Terminal Evaluation Review form, GEF Independent Evaluation Office, APR 2016

# 1. Project Data

	Sur	mmary project data		
GEF project ID		4115		
GEF Agency project ID		4289		
GEF Replenishment Phase		GEF 4		
Lead GEF Agency (include all for joint projects)		UNDP		
Project name		LGGE Improving Energy Efficiency Regions of Romania	in Low-Income Households and	
Country/Countries		Romania		
Region		Europe and Central Asia		
Focal area		Climate Change		
Operational Program or Strategic Priorities/Objectives		LGGE Improving Energy Efficiency in Low-Income Households and Regions of Romania		
Executing agencies in	volved	Romanian Ministry of Regional De	evelopment and Tourism	
NGOs/CBOs involven	nent	None		
Private sector involvement		Association of Companies for Energy Utilities (ACUE); The Association of Energy Auditors for Buildings in Romania (AAEC); Romanian Association for Building Services Engineers (AIIR); Arabesque		
CEO Endorsement (FSP) /Approval date (MSP)		6/6/2011		
Effectiveness date / project start		6/22/2011		
Expected date of project completion (at start)		7/30/2015		
Actual date of project completion		6/30/2015		
Project Financing				
		At Endorsement (US \$M)	At Completion (US \$M)	
Project Preparation	GEF funding	0.098	0.98	
Grant	Co-financing	0.12		
GEF Project Grant		2.97	2.49	
	IA own	0.05	NA	
	Government	119	NA	
Co-financing	Other multi- /bi-laterals			
	Private sector			
	NGOs/CSOs	0.15		
Total GEF funding		3.07	2.49	
Total Co-financing		119.32	99.3	
Total project funding (GEF grant(s) + co-financing)		122.39	101.85	
Terminal evaluation/review information				
TE completion date		June, 2016		
Author of TE		Mr. Roland Wong		
TER completion date		January, 2017		

TER prepared by	Ritu Kanotra
TER peer review by (if GEF IEO review)	Molly Fahey Watts

### 2. Summary of Project Ratings

Criteria	Final PIR	IA Terminal Evaluation	IA Evaluation Office Review	GEF IEO Review
Project Outcomes	MS	S	N/R	MS
Sustainability of Outcomes		ML	N/R	ML
M&E Design		S	N/R	MS
M&E Implementation		S	N/R	S
Quality of Implementation		MS	N/R	MS
Quality of Execution		MS	N/R	MS
Quality of the Terminal Evaluation Report		-	N/R	S

### **3. Project Objectives**

3.1 Global Environmental Objectives of the project:

As indicated in the Project Document (PD), the Global Environmental Objective of the project is to reduce direct annual GHG emissions in the buildings sector in Romania.

3.2 Development Objectives of the project:

As stated in the PD, this project was designed to dismantle the barriers to the implementation of energy efficiency measures among poorer households and in poorer communities in Romania, working to alleviate fuel poverty reduction of energy consumption in buildings in low-income households and regions of Romania.

The log frame in the PD lists the following expected outcomes of the project:

# Outcome 1: Romanian energy policy integrates fuel poverty issues and addresses EE needs in low-income communities.

3 national-level Government institutions and 2 municipal or county-level Government institutions integrating the reduction of fuel poverty through Energy Efficiency (EE) into their programmes and policies

# Outcome 2: Supply of trained architects, building engineers, builders and auditors with EE experience expanded; municipalities in low-income regions have a better understanding of EE issues and are able to support auditing and weatherization projects - including disseminating information for Do-It-Yourself projects.

200 architects, engineers and auditors trained in application of EE measures and in the use of sustainable, locally produced/available building material; 10% increase in the households that plan to/have already implemented EE measures;6 building materials and construction companies producing and selling locally produced, sustainable EE materials; 3 additional counties interested in replicating project activities.

# Outcome 3: Energy efficient buildings reconstructed (and potentially new buildings constructed) with reduced fuel costs or using improved sustainable energy technologies in low-income communities

1474 apartment blocks and 40 social building implementing EE/RE measures; 150 houses implementing

EE measures using locally produced, sustainable materials.

# Outcome 4: Data and information available for decision-makers for designing programmes to address fuel poverty.

3.3 Were there any **changes** in the Global Environmental Objectives, Development Objectives, or other activities during implementation?

No

### 4. GEF IEO assessment of Outcomes and Sustainability

Please refer to the GEF Terminal Evaluation Review Guidelines for detail on the criteria for ratings.

Relevance can receive either a Satisfactory or Unsatisfactory rating. For Effectiveness and Cost efficiency, a six point rating scale is used (Highly Satisfactory to Highly Unsatisfactory), or Unable to Assess. Sustainability ratings are assessed on a four-point scale: Likely=no or negligible risk; Moderately Likely=low risk; Moderately Unlikely=substantial risks; Unlikely=high risk. In assessing a Sustainability rating please note if, and to what degree, sustainability of project outcomes is threatened by financial, sociopolitical, institutional/governance, or environmental factors.

Please justify ratings in the space below each box.

4.1 <b>Relevance</b>	Rating: Satisfactory
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TE assigns a satisfactory rating for outcome relevance. This evaluation confirms the rating. The project is fully in line with national and GEF strategic priorities. The accession of Romania to the EU in January 2007 served as a driver to the Government of Romania (GoR) to accelerate its adoption to a number of EU standards including energy efficiency. Romania adopted a National Energy Strategy (NES) in 2007 covering the 2007 to 2020 period that covered targets for (EE) Energy Efficiency. However, the country faced several barriers related to issues to regulatory framework, awareness, technical knowledge and financing for implementation of EE measures. This project was designed to assist the GoR (Government of Romania) to overcome these barriers that would result in the accelerated adoption of EE measures in buildings in Romania, a large proportion of which are low income households. The project also aligned with existing national priorities in Romania, namely with 'National Development Plan', which specifies public development investment priorities; National Energy Strategy 2007-2020, which was adopted in 2007 and includes the objective of "improving energy efficiency" and National Action Plan on Climate Change, Action 6.3, in its effort to "promote energy efficiency among energy end users".

The project is also directly consistent with the GEF 4 strategic programming for climate change and its Strategic Objective 1 'To promote energy-efficient technologies and practices in appliances and buildings', and namely the Strategic Programme 1 'Promoting energy efficiency in residential and commercial buildings'. The project is also a part of the Global Programme on Low Greenhouse Gas Buildings, as it addresses improving knowledge and understanding related to energy-efficient buildings and in promoting energy-efficient municipal and other public buildings.

4.2 Effectiveness	Rating: Moderately satisfactory
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TE rates achievement of overall project results as 'moderately satisfactory' and TER concurs with this rating. Achievements of the project include ordinance amendments that has empowered municipalities of the selection of buildings for rehabilitation and application of EE measures and would allow municipalities to allocate necessary budget and subsidies to low income households. However, fuel poverty related measures have not yet been adopted in the national legislation which will continue to bog down the GoR's efforts to more effectively address the financing of EE retrofits for low income households. Adoption of fuel poverty related measures in national legislation would require more effective inter-ministerial dialogue on fuel poverty issues, and sustained support from parliamentarians to guide the legislation through parliament. However, there is now a greater understanding of energy efficiency buildings amongst many professional, architects, engineers and energy auditors approached and trained through the project. There is also an improved understanding of EE measures amongst the municipal government personnel. The project has produced an abundance of papers on fuel poverty and policy analysis that will be useful for decision makers in future in designing relevant programs. However, excessive effort spent during the project in finding locally sourced and certified energy efficient thermal materials even though suppliers for such materials didn't exist locally; absence of any qualified technical personnel on building energy efficiency serving as a Chief Technical Advisor during the initial phase of the project and delays in procurement of services and goods through the Romanian public procurement system impacted the timely achievement of some of the critical outputs of the project as explained in detail in the section below: sep

#### Outcome 1: Romanian energy policy integrates fuel poverty issues and addresses EE needs in lowincome communities.

This outcome is rated as 'moderately satisfactory' as project contributed to policy analysis and formulation leading to draft amendments, but none of these legislative acts were endorsed by MRDAP and other ministries at the time of TE and were unlikely to be approved by the end of project. Adoption or approval of the legislation in Romania is a complex process, requiring participation of elected parliamentarians, which was further effected due to the uncertain political environment. Project was successful in facilitating 8 inter- organizational working group vested with the responsibility of formulating and facilitating adoption of policy recommendations and action plans into their working group programs. However, only 1 action has been taken that includes the amendment of Ordinance 18/2009 with Ordinance 63/2012, primarily due to lack of participation from the main institutes and the central level decision makers. But, to the credit of the project, MRDAP has distributed the proposed legislation to all relevant departments for analysis and the State Minister of MRDAP has promised an official letter stating that MRDAP fully agrees with the concepts on fuel poverty and efforts to integrate it with energy policy. At local level, the Project worked with the targeted local municipalities (2 as per the target), in the mainstreaming of fuel poverty measures into the local development and energy strategies.

#### Outcome 2:

This outcome was achieved 'satisfactorily' as a total of 826 building engineers (as against a target of 200), architects and energy auditors were trained and certified, who are using the information in their work for the application of EE measures and in the use of sustainably, locally available building

materials. However, only 1 building materials and construction company (target of 6), could be identified for the supply of sustainable EE material as two previous companies identified in the pilot counties could not be scaled up, as that required extensive engineering and high investment costs that were beyond the scope of the project. Information about project activities and results was widely disseminated at national and international level through conferences and covered widely by national and international media. 17 counties (target of 3 counties) reported to have expressed interest in replicating project activities because of the influence of the information material produced through the project. Almost 49% of households (target of 10%) interviewed during TE had implemented EE measures and a survey undertaken in 2014 indicated energy efficiency as top priority of consumers in comparison to similar survey in 2012 that ranked energy efficiency as a third priority amongst consumers.

# Outcome 3: Energy efficient buildings reconstructed (and potentially new buildings constructed) with reduced fuel costs or using improved sustainable energy technologies in low-income communities

TE rated this outcome as 'moderately satisfactory'. The project led to the preparation of technical documentation for EE measures for 50 typical apartment block designs. However, the MRDAP website at the time of the TE indicated that the posting of these block designs on their website was still in progress. Delays were experienced in the delivery of documentation of technology analysis and energy performance of typical apartment building designs because of which, no buildings were rehabilitated by the end of project using the technical documentation. This documentation, once posted on the website, would be very useful especially to low income housing blocks in reducing or even eliminating the cost of preparing plans for EE measures in such buildings. 1,606 residential buildings retrofitted thermally since the Project start. However, as TE notes, the late commencement of these installations did not provide sufficient time for the project to monitor energy savings and GHG emission reductions. 71 social buildings (against target of 40) benefitted from the project's financial support in 6 municipalities. However, no houses were refurbished using locally produced EE materials due to the lack of approval of these materials by the Technical Economic Council of MRDAP, and late dissemination of 3 handbooks describing appropriate application techniques of affordable sustainable thermal insulation.

# Outcome 4: Data and information available for decision-makers for designing programmes to address fuel poverty

Achievement under this outcome was rated as 'moderately satisfactory' as several documents containing information, data and methodologies were made available to decision-makers for designing methodologies to assess fuel poverty as well as design fuel poverty programs in Romania. However, as TE notes, an important challenge for MRDAP personnel responsible for the EE building schemes will be to engage parliamentarians to adopt fuel poverty into the national legislation.

4.3 Efficiency	Rating: Moderately satisfactory
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The TE does not assess a rating for project efficiency. Based on the evidence presented in the TE narrative, this TER assigns 'moderately satisfactory' rating to efficiency of the project.

The project experienced several delays for various reasons. First, inception phase of the project was delayed by three months and Project Management Unit (PMU) was not established until December, 2011, 6 months after commencement of the project due to numerous bureaucratic delays by the Government

of Romania. The project also had a weak public procurement system that was not flexible, lacked clear resolution mechanisms and was biased towards lowest price option, which hindered the selection of unique innovative products or services which were usually higher priced.

One of the important issues that UNDP and PMU failed to recognize early on during the project was the absence of any capacity to supply thermal insulation material in the two target counties of Dolj and Hunedoara on a commercial scale, which was necessary to achieve Output 3.2. - EE measures taken using locally produced, sustainable materials. The search for locally sourced thermal insulation materials delayed the project by 15 months during the period of NIM – National Implementation Modality (from February 2013 to May 2014). This proved very costly for the entire project, delaying not only the energy audits and technical documentation for 50 typical apartment types, but also delaying delivery of the pilot projects that were to generate energy savings and GHG emission reductions for the purposes of designing fuel poverty programs. As noted by the TE, the project started with the good intention to create local jobs by assisting local enterprises to become suppliers of sustainable thermal insulation material with raw materials sourced locally, however, the project failed to recognize that technical assistance to local companies for production scale up can be quite expensive and beyond the scope and budget of the project.

After Mid Term Evaluation (MTE) made recommendations to remove the numerous implementation bottlenecks, the management arrangement of the project was changed from NIM (National Implementation Modality) to DIM (Direct Implementation modality), whereby under DIM, the PMU could take critical decisions in more timely manner as opposed to when the PMU was housed within the premises of Ministry of Regional Development and Public Administration (MRDAP). This change in modality allowed UNDP to takeover formal responsibility and direct control of the project, without which project would have fallen behind schedule.

4.4 Sustainability	Rating: Moderately Likely
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The TE provided an overall rating of 'moderately likely' to sustainability of the project and this TER agrees with this rating for three reasons: 1. Although funds are available with the government for EE building retrofits in low income communities, there is a moderate risk that government priorities shift funds allocations to other purposes and there is also lack of confirmed government financing for the efficient collection of building energy related data and information for the national buildings registry database; 2. There is a strong support of MRDAP to manage the building registry database and high enthusiasm and demand for EE training session by regional development authorities and local municipalities; 3. Enough interest in some of the local municipalities who have also prepared long term strategies to reduce fuel poverty in their municipalities. Local municipal governments are supportive of pilot building rehabilitation projects that provide immediate benefits 4. But it's not clear whether the MRDAP staff responsible for sustaining the project activities will have the required capacity and time to sustain the project activities.

#### a) Financial Sustainability: Moderately likely

TE didn't provide a rating but based on the narrative in the terminal evaluation, TER assess the possibility of financial sustainability as moderately likely. Although funds are available with MRDAP to continue funding EE building rehabilitations in low income communities, however, it

is uncertain what proportion government is willing to allocate towards low income communities. There is a moderate risk that government priorities shift funds allocations for low income communities to other purposes. Similarly, as per the TE, Government has fiscal resources to manage the building registry but hasn't confirmed finances for the efficient collection of building energy related data and information (using an EMIS) for the national buildings registry database. But TE also notes that MRDAP and other ministries see the registry having excellent value in dealing with integrated policy making decisions, hence could be interested in expanding and maintaining building registry database. There is also an interest in continuation of training sessions after the project is over, but whether MRDAP would fund these sessions was still not clear at the time of the TE.

#### b) Sociopolitical: Moderately unlikely

Based on the narrative in the TE, TER assesses the rating of sociopolitical risks to sustainability of outcomes as 'moderately unlikely'. Country ownership of the project hasn't been strong since the start of the project, with the implementing partner, MRDAP, continuing to experience political instability and frequent changes in the government personnel.

#### c) Institutional framework and governance: Moderately likely

As noted by the TE, PMU is not a standalone entity with full decision powers as the project is dependent on the decision-making process of MRDAP and the Minister of MRDAP. With frequent changes in elected government personnel who often serve as decision makers, there is risk that investments in low income communities is no longer a priority after the project is over. However, certain components of the project are likely to be supported. For instance, as TE notes, local municipal governments are highly supportive of pilot building rehabilitation projects as these not only provide immediate benefits of warmth to various public buildings and housing projects during winter season, but also enables them to be better prepared for ROP or NTRP funds from the government. MRDAP is also hosting the building registry database and will be undertaking the responsibility for its management, maintenance and gradual outreach to the public. Project enabled in creating a pool of available personnel who can analyze the building opportunities and prepare bankable documents for financing such investments, However, the extent to which the funds will be allocated to support these activities was unclear at the time of the TE.

#### d) Environmental: Likely

As per the TE, there are no environmental risk that would hinder the continuation of the project activities. Hence, TER assigns a rating of 'likely' with no perceived environmental risks to the sustainability of the project.

### 5. Processes and factors affecting attainment of project outcomes

5.1 Co-financing. To what extent was the reported co-financing essential to the achievement of GEF objectives? If there was a difference in the level of expected co-financing and actual co-financing, then what were the reasons for it? Did the extent of materialization of co-financing affect project's outcomes and/or sustainability? If so, in what ways and through what causal linkages?

As per TE, actual Project co-financing was 17% under the project document estimate of USD 119.2 million. Lower co-financing estimates were due to lessor contributions from the executing agency, the Romanian Ministry of Regional Development and Tourism (MRDAP) on the size of their National Thermal Rehabilitation Program under MRDAP (NTRP) and Ministry of Environment and Climate Change (MoECC) with regards to the sizes of their Green Homes Program. However, the impact of less contribution from MRDAP and MoECC on the outcome or sustainability of the project is unclear. But TE notes that more funds under the government's ongoing NTRP programme is likely to make funds available for continuation of some of the activities of the project.

5.2 Project extensions and/or delays. If there were delays in project implementation and completion, then what were the reasons for it? Did the delay affect the project's outcomes and/or sustainability? If so, in what ways and through what causal linkages?

The project experienced several delays during the first three years, including delays in the procurement of services and goods through the Romanian public procurement system during NIM. There was excessive effort during the start of the project, in trying to locally source and certify energy efficient thermal insulation materials even though suppliers for such materials didn't exist locally, which delayed the project by 15 months during NIM – National Implementation Modality (from February 2013 to May 2014). This further delayed the energy audits and technical documentation for 50 typical apartment types as well as delivery of the pilot projects that were to generate energy savings and GHG emission reductions for the purposes of designing fuel poverty programs.

However, the UNDP country office decided to step in and made certain decisions to assist the project and ensure completion of certain processes deemed vital for achievement of the project objectives. After the Mid Term Evaluation (MTE) made certain recommendations to remove the numerous implementation bottlenecks, the management arrangement of the project was changed from NIM (National Implementation Modality) to DIM (Direct Implementation modality), whereby under DIM, the PMU could take critical decisions in more timely manner as opposed to when the PMU was housed within the premises of MRDAP.

5.3 Country ownership. Assess the extent to which country ownership has affected project outcomes and sustainability? Describe the ways in which it affected outcomes and sustainability, highlighting the causal links:

Country ownership of the project hasn't been strong as, right from the start of the project in 2011, the implementing partner, MRDAP, experienced and continues to experience political instability and frequent changes in the government personnel. Top management of the ministries including state secretaries were replaced several times within the project duration (4 times with MRDAP and 5 times with MoE). Moreover, as TE notes, inter-ministerial dialogue and cooperation amongst several ministries, was very low due to which the policy reform – adoption of fuel poverty into national legislation - suggested under the project couldn't be achieved. This is bound to impact the GoR's efforts to more effectively address the financing of EE retrofits for low income households until there is more

effective inter-ministerial dialogue on fuel poverty issues, and sustained support from parliamentarians to guide the legislation through parliament.

Moreover, the Project Management Unit (PMU) was not established as a standalone entity with full decision powers, dependent on the bureaucratic decision making process of MRDAP and the Minister of MRDAP. It is for these reasons that several project outcomes were delayed during the first three years of the project, after which with recommendations from MTR and discussions with UNDP, the project was managed as a direct implementation modality (DIM), where UNDP directly managed the project. This is bound to have implications on the sustainability of the project outcomes, since it is unclear at this stage, the extent to which the government of Romania is willing to use its funds for low income communities, which may no longer be a priority after the project is over.

Ratings are assessed on a six point scale: Highly Satisfactory=no shortcomings in this M&E component; Satisfactory=minor shortcomings in this M&E component; Moderately Satisfactory=moderate shortcomings in this M&E component; Moderately Unsatisfactory=significant shortcomings in this M&E component; Unsatisfactory=major shortcomings in this M&E component; Highly Unsatisfactory=there were no project M&E systems.

Please justify ratings in the space below each box.

6.1 M&E Design at entry	Rating: Moderately satisfactory
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TE assigns a 'satisfactory' rating for M&E design at entry. However, based on the review of M&E plan in the project document and evidence in the TE, this TER assesses the M&E design at entry to be 'moderately satisfactory'.

The Project Results Framework (PRF) provides number of indicators and targets to support the Project objectives, with wording of most of the indicators meeting SMART criteria. M&E plan also included timeframes and procedures for data collection, defined the time frame, budget and allocated specific responsibilities for different entities responsible for monitoring the indicators.

As noted in TE, although the intent of the indicators and targets set have been sufficiently clear for the project team, such an extensive list of targets and indicators can be a burden for the project to monitor. Moreover, some of the targets and indicators were unattainable and defined without an understanding of the baseline situation of existing local capacities. For instance, there were no local companies producing any locally produced EE building materials, so the target of '6 building materials and construction companies within the two pilot counties which are producing and selling locally produced, sustainable EE materials at EOP' was unattainable. As such, the TER couldn't ascertain from the project document if there was a separate budget for carrying out baseline studies in the project area, which was critical for a project of this nature.

6.2 M&E Implementation	Rating: Satisfactory
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The TE assesses the rating of M&E implementation as satisfactory and this TER concurs with this rating. As the TE notes, the reporting quality of the PMU (during NIM and DIM) was satisfactory. The evaluators

had access to annual PIRs that included reports on all targets in the project results framework as well as monthly and progress reports, and mission reports. These reports were sufficiently thorough in conveying the project achievements and issues that were addressed in minutes to project steering committee meetings. The information from the midterm evaluation was used for adaptive management and learning that helped in making certain changes in the management of the project, which allowed for the achievement of its objectives in a timely manner.

# 7. Assessment of project implementation and execution

Quality of Implementation includes the quality of project design, as well as the quality of supervision and assistance provided by implementing agency(s) to execution agencies throughout project implementation. Quality of Execution covers the effectiveness of the executing agency(s) in performing its roles and responsibilities. In both instances, the focus is upon factors that are largely within the control of the respective implementing and executing agency(s). A six point rating scale is used (Highly Satisfactory to Highly Unsatisfactory), or Unable to Assess.

Please justify ratings in the space below each box.

7.1 Quality of Project Implementation Rating: Moderately satisfactory
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The TE assesses the performance of UNDP separately for NIM and DIM regime. It assigns a rating of 'unsatisfactory' during NIM and of 'satisfactory' during DIM regime. Looking at the collective evidence from NIM and DIM regime, this TER assigns a rating of 'moderately satisfactory'. During the NIM period of the Project (June 2011 to May 2014), UNDP served as the implementing agency and MDRT (with ministry name changed to MRDAP in January 2014) served as the executing partner. During the DIM period of the project (May 2014 to June 2016), UNDP undertook the dual role of implementing and executing entity with MRDAP serving as an executing partner (with support from a National Project Manager based in MRDAP). The performance of UNDP during NIM as an implementing entity is rated as unsatisfactory for reasons such as UNDP insisting on using local certified company and locally sourced thermal insulations, without recognizing that such capacities didn't exist locally and would take time to develop that delayed the project by 15 months during NIM. However, when the project regime was shifted to DIM, UNDP had more control on the project and new personnel in the PMU under UNDP accelerated project activities to make up for lost time during NIM. New PMU also developed good relationship with MRDAP through several meetings.

7.2 Quality of Project Execution	Rating: Moderately satisfactory
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TE assigns separate ratings for NIM (unsatisfactory) and DIM (moderately satisfactory) regimes of the project. Based on the evidence, TER assigns a rating of 'moderately satisfactory' to the quality of project execution. During the NIM phase (2011 to 2014), MRDAP underwent 3 management changes including minister and state secretaries, and MOE underwent 4 changes in top management, resulting into a weak ownership of the project, excessive efforts by PMU to familiarize new government staff of the project and lengthy decision making processes. However, during DIM phase the support from the General Secretary of MRDAP and the project coordinator, helped project in meeting some of the critical outputs.

In addition, they have also been very supportive in facilitating dialogues with parliamentarians so that fuel poverty is adopted in the national legislation of Romania, one of the critical outputs of policy reform under the project. But the future of the national legislation on fuel poverty was still uncertain at the time of TE due to upcoming national elections in November 2016.

# 8. Assessment of Project Impacts

Note - In instances where information on any impact related topic is not provided in the terminal evaluations, the reviewer should indicate in the relevant sections below that this is indeed the case and identify the information gaps. When providing information on topics related to impact, please cite the page number of the terminal evaluation from where the information is sourced.

8.1 Environmental Change. Describe the changes in environmental stress and environmental status that occurred by the end of the project. Include both quantitative and qualitative changes documented, sources of information for these changes, and how project activities contributed to or hindered these changes. Also include how contextual factors have contributed to or hindered these changes.

1. Considering the available data and information, using the GEF GHG Calculation Methodology as revised in 2013, and assuming that the Amendment to Ord. 18/2009 with Ord. 63/2012 which was developed by the Project and enacted in November 2012 would not have occurred (or occurred over 10 years later) without the Project, the direct CO<sub>2</sub> emission reductions accredited to the Project on account of these legislative changes are estimated to be 682.5 ktCO<sub>2</sub> prior to EoP and 1365 ktCO<sub>2</sub> in the 10-year Post-Project period. Further 64.14 ktCO<sub>2</sub> direct emission reductions are accredited to the demonstration activities undertaken under Component 3. Altogether, the direct ER of the Project are estimated to be 746.6 ktCO<sub>2</sub>. This exceeds the direct CO<sub>2</sub> ER target (641.3 ktCO<sub>2</sub>) outlined in the ProDoc.

2. The Project also reduced heat energy consumption in buildings in Romania during its lifetime by an estimated 82,309 MWh/yr. 91% of this amount is accredited to the legislative changes under Outcome 1 and the remainder to demonstration projects carried out under Outcome 3.

8.2 Socioeconomic change. Describe any changes in human well-being (income, education, health, community relationships, etc.) that occurred by the end of the project. Include both quantitative and qualitative changes documented, sources of information for these changes, and how project activities contributed to or hindered these changes. Also include how contextual factors have contributed to or hindered.

#### None.

8.3 Capacity and governance changes. Describe notable changes in capacities and governance that can lead to large-scale action (both mass and legislative) bringing about positive environmental change. "Capacities" include awareness, knowledge, skills, infrastructure, and environmental monitoring systems, among others. "Governance" refers to decision-making processes, structures and systems, including access to and use of information, and thus would include laws, administrative bodies, trust-building and conflict resolution processes, information-sharing systems, etc. Indicate how project activities contributed to/ hindered these changes, as well as how contextual factors have influenced these changes.

#### a) Capacities

The training aspect of the Project helped build knowledge around Energy Efficiency(EE) issues with a wide range of stakeholders from Government personnel to building professionals, energy consultants, potential building material suppliers, local tradespeople, and building maintenance personnel. However, such capacities were developed at the local level and it's not clear from the TE whether this may lead to any large-scale action bringing about positive environmental change.

b) Governance

Although the National Thermal Rehabilitation Programme (Ordinance 18/2009) was operational before the project start (and is thereby considered as baseline), the amendment of Ordinance 18/2009 with Ordinance 63/2012 which was enacted in November 2012, is a result of Project activities. As per the MTE, the Project formed and participated in the Inter-Organizational Working Group (MTE, p.52, Expected output 1.1) which proposed the amendment to Ordinance 18/2009 with Ordinance 63/2012 (MTE, pp.53 & 68), 'directly influencing the expansion of the original national rehabilitation programme to cover supplementary EE measures and municipalities.'

8.4 Unintended impacts. Describe any impacts not targeted by the project, whether positive or negative, affecting either ecological or social aspects. Indicate the factors that contributed to these unintended impacts occurring.

#### None.

8.5 Adoption of GEF initiatives at scale. Identify any initiatives (e.g. technologies, approaches, financing instruments, implementing bodies, legal frameworks, information systems) that have been mainstreamed, replicated and/or scaled up by government and other stakeholders by project end. Include the extent to which this broader adoption has taken place, e.g. if plans and resources have been established but no actual adoption has taken place, or if market change and large-scale environmental benefits have begun to occur. Indicate how project activities and other contextual factors contributed to these taking place. If broader adoption has not taken place as expected, indicate which factors (both project-related and contextual) have hindered this from happening.

None.

### 9. Lessons and recommendations

9.1 Briefly describe the key lessons, good practices, or approaches mentioned in the terminal evaluation report that could have application for other GEF projects.

1. Project designs need to include a realistic and thorough assessment of Project risk. The lack of identification of all significant risks on a project design jeopardizes the timelines on which the project can achieve and deliver its goals and objectives as well as outcomes and outputs. A solution to more thorough risk assessments of the project design would be either more effective use of existing PPG resources or more time required to undertake careful consideration of the project risks.

2. The use of GEF funds to create jobs for locally sourced products should meet certain criteria like, there should be existing demand for the product; the product should have some form of official certification, domestically or internationally; local production capacities of the product should be scalable but not be too costly to meet the desired demand; and assessments for upgrading the

production of a manufacturing facility should be conducted by a business and technical professional.

3. Greater and sustainable impacts can be achieved through an integrated approach to capacity building of stakeholders. The integrated approach includes feedback from the stakeholders on the effectiveness of the training seminars and suggestion on the training topic that need to be addresses in future seminars.

4. Project implementation teams need to carefully prepare procurement packages for goods or services to ensure that the desired goods or services are procured and that risks of a prolonged tendering process are minimized.

5. All GEF climate change mitigation projects should employ a part time Chief Technical Advisor (CTA) to provide oversight to project management and technical guidance.

9.2 Briefly describe the recommendations given in the terminal evaluation.

1. MRDAP will need to find resources to monitor energy savings resulting from the pilot projects of Component 3 using the energy management information system (EMIS) and to disseminate the result

2. MRDAP should facilitate the prioritization of technical assistance to low income municipalities that will increase access of low income communities to EE funds for public buildings and low income apartment blocks.

3. MRDAP should support strengthened business connections with local and foreign ESCOs.

4. MRDAP should strengthen its quality control oversight on EE measures installed.

5. MRDAP should allocate further budgetary resources related to the full scale implementation of the national buildings database registry that would include efficient collection of building energy-related data through an energy management information system (EMIS).

# **10. Quality of the Terminal Evaluation Report**

A six point rating scale is used for each sub-criteria and overall rating of the terminal evaluation report (Highly Satisfactory to Highly Unsatisfactory)

Criteria	GEF IEO comments	Rating
To what extent does the report contain an assessment of relevant outcomes and impacts of the project and the achievement of the objectives?	TE provides a complete analysis for achievement as well as non-achievement of objectives, and assessment of relevant outcomes and impacts.	HS
To what extent is the report internally consistent, the evidence presented complete and convincing, and ratings well substantiated?	The ratings are substantiated with sufficient and convincing evidence; report is internally consistent with each section well written providing complete details	S
To what extent does the report properly assess project sustainability and/or project exit strategy?	TE provided an overall rating to sustainability and assessments for all the four dimensions of sustainability individually.	S
To what extent are the lessons learned supported by the evidence presented and are they comprehensive?	Lessons learned are drawn from evidence given in the main body of the report, are relevant to the project and presented in comprehensive manner	S
Does the report include the actual project costs (total and per activity) and actual co-financing used?	Report includes details of the cost for all components of the project individually. It also gives an account of the actual co financing materialized. However, it doesn't cover adequately on how the gaps in co -financing impacted the achievement of project outcomes	MS
Assess the quality of the report's evaluation of project M&E systems:	While it covers the quality of M&E design, but doesn't provide adequate detail on the extent to which the M&E was implemented by the project and those responsible for project monitoring and evaluation. It provides an overall account of the various reports generated during monitoring and evaluation of the project, that proved useful as reference documents during TE.	S
Overall TE Rating =		S

11. Note any additional sources of information used in the preparation of the terminal evaluation report (excluding PIRs, TEs, and PADs).