration buildings:

<http://tietkiemnangluong.xaydung.gov.vn/project-t222.html>

K. Partnerships

Partnerships & Stakeholder Engagement

Please select yes or no whether the project is working with any of the following partners. Please also provide an update on stakeholder engagement. This information is used by the GEF and UNDP for reporting and is therefore very important! All sections must be completed by the Project Manager and reviewed by the CO and RTA.

Does the project work with any Civil Society Organisations and/or NGOs?
Yes
Does the project work with any Indigenous Peoples?
No
Does the project work with the Private Sector?
Yes
Does the project work with the GEF Small Grants Programme?
No
Does the project work with UN Volunteers?
No
Did the project support South-South Cooperation and/or Triangular Cooperation efforts in the reporting year?
No
CEO Endorsement Request: PIMS 5245 VN EECB_CER Doc_22Jun2015.docx
Provide an update on progress, challenges and outcomes related to stakeholder engagement based on the description of the Stakeholder Engagement Plan as documented at CEO endorsement/approval (see document below). If any surveys have been conducted please upload all survey documents to the PIR file library.
<p>The project has involved following organizations in technical consultation in implementation of project activities on energy labeling, M&V, SEC and energy benchmark.</p> <ul style="list-style-type: none"> • Vietnam Association of Civil Engineering Environment • Vietnam Institute for Building Science and Technology (IBST) • Green Urban Institute • Institute of Tropical Architecture - Hanoi Architectural University • Vietnam Engineering Consultant Association • Viet Nam Building Council

Many public and private businesses joined in project activities as beneficiaries of the project demonstration activities. These are:

- Development Investment Construction J.S Corporation
- Thien Duc Capitaland Investment Company
- Consultant and Inspection Joint Stock Company of Construction Technology and Equipment (CONINCO., JSC)
- Golden Lotus JSC
- Development Investment Construction J.S Corporation
- Daikin Air Conditioning Vietnam JSC
- Melia Hotel;
- EQUATORIAL Hotel
- Nam Linh Pharmacy Company, JSC;
- Cuu Long Majestic Hotel
- Saigon Office and Apartment Join-venture Company;
- Thong Nhat Metropole Hotel J.V Co.,Ltd

L. Annex - Ratings Definitions

Development Objective Progress Ratings Definitions

(HS) Highly Satisfactory: Project is on track to exceed its end-of-project targets, and is likely to achieve transformational change by project closure. The project can be presented as 'outstanding practice'.

(S) Satisfactory: Project is on track to fully achieve its end-of-project targets by project closure. The project can be presented as 'good practice'.

(MS) Moderately Satisfactory: Project is on track to achieve its end-of-project targets by project closure with minor shortcomings only.

(MU) Moderately Unsatisfactory: Project is off track and is expected to partially achieve its end-of-project targets by project closure with significant shortcomings. Project results might be fully achieved by project closure if adaptive management is undertaken immediately.

(U) Unsatisfactory: Project is off track and is not expected to achieve its end-of-project targets by project closure. Project results might be partially achieved by project closure if major adaptive management is undertaken immediately.

(HU) Highly Unsatisfactory: Project is off track and is not expected to achieve its end-of-project targets without major restructuring.

Implementation Progress Ratings Definitions

(HS) Highly Satisfactory: Implementation is exceeding expectations. Cumulative financial delivery, timing of key implementation milestones, and risk management are fully on track. The project is managed extremely efficiently and effectively. The implementation of the project can be presented as 'outstanding practice'.

(S) Satisfactory: Implementation is proceeding as planned. Cumulative financial delivery, timing of key implementation milestones, and risk management are on track. The project is managed efficiently and effectively. The implementation of the project can be presented as 'good practice'.

(MS) Moderately Satisfactory: Implementation is proceeding as planned with minor deviations. Cumulative financial delivery and management of risks are mostly on track, with minor delays. The project is managed well.

(MU) Moderately Unsatisfactory: Implementation is not proceeding as planned and faces significant implementation issues. Implementation progress could be improved if adaptive management is undertaken immediately. Cumulative financial delivery, timing of key implementation milestones, and/or management of critical risks are significantly off track. The project is not fully or well supported.

(U) Unsatisfactory: Implementation is not proceeding as planned and faces major implementation issues and restructuring may be necessary. Cumulative financial delivery, timing of key implementation milestones, and/or management of critical risks are off track with major issues and/or concerns. The project is not fully or well supported.

(HU) Highly Unsatisfactory: Implementation is seriously under performing and major restructuring is required. Cumulative financial delivery, timing of key implementation milestones (e.g. start of activities), and management of critical risks are severely off track with severe issues and/or concerns. The project is not effectively or efficiently supported.