

MID-TERM EVALUATION REPORT

of the

UNDP/GEF Full Size Project

Improving Energy Efficiency in Low-Income Households and Communities in Romania

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Table of content

Acknowledgements	5
Abbreviations and acronyms	6
1. Executive Summary	7
1.1 Brief description of project.....	8
1.2 Context and purpose of the evaluation	9
1.3 Main conclusions, recommendations and lessons learned	9
1.3.1 Recommendations	15
1.3.2 Lessons learned.....	19
2. Introduction	21
2.1 Project background.....	21
2.2 Purpose of the evaluation	22
2.3 Key issues addressed	22
2.4 Scope and methodology of the evaluation.....	23
2.5 Structure of the evaluation.....	24
3. Project Description and Development Context	25
3.1 Problems that the project seeks to address	25
3.2 Immediate and development objectives of the project	26
3.3 Project start and its duration	26
3.4 Main stakeholders.....	27
3.5 Results expected	27
4. Findings	30
4.1 Project design and formulation.....	30
4.1.1 Project relevance and implementation approach	30
4.1.2 Analysis of logical framework (project logic/strategy, indicators)	31
4.1.3 Assumptions and risks	31
4.1.4 Lessons from other relevant projects incorporated into project implementation	32
4.1.5 Country ownership	33
4.1.6 Stakeholder participation in the design phase	33
4.1.7 Replication approach and sustainability strategy.....	34
4.1.8 UNDP comparative advantage	35
4.1.9 Linkages between the project and other interventions within the sector	35
4.1.10 Management arrangements	37
4.2 Project Implementation.....	39
4.2.1 Implementation approach	39
4.2.2 Partnership arrangements	41

MTE: Improving Energy Efficiency in Low-Income Households and Communities in Romania

4.2.3	Monitoring and evaluation.....	43
4.2.4	Feedback from M&E activities used for adaptive management.....	43
4.2.5	Financial planning and management	44
4.2.7	Management by the UNDP country office	47
4.2.8	Co-financing and in-kind contributions.....	49
4.3	Results	51
4.3.1	Interim results and attainment of objectives	51
4.3.2	Relevance	77
4.3.3	Effectiveness and efficiency	78
4.3.4	Country ownership	79
4.3.5	Project Impact.....	80
4.3.6	Prospects of Sustainability.....	81
5.	Conclusions, Recommendations, Lessons Learned	84
5.1	Conclusions	84
5.2	Recommendations	89
5.3	Lessons learned	94
	Annexes.....	95
	Annex 1: Evaluation mission itinerary	95
	Annex 2: List of persons interviewed.....	97
	Annex 3: List of documents reviewed	98
	Annex 4: Overview of formal project meetings and workshops	100
	Annex 5: Overview of media coverage	102
	Annex 6: Mid-term evaluation TOR.....	109

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Abbreviations and acronyms

AAECR	Romanian Association of Energy Auditors for Buildings
AAO	Association of Apartment Owners
ANRE	Romanian Energy Regulatory Authority
APR	Annual Project Review
AWP	Annual Work Plan
CO	UNDP Country Office
EA	Executing Agency
EBRD	European Bank for Reconstruction and Development
EE	Energy Efficiency
EOP	End of Project
GEF	Global Environment Facility
GHG	Greenhouse Gas
IOWG	Inter-Operational Working Group
LogFrame	Logical Framework Matrix
M&E	Monitoring and Evaluation
MDRT	Ministry of Regional Development and Tourism (now MDRAP/MRDPA)
MECC	Ministry of Environment and Climate Change (formerly Ministry of Environment and Forests)
MEF	Ministry of Environment and Forests (nowadays MECC)
MDRAP/MRDPA	Ministry of Regional Development and Public Administration (formerly MDRT)
MTE	Mid-Term Evaluation
NGO	Non-Governmental Organization
PIF	Project Implementation Form (GEF)
PIMS	Project Information Management System (UNDP GEF)
PIR	Project Implementation Review
PIU	Project Implementation Unit
PPG	Project Preparation Grant (GEF)
PPP	Public Private Partnership
RoGBC	Romanian Green Building Council
ROP	Regional Operational Programme
ToR	Terms of Reference
UNDP	United Nations Development Programme

1. Executive Summary

PIMS ID:	4289
Country:	Romania
Project Title:	Improving Energy Efficiency in Low-Income Households and Communities in Romania
GEF Agency:	UNDP
Other Executing Partner:	Ministry of Regional Development and Tourism

The project idea was initiated by the UNDP Country Office (CO) in October 2009 as part of the GEF IV resource mobilization strategy of the UNDP CO. The project development started with GEF pipeline entry on December 2009. The PPG of 100 000 USD, along with the PIF, was approved on February 22, 2010. The final Project Document was submitted to the GEF Secretariat for approval in December 2010 and was endorsed by the GEF CEO on June 6, 2011. The Project Document was signed by UNDP and the Government, represented by the Ministry of Regional Development and Tourism, on June 20, 2011.

The entire project preparation phase, including concept development, PIF submission, PPG implementation, submission of the Project Document, its approval and signature, lasted more than 1.5 years (October 2009 till June 2011).

The four-year full-size project with GEF funding of 2 974 840 USD started its implementation period on June 20, 2011 and is scheduled to be completed by June 30, 2015.

Table 1: Project Timeframe

	Expected date	Actual date
CEO endorsement/approval		June 6, 2011
Agency approval date	March 2011	June 20, 2011
Implementation start	March 2011	June 20, 2011
Inception workshop		October 20, 2011
Inception phase		October 2011 – July 20, 2012
Mid-term evaluation completion	May/December 2013	September – January 2014
Project completion	June 30, 2015	
Terminal evaluation completion	May – June 2015	
Project operational closure	June 30, 2015	

The planned total budget of the project is 122,176,840 USD.

The project budget, as outlined in the Project Document, consists of:

- GEF cash grant of 2,974,840 USD

and total co-financing of 119,202,000 USD, consisting of:

MTE: Improving Energy Efficiency in Low-Income Households and Communities in Romania

- UNDP cash grant of 50,000 USD
- Ministry of Environment and Forests cash co-financing 82,000,000 USD
- Ministry of Regional Development and Tourism cash co-financing 36,500,000 USD
- Ministry of Regional Development and Tourism in-kind co-financing 500,000 USD
- Romanian Green Building Council in-kind co-financing 71,000 USD
- AAECR in-kind co-financing 81,000 USD

Local Authorities endorsed project activities and agreed to provide in-kind co-financing for planned activities depending on available budget; specific amounts of in-kind contributions were, however, not specified in the letter of endorsements due to the lack of data on multi-year budget estimations.

UNDP provided an additional 20 000 USD cash grant for development of PPG.

Table 2: Project Implementation Budget

Cash grants	
GEF	2,974,840 USD
UNDP	50,000 USD
Total cash grant budget	3,024,840 USD
Parallel co-financing cash	
Government of Romania	118,500,000 USD
In-kind contribution	
Government of Romania	500,000 USD
NGOs	152,000 USD
Total co-financing	119,152,000 USD
Total budget	122,176,840 USD

1.1 Brief description of project

The project is designed to dismantle barriers to the implementation of energy efficiency measures among poorer households and in poorer communities in Romania, working to alleviate fuel poverty. The project was intended to act at a national and local level to address energy efficiency needs, develop appropriate policy measures, stimulate an on-going market for locally-produced energy efficient materials, to build capacity for implementation of energy efficiency measures in poorer regions, and implement real energy efficiency improvements to improve the lives of 110 620 people in Romania and reduce energy-related direct

MTE: Improving Energy Efficiency in Low-Income Households and Communities in Romania

greenhouse gas emissions by 666 800 tonnes of CO_{2eq} (net savings of 641 344 tCO_{2eq} after subtracting baseline reductions).

The project design is structured into four Components with four Outcomes:

Component 1: Improved policies to support energy efficiency in low-income communities

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

Component 2: Improved capacity at the local level to reduce fuel consumption in low-income communities

Outcome 2: Supply of trained architects, building engineers, builders and auditors with energy efficiency (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

Component 3: Direct reduction of energy consumption through community-based retrofits and market development

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

Component 4: Information for improved decision-making

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

The project is based on the National Implementation Modality (NIM), with the Implementing Partner being the Ministry of Regional Development and Tourism.

1.2 Context and purpose of the evaluation

This Mid-Term Evaluation has been performed at the request of UNDP Romania as a part of the standard UNDP/GEF project monitoring and evaluation procedure.

The Mid-Term Evaluation mission in Romania took place in September 2013, in the middle of the four-year project implementation period, and the evaluation report was finalized in February 2014.

1.3 Main conclusions, recommendations and lessons learned

The project document was well designed and based on thorough situation analysis. The project aim is to mitigate fuel poverty and to reduce GHG emissions by facilitating increase of investment in energy efficiency in low-income households/communities; utilization of existing energy efficiency financial programs; integration of fuel poverty into national policies and financial programs; decreasing transaction

MTE: Improving Energy Efficiency in Low-Income Households and Communities in Romania

costs of project development; and transformation of annual energy bill subsidies into up-front subsidies for energy efficiency retrofits of buildings of low-income household/communities.

The planned project outcomes are:

1. Fuel poverty integrated into national legislation and national energy efficiency funding schemes
2. Energy efficiency project development capacity strengthened and professionals trained
3. Buildings reconstructed to be more energy efficient or using sustainable energy efficient technologies
4. Data and information available for decision makers to design programs addressing fuel poverty

The project is implemented according to the *National Implementation Modality (NIM) with advances* by the implementing partner (IP) – the Ministry of Regional Development and Public Administration (MDRAP) who hosts the Project Implementation Unit and the Project Manager and has full responsibility for project management. Other project partners include Ministry of Environment and Climate Change, Association of Energy Auditors for Buildings (AAECR), and Romanian Green Building Council (RoGBC). The project works with six partner municipalities (Craiova, Calafat, Petrosani, Petrila, Vulcan and Calan) in two counties. Cooperation with RoGBC was terminated in 2012 because the quality of trainings delivered by RoGBC was evaluated not to be sufficient.

This implementation modality requires effective project management at PIU and a strong and effective support from- and decision making at the Ministry/implementing partner in order to deliver expected results effectively. Unfortunately, this was not the case especially in early phases of this project – primarily due to political crisis and weak country ownership.

The project faced significant delays: inception workshop has been organized 4 month after project start in June 2011, the Project Manager and project staff were designated officially by MDRAP only in December 2011 (MDRAP regulation 90882/EC/8.12.2011) and the Project Implementation Unit was established in 2012 (or 2011?) through a Minister Order. During implementation, the project incurred significant delays with the organization of procurement services at the Ministry (MDRAP). These delays were caused by a combination of lengthy bureaucratic decision making procedures at the Ministry, bureaucratic public procurement process which has respected the national legislation, and political instability in the country. The political instability has led to a change in a position of a National Project Director as well as several changes in top political and management positions at the Ministry and thus the country political ownership was rather weak. The UNDP team also faced two changes of the staff holding the Task Leader position (third Task Leader appointed within two years of project implementation). However, UNDP CO has actively used its human resources including senior management and used adaptive management to mitigate major risks to the implementation; therefore the project delivery has gradually improved by 2013. Annual project spending have increased in 2013 to 15% of total budget (compared to 11% in 2012), and preparatory works for key investment of ca 1.5 million USD (50% of total project budget) into demonstration projects have progressed in 2013, and the investment is scheduled for 2014.

The adaptive management approach was based on anticipation of challenges by the early identification of risks, strengthening of UNDP supervision, and implementation of changes in the execution modality, as follows:

UNDP signed two Micro Capital Grant Agreements (MSGAs) in 2011 with the two partner NGOs, namely AAECR and RoGBC, followed by a second MCGA with AAECR in order to deliver the training activities under Outcome 2 even before the Project Implementation Unit (PIU) has been set up with IP; further in 2012 UNDP signed an ISS (Implementation Support Services) letter with the Ministry of Regional Development

MTE: Improving Energy Efficiency in Low-Income Households and Communities in Romania

and Public Administration (MDRAP-Implementing Partner-IP), and later on in the year Letters of Agreement (LOAs) with six local authorities representatives in order to shift the execution of the first six building retrofitting activities from central to local authorities at which level the public procurement process can be delivered significantly faster.

The ISS Letter signed with MDRAP allowed UNDP support project implementation namely in:

- (i) Identification and recruitment of project personnel
- (ii) Identification and facilitation of training activities
- (iii) Procurement of goods and services

The implemented adaptive management and strengthened UNDP implementation support allowed for an improved delivery and some recovery of delays in 2013.

The key project achievements as of MTE are summarized below:

Component 1: Improved policies to support energy efficiency in low-income communities

The concept of fuel poverty was defined, draft methodology developed and submitted to the Ministry of Labour and Social Protection for review, definition of “vulnerable consumers” submitted to the government for consideration and inclusion in the governmental programs and ordinances (18/2009). The project has set-up an Inter-Organizational Working Group (IOWG) with member representatives of the main stakeholders in the energy sector, governmental and parliamentary policy makers engaged through workshops and bilateral policy oriented advocacy meetings. The project positioned itself as an active facilitator for fuel poverty awareness raising and official adoption of policy recommendations that integrate fuel poverty and energy efficiency aspects actively supporting the transposition of Energy Efficiency Directive 2012/27/EU, especially Article 7 on energy efficiency obligation schemes.

The project has developed studies, methodologies, financing proposals and action plans on fuel poverty and recommendations for mitigation measures, and it works with the Ministry of Labour, Family and Social Protection on a development of a financial impact study that will give the government the overview on cost estimates of the proposed mitigation scheme and allocation of adequate budget. The project has developed a set of draft normative acts for the implementation of distinct support schemes for fuel poverty households; it has organized number of meetings with key stakeholders, worked closely with the National Energy Regulatory Agency (ANRE) on energy tariff policy, and has proposed a definition of fuel poverty to be integrated by the government in the domestic legislation that will transpose the 2012/27/EU Directive. It has also influenced the revisions of the national thermal-rehabilitation programme (Governmental Ordinance 18) to include additional energy efficiency measures and municipalities in low income areas.

Implementation is in process; fuel poverty has not yet been fully adopted and implemented, it is aligned with the complex and lengthy process of transposition of the Energy Efficiency Directive, hence the official adoption into national legislation might be delayed.

The amendment of the governmental ordinance 18/2009 that extended energy efficiency measures eligible for financing from the national thermal-rehabilitation programme has also a potential to generate additional GHG savings within the same programme budget. These extended energy efficiency measures were also included in the thermal rehabilitation programmes with financing from EU funds and implemented by the MDRAP. Extension of regional scope and focus on low-income households redirects GHG savings to low-income households within the national programme, but does not necessarily generate additional GHG savings.

Component 2: Improved capacity at the local level to reduce fuel consumption in low-income communities

800+ professionals and municipal officers have been trained in relevant energy efficiency legislation and suitable energy efficiency and renewable energy technical solutions in different building types. Based on a positive feedback and further demand, the PIU proposed and supported a series of 8 additional trainings that were delivered in 2013 in cooperation with Regional Development Agencies, and additional 250 professionals and regional/municipal decision makers were trained. AAECR was contracted by UNDP to deliver these trainings.

Awareness-raising information materials have been distributed through partner municipalities to general public, country wide media campaign has been implemented in October-November addressing 4.7 million inhabitants through TV and radio spots, outdoor billboards and internet banners.

After poor quality of results of the first expert on sustainable insulation materials and subsequent delays, UNDP contracted another expert of INCERC Research Institute of Iasi recommended by the AAECR to conduct a comprehensive market research on potential locally available sustainable and environmental friendly insulation materials. A potential producer of locally produced sustainable insulation material has been identified - the MOPATEL PROIECT SRL, a company located in Northern Romania, Suceava county, with a patented Mopatel SuperLight insulation material. The Mopatel SuperLight insulation material has met the construction materials certification requirements in December 2013 and can thus be commercialized and used in demonstration projects.

Component 3: Direct reduction of energy consumption through community-based retrofits and market development

Since the beginning of the project, a total of 1 468 residential buildings have implemented energy efficiency or renewable energy measures with the financial support of the National Thermal Rehabilitation Programs of MDRT and Casa Verde programme of the Ministry of Environment and Climate Change (without direct support from the project yet). Inventory of buildings in pilot municipalities has been conducted in 2012 in order to identify 50 most common apartment building types. 140 standard building types have been selected for development of energy audits with standardized energy efficiency solutions. The PIU was in charge to prepare tendering package according to the public procurement rules for energy audits to be performed in selected pilot buildings in order to properly design energy efficiency retrofits that are planned for implementation in 2014. The company that was contracted for this task by the PIU did not deliver the results by December 2013 and the process of energy auditing and implementation of demonstration projects is in a threat of being delayed. Seven energy efficiency/renewable pilot projects have been implemented by UNDP directly in schools and kindergartens in 6 partner municipalities and public buildings have been identified for implementation of 40 pilot projects demonstrating locally produced sustainable insulation materials (expected delivery in 2014).

7 small demonstration projects in six partner municipalities generated 199 tCO₂ direct annual savings, out of a total 600 tCO₂ direct annual savings from retrofits envisaged in Activity 3.2.1 by end-of-project.

Component 4: Information for improved decision-making

Guidelines for municipal decision-makers on fuel poverty, which is an EOP target, are under development. The project has developed a draft methodology for fuel poverty assessment and local draft normative acts

MTE: Improving Energy Efficiency in Low-Income Households and Communities in Romania

and guidelines for a fuel poverty and energy efficiency diagnosis in order to identify priorities. These activities will continue in 2014 and will aim at including the energy efficiency/fuel poverty assessment into the local development plans that are currently being updated at local level.

The building registry database development has not started yet, only preliminary discussions with the MDRAP PIU around the structure of the future database and hosting have been carried out so far. The future database will serve as an important tool for the identification of the priority areas of interest (particularly poverty stricken areas) for the National Thermal Rehabilitation Programme run by the Ministry.

Due to accumulated delays, the project has delivered by MTE only partial results. Delivery of key project results is scheduled for 2014. In case the project delivery would face further delays and lengthy decision making at the MDRAP as in early phase of project implementation, the project would be at a high risk that expected results would not be delivered by the planned end-of-project. However, despite the initial delays, and due to the adaptive management implemented by UNDP to bypass delays in delivery of the PIU/implementing partner (UNDP has signed MCGAs, ISS letter, LOAs), as of MTE the project is still in a position to achieve designed results by the planned end-of-project, including its goal to reach direct annual savings of 43 374 MWh and 22 227 tCO_{2eq} respectively if MTE recommendations will be implemented.

Overview of GHG savings achieved by MTE

- 199 tCO₂ direct annual savings generated from 7 small pilot projects implemented in 2013 in 6 municipalities (energy efficiency retrofits and installation of biomass boilers in schools and kindergartens)

Estimated savings generated by activities delivered/under development at the MTE

- 25 866 tCO₂ direct annual savings are estimated to be generated by the end-of-project by the national thermo-rehabilitation programme by amendment of the Ordinance 18 and extension of energy efficiency measures eligible for financing, and extension of geographical programme focus on additional low-income regions/municipalities
- 15 274 tCO₂ direct annual savings are estimated to be generated by energy efficiency reconstruction of 100 apartment buildings that will use model energy audits that are under development for 50 typical building types

Note: Before reporting this type of GHG savings it should be verified, based on analysis of the national programme and its spending, if these GHG savings are additional to GHG savings that would have been generated without the UNDP/GEF project, or if these savings have been redirected to low-income households without being additional.

Main outcomes to be achieved

Component 1:

In addition to already adopted eligibility extension of national thermal-rehabilitation programme (Ordinance 18), adoption of “fuel poverty” into Romanian legislation is linked with transposition of the Energy Efficiency Directive 2012/27/EU, which allows newly developed compulsory energy efficiency obligation scheme to be implemented as a priority in fuel/energy poor households. This is why the project facilitates the

MTE: Improving Energy Efficiency in Low-Income Households and Communities in Romania

transposition of this Directive (and specifically article 7 that is referring to the vulnerable consumers), although it is a very lengthy process that might be finalized after planned project termination in mid-2015. The project has submitted its proposals to address fuel poverty to the government however, the project has no alternative solution than to support the institutional dialogue and advocate for the inclusion of its proposals into the overall legal framework development process.

Component 2:

Trainings and information dissemination (handbooks, how-to guides) are planned to be continued and extended in scope and scale within the budget availability, and to cover specifically simple energy efficiency measures suitable for poor households and specific information on available financial support schemes for low-income households, municipal information points are planned to be strengthened and scaled-up.

The project intends to continue its support for development of local market (production and application) of sustainable building insulation materials – and apply these materials within component 3.

Component 3:

The project will continue the cooperation with MOPATEL PROIECT SRL, which is willing to invest locally and open a branch in one of the project areas to produce locally sustainable insulation material.

Delivery of the MDRAP hired company has failed to comply with deadlines and deliverables were not submitted by the end of 2013 and thus also implementation of energy efficiency pilot projects scheduled to be implemented and delivered in 2014 to demonstrate locally produced sustainable materials are at risk.

UNDP CO should implement additional adaptive management to offset this delay and implement pilot projects in due time in 2014.

Best practices and lesson learned based on pilot projects will be developed and disseminated locally and internationally.

15 installations of building level mostly biomass heat boilers (with heat output of 40 to 200 kW) are scheduled for 2014. Financing agreements have been prepared by UNDP, and already signed with three municipalities. Estimated costs are 0.2 million USD.

Component 4:

Development of a building registry in order to support the National Thermal Rehabilitation Programme in its targeting to low income areas.

Rating of individual project evaluation benchmarks is summarized in Table 3.

Table 3: Summary rating of the project

Project Formulation	Rating					
	HS	S	MS	MU	U	HU
Project relevance and implementation approach	HS					

MTE: Improving Energy Efficiency in Low-Income Households and Communities in Romania

Logical Framework		S				
Country ownership/drivenness	HS					
Stakeholder participation in the design phase	HS					
Replication approach and sustainability strategy	HS					
Linkages with other interventions		S				
Management arrangements		S				
Project Implementation						
Implementation approach			MS			
Partnerships arrangements		S				
Monitoring and Evaluation	HS					
Feedback from M&E used for adaptive management	HS					
Financial planning and management				MU		
Management by the UNDP office		S				
Management by the PIU/MDRAP					U	
Project Results						
Attainment of objectives				MU		
Relevance		R				
Effectiveness				MU		
Efficiency (cost-effectiveness)				MU		
Country ownership					U	
Project impact				MU		
Prospects of sustainability			ML			

Six point rating scale: HS (Highly Satisfactory) – S (Satisfactory) – MS (Moderately Satisfactory) – MU (Moderately Unsatisfactory) – U (Unsatisfactory) – HU (Highly Unsatisfactory)

Relevance - two point rating scale: R – Relevant, NR – Not Relevant

Prospects of sustainability – four point rating scale: L - Likely, ML – Moderately Likely, MU – Moderately Unlikely, U - Unlikely

After initial delays the project has significantly improved its implementation and delivery in 2013 due to implemented adaptive management by UNDP CO, with a potential to deliver EOP results in a due time. However, as all time reserves have been already utilized, the project is on a critical path and cannot afford any further delays should it deliver expected results by planned end-of-project. The overall evaluation of the project as of MTE is due to delayed delivery **Moderately Unsatisfactory**.

Highly Satisfactory	Satisfactory	Moderately Satisfactory	Moderately Unsatisfactory	Unsatisfactory	Highly Unsatisfactory
			MU		

1.3.1 Recommendations

1. UNDP should take full formal responsibility and direct control over project implementation (Direct Implementation Modality)

MTE: Improving Energy Efficiency in Low-Income Households and Communities in Romania

The project has been implemented with a “National Implementation Modality with advances”. In such case the full responsibility for proper project implementation and delivery of results lies formally with a national implementing partner – Ministry of Regional Development and Public Administration (MDRAP) which was also in charge to set up and staff the Project Implementation Unit. Due to changes in political representation, changes in top political and decision making positions at the MDRAP, related weak political ownership of the project and lengthy bureaucratic decision making procedures at the Ministry, the project delivery has been significantly delayed since its very beginning. The PIU was established and staffed only in December 2011, 5 months after official project launch, procurement (and thus also project activities and delivery) were significantly delayed by months, in some cases up to about a year.

UNDP Country Office, although it is not formally responsible for nationally implemented projects, has a primary responsibility to GEF, the project sponsor, for successful delivery of project results. Thus UNDP CO decided to support MDRAP and its PIU and to help to overcome some of the bureaucratic delays. UNDP CO signed first Micro Capital Grant Agreements even before the PIU has been established, so that trainings under component 2 could have been developed and delivered without delays. In 2012 UNDP signed with the Ministry an Implementation Support Services Letter (ISS Letter) that allowed UNDP CO to actively support PIU/MDRAP and implement necessary project activities. After procurement for first demonstration projects failed to be organized in time, UNDP signed Letters of Agreements with municipalities that allowed implementing first pilot projects without further delays. UNDP CO took over responsibility for delivery of most activities that were developed and delivered for the project by external parties.

UNDP CO offered the MDRAP to change the implementation modality from “NIM/NEX with advances” to “NIM/NEX with full Country Office support” that would better reflect the actual situation. However, MDRAP declined this offer on February 14, 2012.

Procurement and contracting for feasibility analysis/energy audits of energy efficiency retrofits of typical multi-apartment buildings has been the main responsibility of the PIU/MDRAP outsourced to external party. Delivery of these energy audits is critical for implementation of demonstration projects. After delays in procurement and contracting, also the delivery of results has been delayed and the deadline has been extended from November to January 2014. This deadline is already on a critical path: any further delay would delay also implementation of demonstration projects planned for 2014, and the results and savings could not be delivered and monitored in 2014/2015 heating season.

The current implementation setup is thus not sustainable anymore. The necessary and active UNDP support to the PIU/MDRAP, far above a standard support typical for this implementation modality, does not seem to motivate MDRAP to take full responsibility for effective implementation and delivery of project results on time.

UNDP, which has the ultimate responsibility to GEF, should thus take over a direct responsibility for project implementation, and change accordingly the implementation modality to Direct Implementation Modality.

2. The project should have one full-time project manager fully responsible for management and coordination of all project activities.

Under the new implementation modality, UNDP should make sure that the project will have one full-time project manager who will devote 100% of his/her time capacity to project management.

MTE: Improving Energy Efficiency in Low-Income Households and Communities in Romania

Current project manager, as a MDRAP employee, has been actively involved also in other activities of the MDRAP and thus she could not devote her full time capacity for effective project management, supervision and coordination of all project activities, including those that are implemented by UNDP through the ISS letter.

The project should have as a standard one full-time project manager that effectively manages all project activities. This is urgent especially in case when implementation delays have reached their critical path already and the project has no more time reserve to accommodate any potential further delays.

UNDP should hire an experienced and effective project manager who will be able to devote full-time of his/her time capacity to the implementation of all project activities, coordination of all project team members, and ensuring effective communication among all relevant project partners – and thus also to be fully responsible for the whole project delivery.

3. Address also the most vulnerable households with lowest income – provide information on cheap solutions for do-it-yourself installation, demonstrate suitable solutions through on-the-job trainings, disseminate practical how-to guides for the most vulnerable groups.

The most vulnerable households – low-income apartment owners in multi-apartment buildings - that cannot provide co-financing for energy efficiency retrofits cannot benefit from existing/planned national financing schemes. The same applies for the most vulnerable households living in old simple family houses. The project has refocused its activities to the most vulnerable groups living in social housing provided by municipalities. The project should consider also developing and demonstrating appropriate simple do-it-yourself solutions for these income groups. Technical solutions would include simple and inexpensive materials and measures and tips how to reduce energy losses, i.e. how to keep houses warm with less fuel. Information dissemination and demonstration might be linked with on-the-job training of trainers, and include but not be limited to elimination of draft and chimney effect (weatherization/air tightening of old window frames, exterior doors, and attic entrance), optimal operation of stoves (burning of sufficiently dry fuel wood with sufficient air inlet), improvement of single glazed windows (with second layer of glass or plastic), or even do-it-yourself roof and wall insulation using traditional technologies and cheap natural materials (reed, straw, clay), etc. These technical measures do not provide maximum energy/GHG savings, but typically rank among the most cost-effective measures or significantly improve the indoor thermal comfort in case of underheating. The project is considering extension of trainings specifically targeted to the most vulnerable groups, and the evaluator supports extension of such activities.

4. Strengthen the link of the project with national programs and activities supporting energy efficiency in buildings to maximize its impact and additional direct GHG savings

The project has managed already - through the MDRAP PIU - to have amended the governmental decree 18 and to extend the scope of eligible energy efficiency measures and to prioritize low income localities in national thermal rehabilitation program. The more direct support and technical assistance the UNDP/GEF project will provide to energy efficiency project development/implementation in low-income households that could be counted as additional to original programme design/implementation practice, the bigger impact and more direct GHG emission reductions could be assigned by the project as direct project GHG emission savings. The project should continue its efforts in this field and extend its practical trainings, and disseminate information, how-to and financing guides to facilitate implementation of energy efficiency projects on a local level. Practical trainings and information dissemination rank among the most cost-effective strategies how to support implementation of additional energy efficiency projects.

5. Strengthen and expand trainings and information dissemination

The project has delivered already more and good quality trainings than originally planned. However, with increased number of energy efficiency retrofits implemented, there is also growing need and opportunity for further dissemination of more specific information and experience.

Thus the project is encouraged to further extend targeted training activities and information dissemination and support capacity development of both professionals and do-it-yourself home owners in technical and financial best practices in development of affordable and cost-effective energy efficiency projects (focus on technical details, thermal bridges, elimination of condensation, proper ventilation, realistic payback of different technologies/measures). Information can be disseminated also through events organized (and paid for) by third parties.

The project should strengthen information dissemination based on local hands-on examples and include practical information and how-to guides for decision makers, professionals, home and apartment owners and general public on how to prepare, finance and implement energy efficiency projects, how to operate retrofitted buildings (for example how to avoid problems with condensation and mould - sufficient manual ventilation/short-time window opening needed after installation of new windows with tightened plastic frames), including tips on basic energy efficiency do-it-yourself improvements for the most vulnerable groups. The web portal should be updated (hosted perhaps at some project partner website) and kept operational even after project termination, and link it with practical information and existing information sources/youtube videos on proper energy efficiency insulation technologies etc.

6. Develop back up/mitigation plan B for demonstration of alternative sustainable insulation solutions based on local raw materials

Within the Component 3 the project is focusing on demonstration of new, locally produced sustainable insulation materials. Utilization of locally produced sustainable insulation materials has additional positive environmental impact, including additional product lifecycle energy and GHG savings, and positive social impact by creation of local employment opportunities. However development of the whole new supply chain for a new product, including distribution network and marketing is a very demanding and costly task, which includes lots of specific business risks. How successful this new product will be depends not only on the quality, thermal parameters and total installation costs of this insulation material, but also on a feasibility of the business model/plan of the producer, actual demand for such products, and a business (marketing/sales) capacity of the company.

While the demonstration of locally produced sustainable insulation materials is a secondary project aim (the primary goal are sustainable energy/GHG savings), the project team should develop a backup plan B that would be implemented in case there were some unexpected delays or technical/quality problems with this new product that would put at risk implementation of pilot projects and the ultimate goal of the UNDP/GEF project - to deliver energy and GHG savings by the end of project in July 2015.

The backup plan should be developed in early 2014 so that it could be deployed if necessary in pilot projects in 2014 in case the production and application of newly produced local sustainable materials would turn out not to be feasible.

This does not say that the project should resign on demonstration of locally produced sustainable materials. This suggests that the project should prepare a mitigation plan for the case that some unexpected problems

related to these new materials would arise, and the implementation of these demonstration projects would be at risk of delays (such as delayed local production etc).

The mitigation plan then might focus on traditional technologies and locally available non-commercial natural insulation materials (reed, straw, clay, adobe) to be demonstrated – in limited scope - at small suitable buildings. The project should also explore if any certification is required also for home-made natural insulation materials and if so for what application of these materials in do-it-yourself mode, without trading of such materials.

7. Work also with associations of apartment owners in multi-apartment buildings in low-income households to disseminate experience in implementing and financing energy efficiency

Implementation of energy efficiency retrofits in multi-apartment buildings is always more difficult because of numerous partners are organized in Association of Apartment Owners (AAO), specific procedures exist for decision making, and for potential debt recovery. Especially challenging this is in case of low-income households which cannot afford or willing to provide up-front co-financing. Thus the project has gradually refocused on low-income families living in social housing provided by municipalities.

Although the situation in privately owned apartment buildings (AAOs) is much more difficult, and the project might not be able to deliver actual energy/GHG savings from projects in these types of buildings, the project should not resign on this important segment of low-income households. The project should explore opportunities how to eliminate upfront co-financing with support of additional dedicated funds, revolving funds or loans from local utilities, municipalities, etc. and address specific issues and problems that associations of apartment owners have to solve when developing energy efficiency retrofit projects in multi-apartment building with low-income households and disseminate the lessons learned and best practices to decrease transaction costs, for example: specific information on real cost/benefits of energy efficiency improvements based on hands-on experience from implemented projects, model financing schemes with repayment of initial co-financing by reduced energy bills, model tenders and contracts of AAOs with suppliers, including quality control.

When working with AAOs the project would benefit from working with a local entity that has already experience in this field and has demonstrated capacity to work with individual apartment owners associations in low-income regions/municipalities.

1.3.2 Lessons learned

1. Effective management of any project requires the project team to have one single full-time dedicated and experienced project manager who is fully responsible for delivery of overall project results. Any other arrangement is more complicated and tends to be less effective. The project should also have clearly defined responsibilities (and powers) of all team members.
2. UNDP CO managed to overcome delays and underperformance of the national implementation partner, the Ministry of Regional Development and Public Administration (MDRAP), even in case when the implementing partner has full formal responsibility for the PIU and project management. UNDP CO implemented effective adaptive management through signature of Implementation Support Services (ISS) letter with MDRAP, and thus took over responsibility to deliver specified

project activities, and signed Micro Capital Grant Agreements (MCGA) with AAECR and RoGBC, and Letters of Agreement directly with pilot municipalities.

3. The more detailed description of project activities is provided in the Project Document, the better guidance for project implementation team. But on the other hand in such case the project manager might tend to be more bound to originally designed project activities and more reluctant to adopt changes – especially if s/he does not have prior experience with UNDP/GEF adaptive management. Detailed description of project activities in the Project Document should serve as an instruction manual, but it is not intended as a binding prescription on what has to be and what cannot be implemented. UNDP/GEF projects aim to be typically innovative projects. Thus project manager is not expected only to implement prescribed activities, but – in contrast with most other internationally funded projects – s/he is expected to regularly revise and update implementation plan according to actual development and specific needs so that the project objectives will be reached in most effective way. Adaptive management implemented by the UNDP CO in the form of ISS letter, MCGAs and LOAs can serve as the best practice in eliminating accumulated delays.
4. The number of LogFrame indicators should be kept limited. Otherwise their importance tends to be leveled. Maximum number of LogFrame indicators should not exceed ca 10-15 indicators (in exceptional cases ca 20).
5. Projects should use two different sets of project indicators and targets:
 - i. LogFrame indicators for reporting to GEF: Set of indicators and targets for project objectives and outcomes (and eventually for key outputs) that would be used for evaluation of project achievements and delivery of project results for strategic decision makers, steering committee, external project evaluation, and GEF. The number of indicators should be kept reasonably low (dozen +).
 - ii. Activity level indicators for operational project management: More detailed time-bound activity and output level indicators and targets that should be used primarily by the project manager to evaluate project progress on a frequent basis (monthly, quarterly, annually). The number of indicators should reflect the complexity of tasks in specific project period.

2. Introduction

2.1 Project background

Romania has the second lowest GDP per capita in purchasing power standard among 28 EU countries¹, at the level of 49% of the EU 28 average.

Study carried out for the purpose of this project during its preparatory phase and which was based on household surveys carried out among 3,000 households in 2008 by the Romanian National Institute for Statistics states that on average 14.6% of households struggle to pay their heating bills, ranging from 2% in North-West up to 30% in South-East. With progress in elimination of heat and energy subsidies and cross-subsidies, the financial burden to cover heating costs especially of low-income households will even increase.

The study identified that on average 13% of households would pay more than 25% of their income for heating (in apartment buildings, in winter months), and more than 20% of households in 3 out of 8 regions in Romania.

Since the winter season 2011-2012 Romania has adopted a new policy and has eliminated supply-side energy subsidies that reduced price of heat to all residential customers and provides targeted subsidies to low-income households only to cover partially their utility bills.

The UNDP project document identified that buildings in Romania are responsible for 36% of final energy consumption and approximately 56.1 million tonnes of national CO_{2eq} emissions – out of a total of 152.3 million tCO_{2eq} emissions in 2007. The building sector in Romania is dominated by residential buildings – comprising 95.4% of all buildings. Existing residential buildings are generally old (over half of residential buildings were built before 1970). These buildings have poor thermal properties – with average annual heating requirements of 137-220 kWh/m².

As a new EU member state since 2007, Romania has been obliged to transpose EU directives into national legislation, including the 2002 Energy Performance in Buildings Directive (EPBD 2002/91/EC). However, the 2002 EPBD did not apply to new and reconstructed buildings with useful area smaller than 1000 m².

After joining EU, Romania has established and funded national financial support schemes to promote energy efficiency reconstruction in existing buildings and renewable energy heating. However, due to low awareness, limited experience and capacity to co-finance reconstruction the rate of implementation of energy efficiency retrofits in the housing sector was low especially in low-income households and communities.

The project was designed to respond directly to high energy intensity in the building sector, lack of an adequate and sustainable legal framework for improving energy efficiency in buildings in low-income areas and subsequent fuel poverty threat, and to support the National Thermal Rehabilitation Programme by strengthening its focus on poor areas. The project has a demonstration component necessary for an evidence-based policy impact and subsequent nationwide upscale, and has been designed to work primarily within two lower-income counties in demonstrating energy efficiency improvements in residential and public buildings.

A general objective of this project is to dismantle barriers to the implementation of energy efficiency measures among poorer households and in poorer communities in Romania and to alleviate fuel poverty.

¹Source: Eurostat, data for 2012,

<http://epp.eurostat.ec.europa.eu/tgm/refreshTableAction.do?tab=table&plugin=1&pcode=tec00114&language=en>

2.2 Purpose of the evaluation

This mid-term evaluation has been performed on a request of the UNDP Romania as a standard mandatory requirement for all UNDP/GEF projects. The mid-term evaluation mission took place in Romanian September 2013, in the middle of the four-year project implementation period (June 2011- June 2015).

According to GEF and UNDP evaluation policies, Mid-Term Evaluation (MTE) is a required practice for GEF funded FSPs, and the mid-term evaluation was a planned activity of the monitoring and evaluation plan of the Romania Energy Efficiency project. UNDP Romania office initiated the mid-term evaluation near the completion of 2.3 years of implementation since the signature of the project document in June 2011. The postponement of the mid-term evaluation was requested by UNDP CO in Romania and approved by the RTA in BRC. The reason for the postponement was to allow for the project to recover some of the delays in implementation and maximize the relevance of mid-term evaluation's recommendations for the remaining implementation period. The project's planned four-year implementation period ends in June 2015. The mid-term evaluation exercise was conducted based on the MTE Terms of Reference (TOR) (see Annex 6).

The objective of this evaluation is to assess the achievement of project's objective, the affecting factors, the broader project impact and the contribution to the general goal/strategy, and the project partnership strategy. The goal of the evaluation is also to provide the basis for learning and accountability for managers and stakeholders and to make recommendations to improve the project over the second half of its lifetime, and to identify lessons learned which can be incorporated during the next project implementation period and applied to the design of future UNDP projects which aim to remove barriers to energy-efficiency.

According to the GEF and UNDP/GEF Monitoring & Evaluation Policies, the 2009 Handbook on Planning, Monitoring and Evaluating for Development Results, the mid-term evaluation has four objectives:

- i. Monitor and evaluate results and impacts;
Analyze and evaluate effectiveness of the results and impacts that the project has been able to achieve against the objectives, targets and indicators stated in the project document;
- ii. Provide a basis for decision making on necessary amendments and improvements;
Assess effectiveness of the work and processes undertaken by the project as well as the performance of all the partners involved in the project implementation;
- iii. Promote accountability for resource use;
Provide feedback and recommendations for subsequent decision making and necessary steps that need to be taken by the national stakeholders in order to ensure sustainability of the project's outcomes/results; and
- iv. Document, provide feedback on, and disseminate lessons learned.
Reflect on effectiveness of the available resource use; and document and provide feedback on lessons learned and best practices generated by the project during its implementation.

2.3 Key issues addressed

This mid-term evaluation reviews the actual performance and progress toward results of the project against the planned project activities and outputs, based on the standard evaluation criteria: relevance, efficiency, effectiveness, results and sustainability. The evaluation assesses project results based on expected outcomes

MTE: Improving Energy Efficiency in Low-Income Households and Communities in Romania

and objectives as described in the project document, as well as any unanticipated results. The evaluation identifies relevant lessons and provides recommendations as necessary and appropriate.

The following key issues have been addressed in the mid-term evaluation:

Relevance of the project with national development priorities, and its appropriateness,
Effectiveness of the development project and partnership strategies,
Contribution and worth of the project to national development priorities
Key drivers and success factors enabling successful, sustained and scaled-up development initiatives, alternative options and comparative advantages of UNDP
Efficiency – cost-effectiveness of funds spent to reach project objectives and results
Risk factors and risk management strategies
Sustainability - level of national ownership and measures to enhance national capacity for sustainability of results
Impact of the project implemented on human development

According to the TOR, the Mid-Term Evaluation assessed:

1. Project concept and design
2. Implementation
3. Project outcomes, outputs and impact
4. Progress towards results
5. Project's adaptive management framework and underlying factors
6. UNDP contribution
7. Partnership strategy

2.4 Scope and methodology of the evaluation

The methodology used for the project mid-term evaluation is based on the UNDP/GEF Monitoring & Evaluation Policies and includes following key parts:

- I. Project documents review prior to the evaluation mission
- II. Evaluation mission and on-site visits, interviews with project management, UNDP CO, project partners and stakeholders.
- III. Drafting the evaluation report and ad-hoc clarification of collected information/collection of additional information
- IV. Circulation of the draft evaluation report for comments
- V. Finalizing the report, incorporation of comments

The evaluation methodology is based on a participatory mixed-methods approach, which includes three primary elements: a) a desk review of project documentation and other relevant documents; b) interviews with key project participants and stakeholders; and c) a visit to project sites in the region of Dolj and Hunedoara, where the GEF evaluator was accompanied by the UNDP Task Leader.

The evaluation was based on evaluative evidence from the start of project implementation (June, 2011) till September 2013 (with expected project closure at the end of June 2015). The desk review was conducted in

MTE: Improving Energy Efficiency in Low-Income Households and Communities in Romania

Prague between September 10-20, 2013, the evaluation mission was carried out on September 22-28, 2013 (see Annex 1). The list of stakeholders interviewed is included as Annex 2 to this evaluation report.

The evaluation was conducted in accordance with UNDP and GEF monitoring and evaluation policies and procedures, and in-line with United Nations Evaluation Group norms and standards.

Intended users of this terminal evaluation are the Government of Romania and Ministry of Regional Development (MDRAP) as the project implementing partner responsible for the project management, and the UNDP country and regional offices. As relevant, the mid-term evaluation report may be disseminated more widely with additional stakeholders to share lessons learned and recommendations.

2.5 Structure of the evaluation

This mid-term evaluation report follows the structure and content as specified in the Terms of Reference (Annex 6) and the template of the 2009 UNDP Handbook on Planning, Monitoring and Evaluating for Development Results, including its 2011 update.

Content of the mid-term evaluation corresponds with suggested structure and content as specified in the UNDP Handbook and ToR, and it includes following chapters:

1. Executive summary
2. Introduction
3. Project description and development context
4. Findings
 - i. Project Design and Formulation
 - ii. Project Implementation
 - iii. Results
5. Conclusions, Recommendations, Lessons Learned

3. Project Description and Development Context

3.1 Problems that the project seeks to address

Romania, as an EU member state since 2007, had already at the time of the project design (between 2009 through 2011) access to funding of energy efficiency housing retrofit and renewable energy programs (National Thermal Rehabilitation Programme of MDRT launched in 2009 with annual budget of 36 million €, Casa Verde programme of the Ministry of Environment with 26 million € annual budget, and others). However, these programs were not targeted specifically at low-income households.

The only programme specifically designed to support energy efficiency retrofits in low-income communities was the 2007-2010 programme “Structural and Thermal Rehabilitation of Blocks of Flats in Poor Regions” with an annual budget of 2 million €. However, the demand was too low, and instead of planned reconstruction of 44 apartment blocks in 2007-2009, only 5 buildings have been retrofitted.

The key barrier thus was not lack of governmental preferential funding and support schemes for energy efficiency retrofits of buildings, although the funding from central and local governments is always limited, but little demand for energy efficiency retrofits especially among low-income households and communities.

Key problems that needed to be addressed were primarily lack of awareness, little hands-on experience with energy efficiency project development, and little capacity to co-finance energy efficiency building retrofits from low-income households and communities.

The Project Document has identified and evaluated specific barriers and structured them into four categories. For each barrier a priority has been identified as Low, Medium or High respectively.

Organizational and policy barriers

- Lack of institutional support and coordination of Government actors -**Medium**
- Lack of clear policy specifically to address fuel poverty -**Medium**
- The municipalities are not oriented towards end-use EE – especially for poor customers -**Medium**
- Effective and innovative financial mechanisms are not in place -**Medium**

Capacity barriers for implementation of EE measures

- Lack of EE knowledge among building professionals - **High**
- Municipalities are not able to effectively tender and check on the quality of programs - **High**
- In rural areas, most people implement projects in a Do It Yourself manner and their knowledge of implementing EE in houses is not at a very high level (if at all present) - **High**
- Lack of EE practices being utilized in the construction/refurbishing of buildings in rural areas due to lack of locally-produced, affordable materials - **High**

Project-level barriers

- The application process for Government EE programs is complex, requiring technical analysis that is duplicated - **High**
- Numerous communities without District Heating are not aware/have no existing market for appropriate/sustainable building-based heating sources - **Medium**
- Lack of money among some households within blocks of flats - **High**

MTE: Improving Energy Efficiency in Low-Income Households and Communities in Romania

- Lack of customer-controlled heating sources and data for utilities and municipalities / Government on fuel usage - **Low**

Barriers for national and local decision-making

- Lack of information about fuel poverty and among decision-makers - **Medium**
- Lack of data for utilities and municipalities/ Government / donors on fuel usage for prioritization of buildings refurbishment - **High**
- Lack of information about the economic benefits of EE - **High**

3.2 Immediate and development objectives of the project

The aim of the project is to raise awareness and to increase capacity to develop, implement and finance energy efficiency building retrofit projects, to transform annual energy bill subsidies to up-front subsidies for energy efficiency retrofits in low-income households, and to decrease transaction costs when developing energy efficiency projects for co-financing from governmental programs focused on low income households. To address these goals, the project was designed to provide technical assistance to central and local authorities and project developers, in order to increase the number of energy efficiency projects implemented – and thus to increase energy and GHG emission savings - especially in low-income households and communities. Additional intention of the project was to leverage financing from governmental programs across more investment projects, by reducing the percentage of eligible costs to be directly subsidized by governmental program.²

The project document specified a project goal to reduce direct annual GHG emissions in the buildings sector in Romania by 22 227 tCO_{2eq}, and a project objective to reduce energy consumption in buildings in low-income households and regions of Romania by 43 374 MWh annually.

A general objective of the project is to dismantle barriers to the implementation of energy efficiency measures among poorer households and in poorer communities in Romania and alleviate fuel poverty.

As per project document specification, the “project has for its objective the removal of barriers to the implementation of energy efficiency measures among poorer households and in poorer communities in Romania – working to alleviate fuel poverty. The project will act at a national and local level to address energy efficiency needs, develop appropriate policy measures, stimulate an on-going market for locally produced, energy efficient building materials, build capacity for implementation of energy efficiency measures in poorer regions, and implement real energy efficiency improvements to improve the lives of 110,616 people in Romania and reducing (lifetime) emissions associated with energy use by 666,800 tonnes of CO_{2eq}”.

3.3 Project start and its duration

The Project Document was endorsed by GEF CEO on June 6, 2011, and signed by the Government and UNDP on June 20, 2011, when the project has formally launched its four-year implementation period.

UNDP Resident Representative/Head of Office asked in his letters of August 1 and October 4, 2011 the Ministry of Regional Development and Tourism as an implementing partner to set up a date for the inception workshop and to nominate members of the Project Implementation Unit of MDRT. The date for inception workshop was finally convened and the inception workshop was held on October 20, 2011.

²Interview with Seth Landau, co-author of the Project Document, October 2013.

MTE: Improving Energy Efficiency in Low-Income Households and Communities in Romania

Before the inception workshop UNDP project team has produced a thorough review of the changes in the local legislation and economic environment and shortly before the inception workshop UNDP hired a Technical Advisor/Task Leader in order to support the project management and technical coordination of project consultants.

The MDRT has set up a PIU in late November 2011 and has nominated Project Manager, Procurement Specialist and a Project Assistant.

The project team, including PIU set up by the MDRT, became fully staffed and operational six month after ProDoc signature.

The four-year project is planned to end by July 31, 2015.

3.4 Main stakeholders

The project implementing partner is the Ministry of Regional Development and Tourism.

Main project stakeholders identified in the Project Document to be actively involved in project implementation include national and local governmental agencies and NGOs. Specific private sector companies/representatives have not been listed as main project stakeholders in the project document, however they had crucial role in project development and implementation.

- Ministry of Environment and Forestry
- Ministry for Labour and Social Protection
- Ministry of Economy, Trade and Business Environment
- Ministry of Administration and Internal Affairs
- The National Institute of Statistics
- Regional/municipal administrations
- Romanian Energy Regulatory Authority (ANRE) and its Regulatory department for Energy Efficiency (former National Agency for Energy Conservation – ARCE)
- National Institute for Research and Development in Construction, Urban Planning and Sustainable Regional Development (URBAN-INCERC)
- The Association of Energy Auditors for Buildings (AAECR) - NGO
- The Romanian Green Building Council - NGO
- Habitat for Humanity International (HFHI) -NGO

Other relevant organizations:

- The World Bank
- EBRD
- European Commission

3.5 Results expected

The project goal is to reduce GHG emissions in the buildings sector in Romania by 666 800 tonnes CO_{2eq} over the lifetime of energy efficiency measures introduced (direct reductions).

MTE: Improving Energy Efficiency in Low-Income Households and Communities in Romania

The Project Document specified expected project results – project outputs for each of the project component/outcome.

Overview of expected project Outcomes and Outputs:

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

- Output 1.1: Established national-level, functional multi-organizational working group that formulates and facilitates the approval and adoption of policy recommendations and action plans for EE which integrate poverty alleviation into their working group members' programs
- Output 1.2: Identified fuel poverty-related EE improvement activities that are integrated into, and implemented within, development plans and energy plans of selected municipalities/counties; including leveraging funding sources for EE improvements

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

- Output 2.1: Increased numbers of building professionals, local government authorities and technical personnel capable of providing technical advice and services on the application of EE measures and techniques in the design, construction and operation of buildings
- Output 2.2: Information points in selected public municipalities within two counties for promoting public education on EE measures using commonly used and locally-available technologies
- Output 2.3: Local building material producers and building construction companies highly qualified and capable of producing and applying, respectively, EE building materials
- Output 2.4: Information campaign results and EE success stories disseminated within Romania, UNDP and in the international community

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

- Output 3.1: Standard EE building design analysis for key types of existing apartment blocks and retrofitted thermal systems of selected apartment blocks
- Output 3.2: Thermally retrofitted social buildings (schools, kindergartens, municipal offices and social houses/residences owned by the local government) in selected counties
- Output 3.3: Houses built/refurbished using energy efficient, locally-produced materials

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

MTE: Improving Energy Efficiency in Low-Income Households and Communities in Romania

Output 4.1: Regionally-adaptable methodology for fuel poverty assessment proposed and a guide for municipal decision-makers on fuel poverty issues

Output 4.2: Local and regional registries/databases of building stock

4. Findings

4.1 Project design and formulation

4.1.1 Project relevance and implementation approach

The project is 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.

The project is also closely aligned with existing national priorities in Romania, namely with:

- National Development Plan, which specifies public development investment priorities, and specifically with three of the six national development priorities:
 - Protecting and improving the quality of the environment
 - Developing human resources, promoting employment, social inclusion and strengthening administrative capacity
 - Diminishing development disparities between country regions
- National Energy Strategy 2007-2020, which was adopted in 2007 and includes the objective of “improving energy efficiency”
- National Action Plan on Climate Change, Action 6.3, in its effort to “promote energy efficiency among energy end users”

The project “Improving energy efficiency in low-income households and communities in Romania” is fully in line with national and GEF strategic priorities.

The project implementation approach focuses on four components, including improved policies to support energy efficiency in low-income communities, improved capacity at the local level to reduce fuel consumption in low-income communities, direct reduction of energy consumption through community-based retrofits and market development and information for improved decision-making.

The project document was prepared to a high quality; it included a very thorough analysis of current situation and designed properly not only project outcomes and outputs, but also in a very detail all project activities that reflected the situation in the country at the project development phase. The Project Document adequately addressed the needs and designed appropriate implementation strategy.

The rating of the project relevance and designed implementation approach is rated **Highly Satisfactory**.

Highly Satisfactory	Satisfactory	Moderately Satisfactory	Moderately Unsatisfactory	Unsatisfactory	Highly Unsatisfactory
HS					

4.1.2 Analysis of logical framework (project logic/strategy, indicators)

The project LogFrame defines indicators, baselines, targets, source of verification and risks and assumptions for project goal, project objective, four project outcomes, and for each project output.

The LogFrame is based on a thorough situation and barrier’s analysis; it is well designed, and properly follows the project logic. The LogFrame indicators are designed to meet the SMART requirements: they are Specific, Measurable, Attainable, Relevant and Time-bound. LogFrame baselines and targets are expressed in concrete values that are easy to evaluate.

In total, the LogFrame includes 45 indicators and targets. Although this large number of indicators helps to cover the full complexity of the project, in the same time it levelizes their importance. For GEF project evaluation it is important what has been achieved, rather than what has been implemented in terms of project activities. Thus project outcome and output indicators are more suitable for evaluation of overall project achievements than activity level indicators. More specific activity level indicators are better suited to evaluation of project implementation progress on a short-term basis (annual, quarterly project evaluation by project team). The project uses outcome and output level indicators for reporting in PIR.

The numerical specification of targets is ideal for measurement. On the other hand, targets expressed numerically tend to focus the evaluation on quantitative parameters primarily, and quality of achievements is harder to express by those LogFrame targets only.

LogFrame matrix, including indicators and targets, has been well defined and the project team did not feel the need for its update or revision since they have been specified in the ProDoc. The inception report did not propose any changes to the LogFrame matrix either, except for one minor update in wording.

The inception report did not take into account two negligible numerical corrections in targets of Outcome 3 and Output 3.1 as specified in the Request for GEF CEO endorsement/approval and used the value of the targets from the draft Project Document. The revised value of the target should be 1 474 instead of 1 494 (Outcome 3 – number of apartment blocks with EE/RE measures) and 484 instead of 504 (Output 3.1 – number of sustainable heating systems installed).

Rating of the Logical Framework is **Satisfactory**.

Highly Satisfactory	Satisfactory	Moderately Satisfactory	Moderately Unsatisfactory	Unsatisfactory	Highly Unsatisfactory
	S				

4.1.3 Assumptions and risks

The request for GEF CEO endorsement/approval has identified project risks and proposed adequate mitigation strategies for each risk. The risks have been rated Low to Medium and include:

- Shift in political priorities means discontinuation of Government co-financing – *Medium/Low*
- Lack of funding to support investments that are targeted – *Medium/Low*
- Lack of investment triggered in low-income communities - *Medium*
- Professionals/building materials producers not interested in participating in capacity building exercises – *Medium/Low*
- Lack of administrative capacity will hinder project implementation in more disadvantaged regions of the country - *Low*

In addition to this, the project LogFrame specified for each target specific risks and assumptions.

Risks and assumptions have been properly addressed and defined and reflect all key risks that the project implementation was expected to be exposed to.

4.1.4 Lessons from other relevant projects incorporated into project implementation

The project was designed based on experience from a series of UNDP/GEF energy efficiency in buildings projects implemented in the region of Central and Eastern Europe, CIS and other countries and from UNDP/GEF project “Capacity Building for GHG Emission Reduction through Energy Efficiency Improvement in Romania” implemented in 2003-2006.

The goal of this 2 million USD project was to persuade companies and municipalities to lower greenhouse gas emissions by investing in energy efficiency; to build local capacity for this type of greenhouse-friendly investment; and to help leverage 20 real investments with a combined value of 12.5 million USD by providing technical assistance and small grants for co-financing of energy efficiency equipment. As a result, 34 energy efficiency investment projects have been implemented with a combined value of 70 million USD.

UNDP CO has formulated the concept of this project in October 2009, based originally on the conclusions of a 2003 USAID sponsored study on energy reform and social safety³, authored by Mark Velody, and on lessons learned from a previous UNDP/GEF funded 2003-2006 Energy Efficient project⁴ - project managed by Mark Velody as well. The study has showed that *“thus far, there have been no projects focusing specifically on energy issues for low income households; moreover... no government department is responsible specifically for low income energy issues, there is no formal definition of “fuel poverty” and no fuel-poverty eradication strategy”*.

The focus of this new Romanian energy efficiency in buildings project on low-income households and communities and locally produced sustainable energy efficient construction materials is rather unique in international context and UNDP/GEF experience.

Incorporating lessons learned from other relevant projects were secured by involvement of three experienced international consultants in the project document development phase and by a support of senior UNDP staff that had experience in similar energy efficiency projects across the RBEC region and in Romania.

This UNDP/GEF project is not the only project focused on energy efficiency in buildings in Romania. Since Romania joined EU in 2007, it had - at the time of this UNDP/GEF project development phase - access to European funds (pre-accession and structural funds), and it participated in a number of bilateral projects focused on improving energy efficiency in general, and specifically in buildings as well.

The project development team incorporated experience from these on-going projects in Romania in that time and designed the UNDP/GEF project to supplement rather than compete with the existing initiatives. Specifically, it translated into the focus of the energy efficiency in buildings project on low-income households and communities, integrating fuel poverty in national policies, incorporating locally produced

³ “Energy Reform and Social Protection in Romania” Mark Velody, 2003

⁴ROM/00/G31/Rev.1/A/2/1G/31: Capacity Building for GHG Emission Reduction through Energy Efficiency Improvement in Romania

MTE: Improving Energy Efficiency in Low-Income Households and Communities in Romania

sustainable energy efficient materials, raising awareness and strengthening capacity to develop energy efficiency projects.

4.1.5 Country ownership

The project has emerged as an initiative of UNDP CO Romania with a support from UNDP Bratislava Regional Center.

During the preparatory phase the UNDP project development team consulted with a number of local stakeholders and agreed upon cooperation during project implementation phase with the following key local project partners:

- Ministry of Regional Development and Tourism that agreed to serve as an executing entity and to set up, empower and staff a Project Implementation Unit
- Ministry of Environment and Forests
- Local/municipal administrations/governments in two counties of Dolj and Hunedoara
- Municipalities of Calafat, Calan, Craiova, Petrila, Petrosani, and Vulcan – beneficiaries of the project, site of demonstration projects
- Association of Energy Auditors for Buildings
- Romania Green Building Council

All project partners signed a letter of support and both ministries and NGOs signed a commitment to provide cash and/or in-kind co-financing for project implementation.

The country ownership in the design phase is rated **Highly Satisfactory**.

Highly Satisfactory	Satisfactory	Moderately Satisfactory	Moderately Unsatisfactory	Unsatisfactory	Highly Unsatisfactory
HS					

4.1.6 Stakeholder participation in the design phase

Stakeholders involved in the project development phase included three groups:

- I. Relevant stakeholders that were consulted during project development phase,
- II. Partners that were planned to participate in the project implementation phase and/or to serve in a Steering Committee and/or an Advisory Committee, and
- III. Project partners to be actively involved and responsible for project implementation

Besides project partners that were planned to actively participate in project implementation and to take responsibility for successful project implementation (see the list of partners in Chapter 4.1.5 Country ownership), the following partners have been consulted during the project preparation phase and expected to provide inputs also to project implementation:

- Ministry of Environment and Forests
- Romanian Loan Guarantee Fund (FRGC)
- Ministry of Administration and Internal Affairs (MAI)

MTE: Improving Energy Efficiency in Low-Income Households and Communities in Romania

- Romanian Energy Efficiency Fund (FREE)
- Professional Associations: Association of Installation Engineers (AIIR), Association of Facility Management (ROFMA), Chamber and Union of Architects
- National Housing Agency (ANL)
- European Bank for Reconstruction and Development
- Ministry of Labour, Family and Social Protection
- Romanian Energy Regulatory Authority (ANRE)
- National Institute for Research and Development in Constructions, Urban Planning and Sustainable Regional Development "URBAN-INCERC" (INCD URBAN-INCERC)

Stakeholder participation in the design phase is rated **Highly Satisfactory**.

Highly Satisfactory	Satisfactory	Moderately Satisfactory	Moderately Unsatisfactory	Unsatisfactory	Highly Unsatisfactory
HS					

4.1.7 Replication approach and sustainability strategy

Each of the project components has been designed to have lasting impact on improving energy efficiency in buildings in low-income households and communities.

Component 1: Improved policies to support energy efficiency in low-income communities will have sustainable impact and replication potential on governmental/local administration capacity in financial programming support schemes for energy efficiency in low-income communities. The ultimate goal of this component is to strengthen governmental financial support schemes targeted specifically at energy efficiency improvements in low-income households and to transpose annual energy bill subsidies to upfront energy efficiency investment subsidies.

Component 2: Improved capacity at the local level to reduce fuel consumption in low-income communities – is designed to increase capacity of building professionals, local officers and materials producers and thus to stimulate the capacity necessary for sustainable market development of energy efficiency in the Romanian buildings sector. Information campaign and series of trainings have been designed to stimulate the demand for energy efficiency improvements and sustainable building materials.

Component 3: Direct reduction of energy consumption through community-based retrofits and market development. Demonstration projects planned for implementation under Component 3 were designed to serve primarily to obtain hands-on experience on a local level with preparation, administration and implementation of energy efficiency projects and to stimulate demand for energy efficient materials and services.

Component 4: Information for improved decision-making has been designed to utilize newly developed methodology for measuring fuel poverty at local and national level in order to improve targeted energy efficiency programming for low income households and for replication of energy efficiency investments.

Project Document replication approach and sustainability strategy is rated **Highly Satisfactory** because it is based, as described above, on lasting impact of policy improvements and capacity development and not only on important but limited one-time investment demonstration projects.

Highly Satisfactory	Satisfactory	Moderately Satisfactory	Moderately Unsatisfactory	Unsatisfactory	Highly Unsatisfactory
HS					

4.1.8 UNDP comparative advantage

UNDP Romania has the administrative capacity to implement energy efficiency in buildings project, it is a neutral implementing agency and it can benefit from synergy of portfolio of similar energy efficiency projects in environmental governance focus area being implemented internationally.

UNDP has demonstrated international experience in energy efficiency in buildings.

UNDP has also a proven record of effective cooperation with international energy efficiency experts both in the project development as well as in project implementation phases.

In addition to the international experience, UNDP CO Romania has developed already between 2003 and 2006 its own country specific experience in developing and financing energy efficiency projects through the successful implementation of the UNDP/GEF project “Capacity Building for GHG Emission Reduction through Energy Efficiency Improvement in Romania”. This 2 million USD project worked with municipalities and private companies and provided technical assistance to develop and finance energy efficiency projects. In total the project leveraged 34 investment projects with a total combined value of 70 million USD, and significantly exceeded the originally planned target of 12.5 million USD leveraged investment.

4.1.9 Linkages between the project and other interventions within the sector

The project was designed to build upon experience from existing energy efficiency interventions in the country and to supplement their impact by focusing on a specific target group of low-income households and low-income communities.

The project was designed also to work closely with existing national programs providing financial support for energy efficiency retrofits of buildings, namely with the National Programme for Thermal Rehabilitation of Blocks of Flats administered by the Ministry of Regional Development and Tourism, and with the Green Home (Casa Verde) programme of the Environmental Fund under the auspice of the Ministry of Environment and Forests. Other smaller national programs have been also identified as potential project partners, including Thermal Rehabilitation of Public Health Buildings. The project design built on experience also from the Structural and Thermal Rehabilitation of Blocks of Flats in Poor Regions programme that planned for rehabilitation of a total of 52 blocks of flats between 2006 and 2010, but actually only 5 blocks have been rehabilitated between 2007 and 2009.

The UNDP/GEF project was intended to be supplementary to the existing national programs: it built upon established institutional capacity to administer energy efficiency programs and already developed technical and financial expertise in developing and implementing energy efficiency projects in buildings. The aim of the project is to redefine the eligibility criteria and specific conditions integrating fuel poverty, and to utilize existing administrative capacity at national and local levels.

Chart 1: Overview of national energy efficiency and building construction programmes

Program	Legal act	Implementing organization	Annual budget*	Time frame	Target group/ region	Aims/strategies of the program
National Program for Thermal Rehabilitation of Blocks of Flats ³⁷	Law 372/2005 Law no. 18/2009 Law no. 69/2010	MDRT, Local Authorities (LA)	36 million Euros, from MDRT >36 million Euros, from LA	2005-	Blocks of flats – national level	781 blocks (27,385 apartments) rehabilitated up until 31 Dec. 2009 896 blocks (24,548 apartments) up to the end of 2010
The Green Home (the Environment Fund) ³⁸	Law 105/2006	Ministry of Environment and Forestry – Administration of Environment Fund	26 million Euros	1 July 2010 -	Housing sector (apartments and houses) (also industrial applications, not included in the table)	Program started on 1 st July; 8500 projects received for houses up to 1 st Sept. 2010, 7500 more expected until the end of the year - Provides state subsidies (6000-8000 RON/equipment) when classical heating installations are partially or totally replaced with renewable energy equipment.
Thermal rehabilitation of public health buildings	GD 964/2003 GD 1868/2005 GD 765/2010	MDRT by CNI S.A.	6.5 million Euros allocated until 2010; 2.2 million Euros for after 2009	2005-2010; 2011-	Public health sector	Thermal rehabilitation of 32 public health buildings until 2010; 3 more buildings starting with 2010. Major financial contribution from the Swiss Government.
Structural and thermal rehabilitation of blocks of flats in poor regions	Law 60/2005 GD 663/2005, ... 940/2010	MDRT by CNI S.A.	2 million Euros	2007-2010	Private and public buildings	Structural and thermal rehabilitation previewed in governmental decisions for: 8 blocks in 2006, 12 blocks in 2007, 13 blocks in 2008, 11 blocks in 2009, 8 blocks in 2010. In actuality, there have only been 5 blocks rehabilitated with 243 apartments during 2007-2009.

Program	Legal act	Implementing organization	Annual budget*	Time frame	Target group/ region	Aims/strategies of the program
The First House	Law no. 368/2009 – (EGO no. 60/2009)	Government	53 million Euros (initial)	2009 -	Housing (single buildings or apartments)	Credit guarantee scheme. 1,017,700 Euros for 24,277 guarantees up to July 2010, then frozen.
The Program for the Romanian Village Rebirth – 10 houses for specialists	GD 151/2010; (EGO 28/2010 for financing)	MDRT	800 million Euros allocated for 5 years	2010-2015	State-owned housing, in rural areas	Feasibility studies foreseen for 25,000 houses and 17,000 requests received; no house has been built so far.
The Housing Program for Young People	EGO no. 14/2010 (Law 152/1998, EGO 105/2005)	ANL	44 million Euros for 2010 (initial)	2005-	New blocks of flats at affordable prices	7000 houses in 2010-reduced to 1400 due to budget cut-off in August 2010
District Heating 2006-2015 – Heat and Comfort	GD no. 462/2006, MO no. 471/2008	Ministry of Administration and Internal Affairs	63 million Euro/year proposed; 10.5 mil. Euro in 2009 for about 35 projects	2006-2015	It is not addressed to natural persons, although it might rehabilitate residential buildings as well.	This program has two components: rehabilitation of the district heating system, and the thermal rehabilitation of buildings (indoor installations).
National Action Plan for Energy Efficiency	EGO no. 28/2008 (ESD 2006/32/EC)	ANRE (dept. Regulation in Energy Efficiency Field)	Distributed, not known	2008-2010	Industry, public sector, housing sector, ESCO's.	Contributions to the legal framework, promotion of national EE programs, 1 st report for EC due in 2011.
The national program for improving energy efficiency and use of renewable energy resources in the public sector, for 2009-2010.	GD no. 1661/2008; GD no. 835/2010	ANRE (dept. Regulation in Energy Efficiency Field)	5.8 million Euros allocated for co-financing in 2009; 2.8 million Euros allocated for co-financing in 2010.	2009-2010	Public sector (infrastructure, buildings)	6 projects for district heating; 5 projects for public lighting; 12 projects for public buildings (schools, hospitals, local administration).
State guarantee for credits made by population for thermal rehabilitation of their homes.	EGO nr. 69/2010 GD 736/2010	MDRT, FNGCIMM	46.8 million Euros	2010 -	Apartments or individual houses built before year 2000.	The scheme guarantees 90% of the implementation costs for energy efficiency measures, but no more than 1850 Euro/room in apartments and 7400 Eurp/single house.

Linkages between the project and other interventions within the sector are rated **Satisfactory**.

Highly Satisfactory	Satisfactory	Moderately Satisfactory	Moderately Unsatisfactory	Unsatisfactory	Highly Unsatisfactory
	S				

4.1.10 Management arrangements

The project management arrangement was designed to be based on a National Implementation Modality (NIM) with advances with the Ministry of Regional Development and Tourism serving as an executing entity (implementing partner) that is responsible to set up and staff Project Implementation Unit (PIU) that is responsible for actual project implementation. Project Implementation Unit was designed to consist of three full-time members: Project Manager, Project Assistant, Procurement Officer, and additional project support if needed.

UNDP was expected to provide Project Assurance, and a Project Technical Assistance consisting of a Task Leader, Local Coordinators, Local Project Assistants, and Communication Officer.

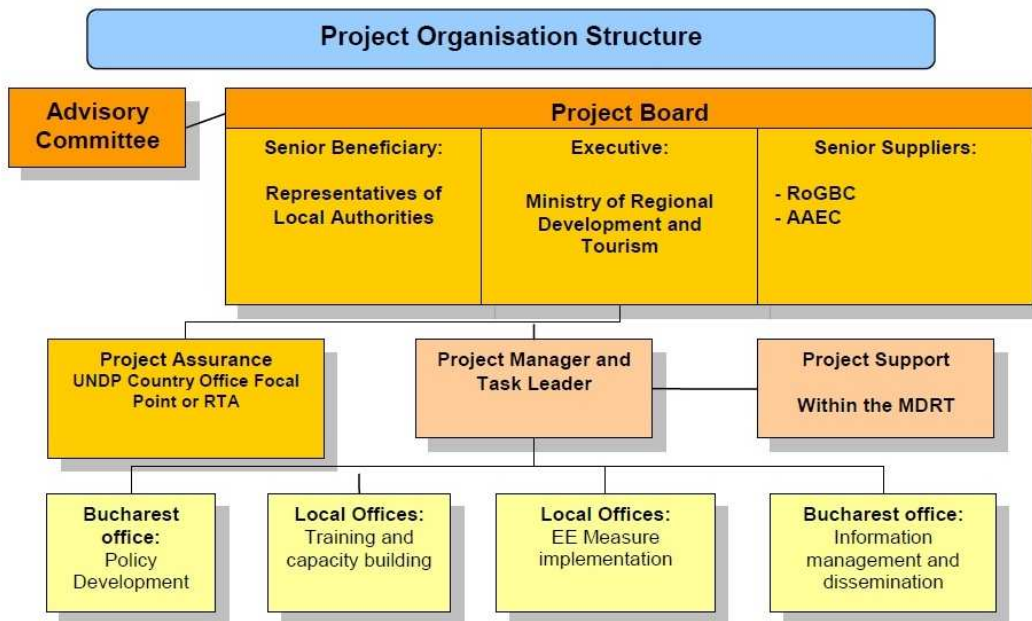
Project Board (Steering Committee) was designed to oversee, monitor and evaluate the overall project implementation. Advisory Board was planned to provide technical expertise to the Project Board.

For specific project tasks UNDP CO was expected to hire additional short-term national or international experts.

Responsibility of MDRT was to appoint a National Project Director.

The structure of the proposed management arrangements is shown in the Chart 2.

Chart 2: Project Organization Structure



The Project Document envisaged that both the Project Implementation Unit and the Project Technical Assistance will work jointly as a single team under a leadership of the Project Manager - although under different contractual arrangements: the Project Manager as an employee of MDRAP, and Project Technical Assistance staff under contracts with UNDP.

Key project partners envisaged in the Project Document include, except for the Ministry of Regional Development and Public Administration – the implementing partner, also:

MTE: Improving Energy Efficiency in Low-Income Households and Communities in Romania

- Ministry of Environment and Climate Change (former Ministry of Environment and Forests)
- Local/municipal administrations/governments in two counties of Dolj and Hunedoara
- Municipalities of Calafat, Calan, Craiova, Petrila, Petrosani, and Vulcan
- Association of Energy Auditors for Buildings (AAECR)
- Romanian Green Building Council (RoGBC)

Planned management arrangements and project organization structure as described in the Project Document and Chart 2 represent proven arrangements used successfully in other UNDP/GEF projects as well, and are thus rated **Satisfactory**.

Highly Satisfactory	Satisfactory	Moderately Satisfactory	Moderately Unsatisfactory	Unsatisfactory	Highly Unsatisfactory
	S				

4.2 Project Implementation

4.2.1 Implementation approach

Project implementation faced significant delays during the reporting period. Due to political instability in Romania since 2011, there have been frequent changes in the government. At several ministries, including the Ministry of Regional Development and Tourism and the Ministry of Environment, ministers as well as the top management of the ministry including state secretaries, have been replaced several times within a year (3 times at the MDRT, and 4 times at the MEF since the project start). This has led to an institutional instability and a weak political ownership of the project. Since the PIU has not been set up as a stand-alone entity with full decision powers but it is rather a subject of lengthy bureaucratic decision making process at the MDRT, and due to changes in a position of the minister and state secretary who serves as a National Project Director, there were delays with setting up PIU, its staffing, and especially with procurement of services for project implementation which was delayed for about a year.

UNDP team has responded to this situation (delays at the Ministry's PIU caused by inflexible operational management and decision making process) and started to support PIU more thoroughly already in October 2011. In October and November 2011, UNDP CO signed two Micro Capital Grant Agreements (MCGAs) with AAECR and RoGBC to deliver trainings. Due to this pro-active UNDP approach, trainings were prepared and delivered even before PIU was set up in November 2011. UNDP signed further MCGA with AAECR to deliver trainings in 2013.

Early in 2012, UNDP signed ISS letter (Implementation Support Services Letter) with the Ministry, which allowed UNDP CO to actively support PIU and to directly implement necessary project activities. Without signing the ISS letter, UNDP would have limited opportunities to influence the project which is implemented under the National Implementation Modality with advances, and the Ministry is thus fully responsible for project management.

Early in 2012 UNDP Resident Representative and Head of Energy Efficiency Unit started a series of meetings with National Project Director at MDRAP and offered to change the implementation modality to NIM with UNDP Country Office support. However, the government has declined this offer and the minister assured UNDP that MDRAP has sufficient capacity to successfully manage the project.

The UNDP CO management has taken into consideration also the UNDP Country Programme Document CPD 2011-2012 that piloted a new model of cooperation between UN and the government of an EU member state. This type of UNDP commitment has acknowledged the national capacity and was mandated to intervene only in certain niche areas offering technical assistance and supporting role. The UNDP CO senior management has considered all these factors when deciding to respect the will of the government, and take a calculated risk and continue this implementation modality with intensified support to PIU.

In December 2012 UNDP CO decided to mitigate delays in public procurement for pilot project services conducted by the PIU and signed with 6 partner municipalities Letters of Agreement (LOA). These LOAs allowed shifting the procurement from the national to local levels, and thus effectively allowed implementation and direct financing of first 7 pilot projects without further delays.

The UNDP team faced also discontinuity and changes on a position of a Task Leader. UNDP has employed a third Task Leader within less than two years. During periods of changes in the position of the Task Leader and in a period when the position was unoccupied, the UNDP Head of Energy Efficiency Unit and Programme Associate provided project assurance in order to eliminate potential threats to project implementation.

MTE: Improving Energy Efficiency in Low-Income Households and Communities in Romania

National Project Director:

Mr. Eugen Curteanu, State Secretary, MDRAP 2011 – April 2012
 Mr. Iulian Matache, State Secretary, MDRAP May 2012 - present

Project Task Leader:

Mr. Bogdan Draganescu (former vice-president of RoGBC) October 17, 2011 – October 2012
 Ms. Lavinia Andrei December 2012 – May 2013
 Mr. Raul Pop since May 2013

Period of assignment:

Despite several changes at the top management of the MDRT, positions of the National Project Director and Task Leader, the project has maintained its continuity due to UNDP’s project assurance role and continuity of the project manager with the MDRAP PIU.

In terms of activity implementation approach, the project closely follows implementation of activities that have been designed in detail in the Project Document without any need for major changes on an activity level. The project has responded to a growing demand for trainings in energy efficiency and has extended its training activities in cooperation with local development agencies across Romania. It has also shifted its focus on social buildings due to the challenges in mobilizing associations of apartment owners due to the lack of capacity and willingness to pay.

Since the design phase of the project, the situation in Romania has significantly changed. For example in Petrița, one of the project’s partner cities, there have been practically no buildings insulated at the beginning of the project, thus in that time there was a need to demonstrate locally energy efficiency retrofit of buildings. Within two or three years, the number of insulated buildings, both with support from governmental programs and those financed privately, has increased significantly. Based on the field visit, the evaluator estimates that already at MTE at least 30% of multi-apartment housing stock in Petrița has been already fully or at least partially insulated – with limited direct influence of the project. The need to demonstrate standard energy efficiency solutions and materials is thus overcome already (compared to the situation at project design) and it fully justifies the intention of the project to demonstrate utilization of locally produced sustainable insulation materials made from locally available raw materials.

Since 2011, the UNDP project team has implemented successful adaptive management in overcoming administrative/management barriers that caused delays in procurement of project services. The UNDP team set up direct cooperation local authorities through LOAs, signed ISS letter with MDRAP, and provided MCGA to AAECR to deliver training seminars, thereby bypassed the bureaucratic delays that have proved to be a problem at central government level. Currently, although delayed, the project is still in a position to implement designed activities by planned end-of-project in 2015. However, any further delay creates a high risk that project results could not be delivered in due time.

The overall rating of implementation approach due to implementation delays of the PIU/MDRAP that were overcome with the UNDP CO support is rated **Moderately Satisfactory**.

Highly Satisfactory	Satisfactory	Moderately Satisfactory	Moderately Unsatisfactory	Unsatisfactory	Highly Unsatisfactory
		MS			

4.2.2 Partnership arrangements

The project team has established cooperation with all project partners envisaged in a Project Document, namely with:

- Ministry of Regional Development and Public Administration (former Ministry of Regional Development and Tourism)
- Ministry of Environment and Climate Change (former Ministry of Environment and Forests)
- Local/municipal administrations/governments in two counties of Dolj and Hunedoara
- Municipalities of Calafat, Calan, Craiova, Petrila, Petrosani, and Vulcan
- Association of Energy Auditors for Buildings (AAECR)
- Romanian Green Building Council (RoGBC)

At the governmental level, the ministries serve as policy makers and administrators of energy efficiency support programs – and thus are key partners for component 1. The Ministry of Regional Development and Public Administration serves also as an implementing partner. Two counties and six municipalities serve as partners for implementing pilot projects. Municipalities also provide co-financing for energy efficiency improvements in low-income households. Both NGOs (AAECR and RoGBC) role was to deliver trainings for professionals and municipal officers on energy efficiency project development and implementation. The project team was not satisfied with the quality of training materials prepared and trainings delivered by the Romanian Green Building Council in late 2011, and concluded the cooperation with the RoGBC in 2012. AAECR took over the role of RoGBC in delivering trainings to local professionals and municipal officers.

In addition to these key project stakeholders, the project cooperates on a regular and ad hoc basis with other relevant stakeholders in Romania, including members of the project Inter-Operational Working Group (IOWG), relevant ministries such as Ministry of Social Affairs, policy makers and members of the parliament, Local Development Agencies and other stakeholders.

IOWG serves as an advisory body and in the same time as a channel for information dissemination among key stakeholders in Romania. IOWG meetings are held twice a year, and include more than 60 participants from public administration, business sector, universities, NGOs and media. Following organizations have been represented at the IOWG meetings:

- Architects' Chamber of Romania
- Association of Construction Materials Producers
- Association of Energy Utilities Companies
- Braşov Agency for Energy Management and Environmental Protection
- Bucharest Constructions Technical University
- Centre for Promotion of Clean and Efficient Energy in Romania (ENERO)
- Employers' Federation of Construction Companies
- Habitat for Humanity Romania
- Installation Engineers Association of Romania (AIIR)
- Institute for Studies and Power Engineering
- 'Ion Mincu' University for Architecture and Urban Planning
- Ministry of Environment and Forests/Ministry of Environment and Climate Change
- Ministry of Regional Development and Public Administration
- National Authority for Community Services
- National Regulatory Authority for Energy (ANRE)
- New Energy Sources Employers' Association (SUNE)
- Regional Environmental Center Romania (REC)
- Romanian Association of Construction Entrepreneurs

MTE: Improving Energy Efficiency in Low-Income Households and Communities in Romania

- Romanian Association of Energy Auditors for Buildings (AAECR)
- Romanian Energy Efficiency Fund (FREE)
- Romanian Green Building Council (RoGBC)
- Romanian Loan Guarantee Fund
- Romanian Municipalities Association
- Craiova Municipality
- Petrosani Municipality
- Petrila Municipality
- Vulcan Municipality
- EBRD

The project cooperated also with other stakeholders from private sector, universities and others, namely with construction professionals that develop and implement energy efficiency projects and participated in trainings, potential producers of new sustainable insulation materials, and organizations developing/testing new sustainable materials: SC Mopatel Proiect Ltd. – developer and potential producer of local sustainable insulation material Mopatel, University Transylvania Brasov, Felt Manufactory in Bucharest, Civil Engineering Institute in Bucharest, and INCERC Institute in Lasi.

The project board/steering committee has been set up to oversee project implementation. It consists of representatives of following organizations:

- Ministry of Regional Development and Public Administration
- Ministry of Environment and Climate Change
- Calan Municipality
- Calafat Municipality
- Craiova Municipality
- Petrosani Municipality
- Petrila Municipality
- Vulcan Municipality
- Romanian Municipalities Association
- Romanian Association of Energy Auditors for Buildings (AAECR)
- Romanian Green Building Council (RoGBC)

The project has been able to set up cooperation and effective communication with practically all relevant stakeholders in the country. The project has set up personal contacts and communication also with key policy makers both from government and parliament. Intensive communication with policy makers is essential for approval of policy updates integrating fuel poverty, including its specific parameters.

The support from the implementing partner, the Ministry of Regional Development and Public Administration, did not translate into effective project management on a daily basis. Significant delays occurred that were caused by bureaucratic procedures with setting up fully empowered PIU at the Ministry, installation of the Project Manager, and by political instability and changes at political and senior level management posts of the Ministry - and thus delayed decision making at the Ministry, and weaken political ownership of the project. The project team has no control over political stability and effectiveness of the Ministry and thus it has decided to adjust the implementation modality and sign ISS letter with the Ministry, Letters of Agreement directly with partner municipalities, and sign MCGAs.

Due to delays, the ownership and delivery of the Ministry of Regional Development and Public Administration serving as an implementing partner is unsatisfactory.

Cooperation with municipalities in two counties has been effective, 7 pilot projects have been implemented quickly without further delays based on signed Letters of Agreement, installation of heating sources is in

MTE: Improving Energy Efficiency in Low-Income Households and Communities in Romania

progress and first three financial agreements have been signed with municipalities, demonstration energy efficiency retrofits of buildings using locally produced insulation materials based on local raw materials are scheduled to be delivered in 2014.

The project has set up an effective cooperation with key stakeholders in the country, namely with policy and decision makers on the governmental and local levels, associations of professionals, and universities. The overall rating of partnership arrangements is **Satisfactory** due to lengthy decision making process and delays in delivery of the implementing partner/MDRAP.

Highly Satisfactory	Satisfactory	Moderately Satisfactory	Moderately Unsatisfactory	Unsatisfactory	Highly Unsatisfactory
	S				

4.2.3 Monitoring and evaluation

The project is subject to standard UNDP/GEF regular project monitoring and evaluation including Quarterly Progress Reports, Annual Project Reviews, Project Implementation Reviews, and Combined Delivery Reports.

Summary of annual implemented project activities were regularly reported to and approved by the Steering Committee.

Steering Committee meetings were organized twice a year in 2012 and 2013, as planned in the Project Document. In total four meetings of the Steering Committee were held on March 28, 2012, August 1, 2012, April 10, 2013, and a working meeting on December 19, 2013. In 2011 no Steering Committee meeting was held but an Inception Workshop on October 20.

The project was subject to external financial audits for the calendar year 2011 and 2012. Statements of both financial audits were positive, and found project financial statements to be fair and in line with UNDP relevant accounting policies and standards. Both financial audits identified some minor accounting issues and proposed corrections.

Project monitoring and evaluation is rated **Highly Satisfactory**.

Highly Satisfactory	Satisfactory	Moderately Satisfactory	Moderately Unsatisfactory	Unsatisfactory	Highly Unsatisfactory
HS					

4.2.4 Feedback from M&E activities used for adaptive management

Project activities have been implemented accordingly to those described in the project document; however, the delivery of project results (such as procurement for development of pilot projects) has faced significant delays as described earlier.

Rating of the progress towards meeting development objective and implementation progress has been rated by Project Manager, UNDP CO and UNDP Technical Advisor in PIR 2012 as Moderately Unsatisfactory (fourth grade on a six grade scale), and as Moderately Satisfactory (third grade) in PIR 2013. Main reasons for such rating were delays in delivering results in 2011/2012, and improvements in project implementation

in the last evaluation period thanks to overcoming the lengthy and bureaucratic procedures at the MDRAP by adaptive management implemented by the UNDP CO.

In response to the delays and PIR internal evaluation ratings, the UNDP CO has proposed to the National Project Director a possibility to change the implementation modality from 'NEX/NIM with advances' to 'NEX/NIM with full CO support'. However, this change in the implementation modality was not accepted by the Ministry.

UNDP CO signed Micro Capital Grant Agreements with AAECR and RoGBC in 2011 to deliver trainings even before PIU has been established so that the training delivery delay caused by non existence of PIU would be minimized. UNDP signed another MCGA with AAECR in 2013 for delivery of additional trainings.

Early in 2012 UNDP CO signed ISS letter with the Ministry that allowed UNDP CO to implement directly specific project services (such as procurement). This has effectively unblocked the delayed implementation at MDRAP/PIU and allowed to recover project delivery.

In December 2012 UNDP CO has decided to take over a stronger responsibility for eliminating delays with procurement for pilot projects, signed Letters of Agreement with six partner municipalities that allowed to shift the retrofits execution form central to local level and to implement 7 pilot projects in early 2013. The tender package for energy audits of buildings selected for energy efficiency retrofits has been prepared by the PIU/MDRAP with a support of UNDP and after a lengthy procedure at MDRAP an external company was hired, however, as of December 2013 delivery of audits has been reported to be at threat of delayed delivery or non-delivery.

Feedback from M&E activities used for adaptive management in line with UNDP rules and procedures is rated **Highly Satisfactory** because the UNDP CO implemented adequate measures (ISS, LOAs, MCGAs) that accelerated project implementation after initial delays, however the delays have not been yet fully mitigated.

Highly Satisfactory	Satisfactory	Moderately Satisfactory	Moderately Unsatisfactory	Unsatisfactory	Highly Unsatisfactory
HS	S				

4.2.5 Financial planning and management

Total project budget is 3 024840 USD combining GEF and UNDP cash contributions. The planned project budget as of the project document is shown in Table 4.

Table 4: Project Budget as of Project Document [USD]

	Year 1	Year 2	Year 3	Year 4	Total	
Outcome 1	3 975	29 805	49 135	61 505	144 420	5%
Outcome 2	132 422	227 420	60 678	31 440	451 960	15%
Outcome 3	149 650	581 600	863 900	431 950	2 027 100	67%
Outcome 4	63 300	24 400	43 085	39 785	170 570	6%

MTE: Improving Energy Efficiency in Low-Income Households and Communities in Romania

M&Evaluation	13 760	37 120	9 000	37 120	97 000	3%
Project Management	31 363	35 533	31 363	35 533	133 792	4%
Total	394 470	935 878	1 057 161	637 333	3 024 843	100%
	13%	31%	35%	21%	100%	

Note: The total is 3 USD higher than the actual budget (including numerical rounding). The mistake is in the budgeted Project Management costs, budget line 71300 Local Consultants that is 2 USD higher than its total.

Each year a new updated annual budget has been prepared for the next year and submitted for approval to the Steering Committee in a form of an Annual Work Plan. These annual budgets as shown in first versions of AWP (not updated during current year) are summarized in Table 5.

Table 5: Annual Project Budgets as of AWP

	2011	2011	2012	2012	2013	2013
Outcome 1	3 975	4%	29 805	3%	49 135	4%
Outcome 2	41 690	43%	223 920	24%	231 204	17%
Outcome 3	17 150	18%	581 600	62%	938 900	68%
Outcome 4	14 050	15%	24 400	3%	68 085	5%
M&Evaluation	0	0%	32 380	3%	56 500	4%
Project Management	19 475	20%	47 421	5%	31 363	2%
Total	96 340	100%	939 526	100%	1 375 187	100%

Table 6 shows annual project expenditures by project outcome for each year of project implementation period.

Total project expenditures over the whole project implementation period from July 2011 till December 31, 2013 are 861 647 USD, i.e. 28% of total project budget. The remaining unspent resources are 2 163 195 USD as of end of 2013.

Table 6: Annual expenditures by project outcomes and years

	2011	2012	2013	Total	% of Total	% of ProDoc budget line
Outcome 1	0	39 850	75 119	114 969	13%	80%
Outcome 2	13 445	90 067	67 782	171 294	20%	38%

MTE: Improving Energy Efficiency in Low-Income Households and Communities in Romania

Outcome 3	48 519	135 166	233 305	416 990	48%	21%
Outcome 4	0		27 906	27 906	3%	16%
Monitoring, Learning, Evaluation	0	7 506	15 354	22 860	3%	24%
Project Management	14 237	59 426	33 965	107 628	12%	80%
Total	76 201	332 015	453 431	861 647	100%	28%
% of AWP	79%	35%	33%			

Table 6: Annual expenditures by project outcomes and years and its last line [% of AWP] illustrates the delayed delivery of project results and lower budget spending as a percentage of original AWP for each year (before annual AWP budget updates).

As of end of 2013 28% of the total project budget has been spent. Most of the budget is reserved for demonstration projects (with a total Outcome 3 budget of 2 million USD) that have been postponed and are planned to be implemented in 2014.

Project financial planning provides a good overview of financial funds budgeted and actually spent, and the project management has a regular and also ad hoc access to updated information.

The low rate of budget expenditures spent by the Mid-Term Evaluation (28% or 0.86 million USD) illustrates the significant delay the project is facing, and represents only about 63% of what ProDoc estimated to be spent by the middle of the project implementation period (44% of the budget). The remaining unspent budget of 72% represents 2.2 million USD that should be spent over a period of 18 months by the end of the project. This is on average 1.5 million USD annually. This creates additional challenge for the project implementation, and it is feasible only if the project will be implemented in a very effective way by UNDP without any further delays.

Implementation of energy efficiency demonstration projects within Outcome 3 is scheduled for 2014, with estimated budget of almost 1.5 million USD. If demonstration projects will be implemented on time in 2014, the accumulated project spending will become very proportional to the period of implementation.

Due to delays in project implementation and delayed spending, financial planning and management is rated **Moderately Unsatisfactory**. Administration of financial planning is highly satisfactory.

Highly Satisfactory	Satisfactory	Moderately Satisfactory	Moderately Unsatisfactory	Unsatisfactory	Highly Unsatisfactory
			MU		

4.2.7 Management by the UNDP country office

The project is implemented with the “NEX/NIM modality with advances” and with PIU established at the Ministry of Regional Development and Public Administration (former MDRT) which serves as the local implementing partner. Under this implementation agreement the primary formal responsibility for proper project implementation lies with the PIU and the Project Manager.

Due to political instability and frequent changes in political positions of a minister and a secretary of state, accompanied with changes at top management positions at MRDAP, the project faced weak political ownership and especially in the early phase of project implementation period there were significant administrative delays with procurement of services and delivery of expected results.

UNDP CO responsible to GEF for delivery of planned project achievements has decided to implement adaptive management and to circumvent bureaucratic delays associated with working through the Implementing Partner. UNDP signed two Micro Capital Grant Agreements, ISS letter with the Ministry, and Letters of Agreement with partner municipalities to speed up implementation of the first 7 demonstration projects. The government has declined the UNDP offer to change the implementation modality to NIM with UNDP Country Office support.

UNDP CO has faced also two changes in a position of a Task Leader due to personal/health reasons (third Task Leader has been nominated within less than two years). During the periods when the position of a Task Leader has been changed or remained unoccupied, the UNDP programme manager and programme associate implemented project assurance and guaranteed through their involvement proper implementation on an operational level.

There are two key positions responsible for project management/implementation: the Project Manager at PIU who has the full formal responsibility for project management and the UNDP Task Leader who is assigned to support the project manager and PIU with the delivery of the tasks identified under the ISS letter (project components 2-4). The Head of Programme oversees project implementation and provides project assurance. The ability of the Project Manager to effectively manage project implementation on an operational level is weakened due to lengthy bureaucratic procedures of the implementing partner. The UNDP team has proved to be more effective and flexible in a daily operational management of project implementation.

The UNDP project team is well organized and fully staffed. UNDP internal staff provides project administration support, procurement services, accounting services and public relations support. The project contracted 7 consultants and one international consultant (except for the international evaluator).

Table 7: Overview of project external consultants

Name	Period	Deliverables
Ian Househam, Fuel Poverty Expert, Int. Consultant	February 2012 – February 2013	Policies addressing fuel poverty and energy efficiency, international experience and proposal for Romania
Virgil Musatescu, Energy Efficiency Policy Expert	May 2012 – December 2013	Legal framework and financing mechanisms for energy efficiency and fuel poverty measures in Romania. Action Plan for the integration of the fuel poverty mitigation measures into national and local policies/programs. Methodology for assessing fuel poverty in Romania. Guidelines for integrating energy efficiency issues into the practice of national and local public administration.

MTE: Improving Energy Efficiency in Low-Income Households and Communities in Romania

Radu Roman, Procurement Expert	May 2012 – April 2013	Tendering package for contractual services on energy audits, technical expertise and design
Sorin Axinte, PR Procurement Expert	September 2012 – January 2013	PR/Media procurement package
Diana Poputoaia, Expert on Romanian Policy and Legislation	November 2012 – June 2013	Analysis of legal framework, development of legal concept and necessary legislation to integrate fuel poverty, implement energy efficiency obligation scheme for utilities, greening AAUs (part of revenues to be invested into energy efficiency), and implementation of energy tariffs to protect vulnerable consumers.
Dumitra Mereuta, Expert on Energy Efficiency Financing	April – December 2013	Financial impact of action plan on fuel poverty, assessment of existing funding opportunities, lobbying among MPs and government for integration of fuel poverty
Constantin Miron, Market Research – Sustainable Materials Expert	May-December 2013	Report on available and potential sustainable building materials and their producers, life-cycle analysis, and handbook on appropriate use and construction techniques
Lavinia Andrei, Technical Coordinator	June 2013 - March 2014	Coordination of technical deliverables. Final Fuel Poverty Integrated Report (including action plan at national and local levels and EE financing mechanisms).
Nicolae Diaconu Local Coordinator	Oct 2013-March 2014	Support to local authorities to liaise with the MDRAP–hired company (SC Specialist Consulting SRL) and provide the necessary information on the inventory of buildings

The organizational and management set up based on NEX/NIM modality with advances assumes, in line with the UNDP CPD 2010-2012, that the national implementing partner is fully capable to effectively manage the project and deliver projects results in time, and thus it leaves little direct control for UNDP CO over project management.

Despite the delays occurred at MDRAP, management by the UNDP country office is rated **Satisfactory** due to its pro-active involvement described above.

Highly Satisfactory	Satisfactory	Moderately Satisfactory	Moderately Unsatisfactory	Unsatisfactory	Highly Unsatisfactory
	S				

Rating of the management performance of the PIU/MDRT due to delivery delays, lengthy bureaucratic procedures and weak political ownership is **Unsatisfactory**.

Highly Satisfactory	Satisfactory	Moderately Satisfactory	Moderately Unsatisfactory	Unsatisfactory	Highly Unsatisfactory
				U	

4.2.8 Co-financing and in-kind contributions

Total planned co-financing of 119 202 000 USD consists of:

- UNDP cash grant of 50 000 USD
- Ministry of Environment and Forests cash co-financing 82 000000 USD
- Ministry of Regional Development and Tourism cash co-financing 36 500 000 USD
- Ministry of Regional Development and Tourism in-kind co-financing 500 000 USD
- Romanian Green Building Council in-kind co-financing 71 000 USD
- AAECR in-kind co-financing 81 000 USD

Actual co-financing provided includes:

- UNDP cash 50 000 USD provided in 2011
- MRDT/MDRAP: 21 074 151 USD cash spent for Thermal Rehabilitation Programme (Ordinance 18/2009 and Ordinance 69/2010) since July 2011 till June 2013
- MEF/MECC: 48 003 953 USD cash spent for Casa Verde programme since July 2011 till June 2013
- MDRAP in-kind co-financing: 250 000 USD
- RoGBC: 0 USD (cooperation with RoGBC has been terminated in 2012)
- AAECR in-kind co-financing 41 000 USD

Table 8:
Financial Planning Co-financing

Co-financing (Type/Source)	IA own Financing – UNDP regular (million USD)		Government MDRAP, MECC (million USD)		Other RoGBC, AAECR (million USD)		Total (million USD)		Total Disbursement (million USD)	
	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual
– Grants	0.05	0.05	118.5	69.078			118.55	69.128	118.55	69.128 (58.3%)
– Loans/Concessional (compared to market rate)										
– Credits										
– Equity investments										
– In-kind support			0.5	0.25	0.152	0.041	0.652	0.291	0.652	0.291 (44.6%)
– Other										
Totals	0.05	0.05	119	69.328	0.152	0.041	119.202	69.419	119.202	69.419 (58.2%)

4.3 Results

4.3.1 Interim results and attainment of objectives

As of MTE mission in Romania in September 2013 and updated at the end of 2013, the project has delivered following results in individual project components:

Component 1: Improved policies to support energy efficiency in low-income communities

Expected outcome 1: Romanian energy policy integrates fuel poverty issues and addresses energy efficiency needs in low-income communities

Delivered results:

1. Fuel poverty assessment report developed in 2012, including overview of international experience, policy recommendations, and fuel poverty definition (“*existing in any households that simultaneously suffers low income and high energy costs, where high energy costs are not directly measured, but rather are indicated by either: (i) lack of access to reasonably priced energy sources, or (ii) a dwelling with poor thermal performance*”). The project has submitted the definition and new methodology for defining and evaluating fuel poverty to the Ministry of Labour and Social Protection for review and adoption.
2. Overview of energy efficiency legislation developed in 2013. The report summarizes existing key Romanian regulations related to improving energy efficiency in low-income households and communities and specifies required updates to harmonize local legal norms with the European Union regulatory framework.
3. Survey on Romanian population perception regarding fuel poverty – June 2013, Isra Center
4. Draft Action Plan for the integration of the fuel poverty mitigation measures into national and local policies/programs developed in 2013 and submitted for review to national stakeholders – IOWG members.
5. Proposed methodology and guidelines for assessing and measuring fuel poverty in Romania developed in 2013.
6. Proposal for the development of a draft financial impact study for the implementation of the action plan on fuel poverty in September 2013 to be finalized in 2014.
7. Draft report on current funding opportunities for energy efficiency and fuel poverty in Romania in April 2013.
8. Legislative proposal for transposing fuel poverty methodology into Romanian legislation – September 2013.
9. Amendments to governmental decisions integrating fuel poverty and addressing energy efficiency needs in low-income communities have been approved. Governmental Decision 780/2006– specifies measures for energy efficiency and thermal insulation of the buildings and financial support for solving social aspects for low income households, and fuel poverty

was introduced into the Governmental Decision 372/2005 that is transposing the Energy Performance of Buildings Directive (Directive 31/2010).

10. An integrated report summarizing developed reports within the first component that should serve policy makers in improving the legal framework related to energy efficiency and fuel poverty based on the article 7 (energy efficiency obligation scheme) of the Energy Efficiency Directive 2012/27/EU and existing Romanian legislation.

The project is working with the government, parliament, ministries and governmental agencies and facilitates national dialogue for the transposition of the EU Energy Efficiency Directive 2012/27/EU. It made also strategic intervention to support reinstatement of Romania's eligibility under the Kyoto Protocol in 2012.

The project has also assisted the EU funded Regional Operational Programme (ROP) by formulating the applicants' guidelines, Partnership Agreement and sectoral programs to mobilize funds towards specific energy efficiency measures. Tailored energy efficiency measures for buildings were, subsequently, included in the amendments to the national norms regarding residential buildings energy performance. The amendments of the legal framework represent a guarantee for sustainability and a potential to generate additional GHG savings.

Expected output 1.1: Established national-level, functional multi-organizational working group that formulates and facilitates approval and adoption of policy recommendations and action plans for energy efficiency which integrates poverty alleviation into their working group members' programs

Inter-Organizational Working Group (IOWG) was established in 2011, IOWG members include about 60 stakeholders. Regular IOWG meetings are organized twice a year, five meetings were held so far on December 15 in 2011, June 26 and December 5 in 2012, and June 27 and December 17 in 2013.

Several fuel poverty mitigation measures have been incorporated into existing regulations by the project, definition of the "vulnerable consumers" introduced via revisions to the Government Ordinance 18/2009, modified by the Government Ordinance 63/2012. Two more energy efficiency measures for low-income households are under implementation by MRDPA and ANRE (Authority for National Regulation of Energy), including transposition of EU Directive 2010/31/EC in May 2013, a prerequisite for all building rehabilitation works in Romania. In addition, the project is facilitating the national dialogue among the line ministries and national agencies responsible for development of the national legislation for the latest EU Directive on Energy Efficiency and Cogeneration with High Efficiency (27/2012); UNDP is facilitating the development of the national (primary and secondary) legislation and revision of national data transmitted to the EU regarding the national energy consumption of buildings. The project has facilitated two national working groups at the level of ANRE and the Chamber of Deputies of the Romanian Parliament.

Expected output 1.2: Identified fuel poverty-related energy efficiency improvement activities that are integrated into, and implemented within development plans and energy

plans of selected municipalities/counties; including leveraging funding sources for energy efficiency improvements

Local municipalities are developing tools and methodologies based on draft local government ordinances developed by the project, in order to support allocation of social aid to vulnerable consumers.

The project is working also with the local municipalities on a revision of local development and energy efficiency strategies.

Through project intervention, the updated Ordinance 18/2009 has extended the scope of eligible energy efficiency measures financed by the national programme and empowered local municipalities to decide on building stocks to be rehabilitated and energy efficiency measures to be implemented, allocate necessary budget and subsidies to potential poor households (who would not be able to sustain such works otherwise) and implement rehabilitation works.

Additional funding opportunities have been analyzed, including Joint Implementation under the Kyoto Protocol, EU ETS, and a system of tradable white certificates/energy efficiency obligations.

Government revenues from EU-ETS were allocated for thermal rehabilitation of housing of fuel-poor households via amendments included by the Ministry of Environment into the revisions of the Government Decision 780/2006.

Opportunities of greening carbon credits under the Kyoto Protocol have been analyzed, ie. allocation of revenues from international sales of Assigned Amount Units (AAUs) into energy efficiency retrofits of housing of fuel-poor households. In 2011 Romania was suspended from Kyoto's carbon market which postponed the possibility to use revenues from sold carbon credits for financing of energy efficiency retrofits in low-income/fuel-poor households. The UNDP/GEF project assisted the government to reinstate Romania's eligibility for carbon trading under the Kyoto Protocol in 2012.

Component 2: Improved capacity at the local level to reduce fuel consumption in low-income communities

Expected outcome 2: Supply of trained architects, building engineers, builders and auditors with energy efficiency 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

Expected output 2.1: Increased numbers of building professionals, local government authorities and technical personnel capable of providing technical advice and services on the application of energy efficiency measures and techniques in the design, construction and operation of buildings

Two trainings for municipal employees on identifying critical issues and major energy losses in buildings were organized on November 28, 2011 in Petrosani (19 participants) and May 18, 2012 in Craiova (23 participants). In total 93 technical professionals have been trained as trainers during two “training of trainers” sessions held on November 8-11, 2012 in Bucharest (51 participants) and Iasi (13 participants), and between November 22-25, 2012 in Craiova (15 participants) and Cluj (14

participants). Each of the trained experts was required to train and has delivered training to other 5 experts. The trainings performed raised additional demand for similar trainings across the country. Training sessions for technical professionals with “trainer of trainers” diploma were provided in Bucharest in total for 96 participants in the field of energy efficiency: on November 16-17, 2012 (51 participants) and between November 30 – December 1 (45 participants). The project has prepared additional series of trainings in cooperation with Regional Development Agencies and has delivered 8 training sessions in Craiova (38 participants), Alba Iulia (23 participants), Braila (35 participants), Bucharest (25 participants), Calarasi (34 participants), Timisoara (27 participants), Cluj Napoca (42 participants), Bacau (26 participants) by December 2013. By end of 2013 in total 868 technical professionals, municipal officers, and experts have been trained, of which 388 directly by experts hired by the project, and additional 480 were trained by trainers trained by the project.

The training (ca 600 slides) was prepared and delivered by AAECR – the Romanian Association of Energy Auditors for Buildings and covered a wide range of information including:

1. Relevant EU and Romanian legal context and long term strategy for energy efficiency in buildings
2. Use of renewable resources for buildings
3. Energy efficient solutions for different types of buildings

Training materials have been disseminated to training participants; no additional handbook has been prepared and disseminated yet.

Romanian Green Building Council (RoGBC) was planned to serve as a project partner for delivery of professional trainings. The UNDP project team was not satisfied with the quality of presentations prepared and delivered by RoGBC at the first workshop in November 2011 in Petrosani and decided to conclude cooperation with RoGBC in training activities in 2012.

Expected output 2.2: Information points in selected public municipalities within two counties for promoting public education on EE measures using commonly used and locally-available technologies

7 information points in six partner municipalities and one more in Agres county have been supplied with information leaflets on energy efficiency project in buildings in low-income households. Information leaflets are displayed in frequently visited public areas of city halls and provide brief and basic information to raise energy efficiency awareness.

Expected output 2.3: Local building material producers and building construction companies highly qualified and capable of producing and applying, respectively, energy efficiency building materials

The project has researched the opportunities on Romanian market and have identified potential partner, the SC Mopatel Proiect Ltd. company, which has developed a new product Mopatel SuperLight. This material is based on lime and wood residues or other raw/natural materials, such as cork and clay pellets, and has declared thermal conductivity $\lambda = 0.048 \text{ W/mK}$, and density 350-400 kg/m^3 . The declared thermal conductivity of Mopatel SuperLight is comparable with thermal conductivity of polystyrene or mineral wool (some 20% higher), and the density is 10 to 20 times

higher than the density of mineral wool and polystyrene. On the other hand, it can be produced locally from locally available, renewable and affordable raw materials, using local workforce in the poor communities. Mopatel SuperLight is not commercialized yet; it was certified by the National Institute for Research and Development in Construction, Urban Planning and Spatial Development “URBAN-INCERC” in December 2013.

The project teamed up also with the University Transylvania in Brasov which is researching opportunities for developing locally produced sustainable materials for building insulation; however this material is still at an early stage of development and is not yet ready to enter the market.

Expected output 2.4: Information campaign results and energy efficiency success stories disseminated within Romania, UNDP and in the international community

During the first implementation period the project has worked with printed and electronic media and in total 14 articles on project goals, trainings for construction professionals have been published in local and national media.

Large scale awareness-raising media campaign has been prepared and implemented in October – November 2013. A total of 4.7 million inhabitants have been addressed through a TV spot (1600 broadcasts on 3 national TV channels), two radio spots (140 broadcasts on one radio station), internet banners at three news websites, and outdoor billboards (20 locations in two counties).

Component 3: Direct reduction of energy consumption through community-based retrofits and market development

Expected 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

Since the beginning of the project, a total of 1 468 residential buildings have implemented energy efficiency or renewable energy measures with the financial support from the National Thermal Rehabilitation Programs of MDRT and Casa Verde programme of the Ministry of Environment and Climate Change. This number includes all types of residential buildings, not only buildings of low-income households/communities. Through the project intervention, the scope of the National Thermal-Rehabilitation Programme of MDRT has been extended both in regional scope (additional municipalities), and in energy efficiency measures that are eligible for financing from the Program. However retrofitted buildings have not received direct support from the project.

Expected output 3.1: Standard energy efficiency building design analysis for key types of existing apartment blocks and retrofitted thermal systems of selected apartment blocks

545 apartment buildings have been retrofitted with financing from the National Thermal Rehabilitation Program. Feasibility studies for 15 sustainable heating systems are under development, three financing agreements with municipalities have been signed already. Feasibility studies/energy audits of energy

efficiency/renewable energy retrofits of apartment buildings have not been delivered by December 2013 due to delays of the PIU/MDRAP subcontractor and the deadline was extended till January 2014.

Expected output 3.2: Thermally retrofitted social buildings (schools, kindergartens, municipal offices and social houses/residences owned by the local government) in selected counties

7 pilot energy efficiency retrofits and renewable energy projects have been implemented in six partner municipalities – 7 public buildings (schools and kindergartens) have been thermally retrofitted (installation of thermal insulation of external structures, new energy efficient windows/entrance doors, and reconstruction of heating source – installation of a new biomass boiler).

Implementation of 40 pilot projects (which is EOP target) has been delayed due to delayed process of public procurement at the Ministry of Regional Development and Public Administration (September 2013), and due to delayed delivery of the contracted company. Only technical analysis of typical 50 apartment buildings was delivered in due time in December 2013. Deadline for delivery of energy audits was postponed till January 2014. Implementation of these pilot projects scheduled for 2014 will be at risk if the energy audits will not be delivered in good quality by end of January.

Expected output 3.3: Houses built/refurbished using energy efficient, locally-produced materials

No houses have been retrofitted yet using insulation locally-produced from locally-available raw materials, because no such insulation materials have been certified for commercial usage yet. The producer of a sustainable insulation material has been identified and is willing to open a production branch in one of the pilot sites. The insulation product Mopatel SuperLight has been certified in December 2013, the official issue of a certificate that will allow commercial production is expected in early 2014.

The PIU/MDRAP was in charge to manage the tendering package for the preparations of the structural and energy audits for 50 most used types of blocks of apartments to be rehabilitated through the National Rehabilitation Programme and for 34 public buildings selected by local authorities for rehabilitation as demonstration projects. Technical specification and terms of references of the MDRAP tender package were developed for PIU/MDRAP during January – June 2012 by a procurement expert hired by UNDP. The full tendering package was submitted to PIU/MDRAP in July 2012. Subsequently, the tender package was advertised on the public procurement site SEAP, according to the public procurement rules in October 2012. The company was contracted however only a year later, in October 2013, ie. 16 months from the submission of a final package to PIU. Delays were caused due to cumbersome public procurement rules and by a candidate public complaint which further delayed the process.

At the time of this MTE report, the evaluator has gained additional information about the latest developments that will put the project at high risk: namely, that the company contracted by MDRAP PIU in August/September 2013 has not delivered energy audits. As of December 2013, MDRAP has penalized the company and extended its contract until the end of January; however there is a risk that the contract will be cancelled if the company will not deliver energy audits by an extended deadline. This information was explicitly delivered to UNDP during the Inter-Institutional Working Group meeting supported by the project, on December 17, 2013.

Since there is a high probability that the contract will be cancelled, there is a critical risk posed to the retrofits activities that were supposed to commence and be delivered early in 2014.

Furthermore, this delay has negative impact on the National Thermal Rehabilitation Program, as the structural analysis and energy audit of 50 typical apartment blocks are expected to increase the number of blocks that apply for energy efficiency renovation financing and permits. The project estimates that this analysis and energy audits of the most used types of apartment, when used by the National Program, will allow additional 100 apartment blocks nation-wide to implement energy efficiency rehabilitation improvements generating an estimated 15 274 tCO₂ savings per year.

In response to the delays with public procurement, UNDP CO has implemented adaptive management and signed Letters of Agreement (LOAs) with local authorities. This allows transferring public procurement to local level and supporting local municipalities to have access to grants for energy efficiency retrofits without delays.

The project has signed additional five LOAs with local authorities for provision of subsidies for purchase and installation of 6 sustainable heating systems in selected apartment blocks not connected to district heating. Energy audits were conducted for the calculation of GHG reduction. 3 more LOAs are to be signed in 2014 for the installment of 4 more sustainable heating systems. These pilot projects are expected to be up scaled by the “Casa Verde” National Programme administered by the Ministry of Environment and Climate Change.

Component 4: Information for improved decision-making

- Expected outcome 4: Data and information available for decision-makers for designing programs to address fuel poverty
- Expected output 4.1: Regionally-adaptable methodology for fuel poverty assessment proposed and a guide for municipal decision-makers on fuel poverty issues
- Expected output 4.2: Local and regional registries/databases of building stock

The methodology for fuel poverty assessment has been developed and submitted for comments and approval by the Ministry of Labour and Social Assistance, the approval is pending. Guide for municipal decision-makers on fuel poverty (EOP target) is under development. The project is working with municipalities to develop local strategies and guidelines for mainstreaming fuel poverty measures and energy efficiency considerations in their local development plans by EOP.

Summary of attainment of objectives

After significant initial delays, the project has made progress towards its development objectives in late 2012 and especially in 2013. By signing MCGAs, an ISS Letter with MDRAP, and Letters of Agreement with local authorities, the project has managed to overcome bureaucratic delays associated with working through the Implementing Partner. Although the delivery is delayed, the project is still in a position to deliver expected project results by the planned end-of-project in July 2015. However, this can be achieved only if MTE recommendations will be implemented and no further delays occur.

The work towards outcome 1 is in progress, the end-of-project outcome 1 targets are not yet achieved. Key policy recommendations are expected to be prepared by the project team by the end of 2013 which provides maximum 1.5 year time period till the end of project for advocacy work with policy makers and for adoption of policy and regulatory updates integrating fuel poverty and addressing energy efficiency needs in low-income communities.

In order to integrate effectively fuel poverty into energy policy and to support energy efficiency in low-income households, the project still needs and plans to propose specific parameters of fuel poverty definition and to work with policy makers to have them adopt those specific parameters.

The policy work of the project on integration of fuel poverty in energy efficiency policies is closely linked with transposition of the Energy Efficiency Directive (EED) 2012/27/EU. The project works actively to facilitate transposition of this directive and especially the Article 7 concerning vulnerable customers. EU member states are obliged to transpose the EED Directive into national law by June 5, 2014 at the latest. However, it is not clear yet if Romania will succeed to transpose the EED Directive in time.

Success indicator of effectively implemented policies supporting energy efficiency in low-income communities is – except for energy and GHG savings - amount of funding allocated and spent specifically for energy efficiency improvements in low-income or fuel poor households/communities.

MDRAP administers two large building thermal rehabilitation programs, one smaller programme utilizing commercial funding, and one energy efficiency in district heating program.

MDRAP energy efficiency in buildings programs:

- National programme on increasing energy efficiency in housing blocks financed by the national budget (Governmental Ordinance 18/2009)
- Thermal rehabilitation programme with financing from European funds (Regional Operational Programme - ROP 2007-2013, 2014-2020) (Governmental Ordinance 462/2006)
- Programme on thermal rehabilitation of residential buildings financed by bank loans with government guarantee (Governmental Ordinance 69/2010)

Ministry of Environment and Climate Change administers Casa Verde programme that provides financial incentives for renewable energy.

These financial programmes that were launched before UNDP/GEF project started provide grants for energy efficiency and renewable energy investment in residential housing sector. With the support of the UNDP/GEF project, the national programme (Ordinance 18) has been extended to include additional energy efficiency measures eligible for financing and the regional scope of the programme has been extended to include additional low-income regions and municipalities.

The programme funded by ROP (ordinance 462) has been designed to provide preferential financing for low-income households (higher share of grant) already prior to UNDP/GEF project. The UNDP/GEF project assisted ROP to formulate applicants' guidelines and partnership agreements for the next programming period 2014-2020.

There are also other energy efficiency funding opportunities including RoSEFF – Romania Sustainable Energy Finance Facility and EEFF - Energy Efficiency Finance Facility both funded by EU and EBRD, Romanian Energy Efficiency Fund – FREE funded by the World Bank and GEF.

However these financial facilities are not specifically targeted to energy efficiency improvements in low-income households/communities. The UNDP project team has organized a meeting with the World Bank to explore opportunities for synergy and potential cooperation in reviewing fuel poverty scheme.

The National Programme on Increasing Energy Efficiency in Housing Blocks financed by the national budget has allocated between 2009 and 2013 (over a 5 year period) in total 480 million RON (ca 160 million USD) for energy efficiency retrofits of multi-apartment buildings. Annual allocation of funding from the state budget is progressively decreasing: 2009 - 59 million USD, 2010 - 48 million USD, 2011 - 45 million USD, 2012 - 6 million USD, and 2013 - 5 million USD. Since the beginning of the UNDP/GEF project in 7/2011 a total of 21 million USD has been allocated.

Programme for Energy Efficiency Improvements in Multiapartment Buildings in Low-Income Households funded by the Regional Operational Programme (ROP) has been implemented during 2007-2013 and a new programme has been approved also for the second programming period 2014-2020. It is designed to support energy efficiency improvements in multiapartment buildings specifically in low-income households. Of the 304 million € programme budget, 150 million € is financed by the EU, 32.4 million € by the Romanian government, and 40%, or 121.6 million € is co-financing from local municipalities and apartment owners (Association of Apartment Owners). The share of required co-financing from apartment owners varies between 10-30% of the total investment depending on the level of their income.

While on the national level there are already energy efficiency programs with allocated funding targeted specifically to low-income households, a large co-financing burden lies with municipalities. The higher focus on poorer households will be, the higher co-financing municipalities will need to allocate from their own municipal budgets.

The intention of the project is to address specifically fuel poverty rather than just low-income households. However, administration of programs integrating fuel poverty is more demanding and costly; it requires more complex input data on household income, thermal quality of buildings, and an effective verification system. In order to implement energy efficiency programs integrating fuel poverty effectively, local municipalities need to be supported and trained in effective implementation of new policies and evaluation of fuel poverty in specific cases, including data collection and verification. The UNDP/GEF project has started already this support to pilot municipalities by development of building inventory and plans to continue this support in the next implementation period.

In component 2 the project has delivered excellent results in training of professionals and municipal officers. Complex and good quality trainings have raised additional demand and this suggests that trainings activities should be extended despite the fact that the project has already formally exceeded the planned target. Trainings have been organized as trainings of trainers, which is a time- and cost-effective way for experience dissemination. However, in such set-up there is little control over quality of trainings delivered by (secondary) trained trainers. The more energy efficiency projects are implemented in the country the higher are opportunities and demand for specific trainings addressing specific targeted groups, including practical experience from implementing energy efficiency projects, detailed technical and financial performance of individual energy efficiency measures, best installation practices of energy efficiency construction details, low-cost energy efficiency measures for do-it-

yourself implementation etc. In the next implementation period, the project plans to continue its training activities and to disseminate practical hands-on experience to specific target audience.

In partner municipalities, awareness rising and information dissemination activities were rather limited to provision of information leaflets with basic information on the project and benefits/opportunities of energy efficiency in buildings, and the scope and scale of this information dissemination needs to be extended in the next implementation period. More detailed/specific information and/or how-to guides need to be disseminated to through higher number of distribution points.

In October/November 2013 a large scale energy efficiency awareness rising mass media campaign has been launched. Outdoor billboards and internet banners have been used, and TV and radio spots have been broadcasted on national TV and radio stations. In total 4.7 million inhabitants have been addressed.

After awareness raising campaigns a demand for more specific information on potential energy efficiency solutions and their technical and financial parameters will increase. The project plans and should provide more concrete information and how-to guides in its information dissemination activities in the next implementation period.

The intention of the project to work with local entrepreneurs to develop and commercialize locally produced sustainable insulation construction materials is very ambitious. To develop and market new product requires not only technically and financially competitive product to raise sufficient demand, but also sufficient business, marketing and sales skills – and primarily entrepreneurial spirit. Without any doubts, the project may – within limited budget and time – only support successful entrepreneurs – but not to take from them the responsibility for successful development of their business. The project has succeeded to identify Mopatel company that had its own technology and interest to develop its product for commercial use. Its product Mopatel SuperLight has been certified for commercial production and sales and is planned to be used in demonstration projects in 2014.

Another situation is with traditional not-marketed local materials used for do-it-yourself reconstructions, such as reed, straw etc. These cheap but labour intensive insulation materials and installation technologies might be suitable for low-income households especially in remote areas. However, it should be explored first for what applications (if at all) these natural materials can be used. Specific information and hands-on training might be necessary to renew the local know-how.

In component 3 the delivery is affected by a series of delays in procurement and delivery of structural and energy audits of buildings to be reconstructed with direct support from the project and from National Thermal Rehabilitation Programme. Despite these delays described above, it is still feasible for the project to deliver expected results by planned end-of-project due to effective adaptive management implemented by UNDP.

The main achievement so far in this component is implementation of 7 small scale pilot projects in schools and kindergartens of six partner municipalities, feasibility analysis of 15 sustainable heating systems in buildings, and installation of renewable heating sources in buildings not connected to district heating implemented through signature of MCGAs and LOAs with municipalities. Thermal Rehabilitation Programme of MDRAP has supported energy efficiency/renewable energy installations in 1 468 apartment buildings without direct support from the project.

The project team plans to apply locally produced sustainable insulation material in energy efficiency pilot projects in public buildings in 2014; typical buildings have been selected and are subject of energy audits in order to decrease transaction costs. However, delivery of energy audits was delayed in December 2013.

Component 4 activities to develop local and regional registries/databases of building stock have been delayed and finally launched in October 2013. Because creation and maintaining of a country wide building registry might easily become a very demanding and costly activity out of scope of this project, the project works on data collection for building inventory first with pilot municipalities and based on the experience gained it plans to extend the building registry countrywide. This is a very proper approach; however, it requires the analysis of results from pilot municipalities to be available soon enough (by mid 2014) so that there would be sufficient time for potential revision of the registry and data collection system, implementation of full scale collection of data, and analysis and utilization of data for adjustment of energy efficiency programs integrating fuel poverty.

Overview of achievements

Table 9: Overview of MTE achievements shows summary overview of project goal, objective, outcomes, outputs, indicators, targets and achievements as of October 2013 with revisions incorporated in December 2013.

Most of LogFrame indicators and targets are designed to reflect end-of-project (EOP) situation. Only 8 out of total 45 indicators and targets are specified with a deadline within a two-year implementation period covered by the MTE. At MTE, it is thus difficult and often impossible to provide rating of EOP target achievements - especially in cases when implementation is planned for the next project period. In these cases the rating includes a note – NA (not applicable) – to indicate that the relevant target refers to end-of-project and clearly distinguish from those targets that have been designed with the deadline in the first implementation period. In order to estimate progress as of MTE and a feasibility/ability to meet the EOP targets, rating “in prospect” is provided.

Most of these “in prospect” ratings are speculative, since they estimate future prospects of achievements’ delivery by the end of project. And the ratings often refer to activities that are planned to be implemented only in the next implementation period. In these cases there is no specific “hard fact” mid-term benchmark.

Thus “in prospect” rating evaluates estimated risks or probability as of MTE that the EOP targets **can be delivered** by the end of project **with an assumption** that project implementation in the next project period will be effective and **without any further delays**. These “in prospect” ratings are indicative and can change during the implementation period depending on actual delivery of results.

For example, the EOP project goal target is to reduce GHG emissions in the building sector in Romania by 22 227 tonnes CO_{2eq} annually (direct emission reductions) by the end of project. These GHG savings are planned to be generated partly by directly implemented pilot projects and partly by energy efficiency projects financed by national programs and directly influenced by the UNDP/GEF project (by providing technical assistance). Since most of these activities are planned to be implemented in the next project period, the overall achievement as of MTE is very low – only 199 tonnes of CO_{2eq} saved annually by 7 small pilot projects implemented in 2013 (out of 600 tCO_{2eq}

savings planned for retrofits). However, this small share of achieved GHG savings at MTE cannot be mechanically interpreted that a low delivery of this EOP target is expected also at the end-of-project. Large GHG savings are expected to be delivered in 2014 – if demonstration projects will be implemented. Delays in project implementation due to bureaucratic procedures at MDRAP effected mainly implementation of pilot projects. However, much bigger long-term effect will have energy efficiency projects financed with support from national programs that will integrate fuel poverty.

In order to be able to attribute GHG savings from national programs to the project, the project will need to interlink more closely its outputs and activities with existing national energy efficiency financial support schemes and to: influence them by integrating fuel poverty; provide direct and indirect technical assistance to development of energy efficiency projects in low-income households/communities; and to support local municipalities in administration and identification of sources of co-financing of energy efficiency programs targeted at low-income households. Reported GHG savings must be additional to GHG savings that would materialize without UNDP/GEF project intervention.

The evaluator estimates that it is still feasible, although challenging, within 1.5 year till the end of project to implement demonstration projects, deliver expected GHG savings as well as other planned achievements – thus the “in prospect” rating is MS (Moderately Satisfactory). However, the project has no more time reserves, and even with MTE recommendations implemented, it cannot afford any further delays.

Table 9: Overview of MTE achievements

Strategy	Objectively verifiable indicators				Rating
	Indicator	Baseline	Targets End of Project	Achievement as of MTE	
Project Goal: Reduction of GHG emissions in the buildings sector in Romania	Tonnes CO ₂ eq per year reduced (direct reductions) by end-of-project (EOP)	849	22,227	199 tonnes of CO ₂ eq annually from 7 pilot retrofits of schools and kindergartens Estimated 25 866 tonnes CO ₂ /year – are planned to be achieved by EoP by the National Programme and Regional Operational Programme - ROP, through amendment of Ordinance 18/2009 with Ordinance 63/2012, which makes provisions for the introduction of additional cities into the rehabilitation programme and additional EE measures leading to an increased CO ₂ emission reduction	NA - MU (S in prospect)
	Tonnes CO ₂ eq reduced over the lifetime of the EE measures introduced (direct reductions)	25,456	666,800	3 980 tonnes of CO ₂ Estimated potential of 517 320 – 776 000tonnes of CO ₂ lifetime savings through EE measures installed by the ROP	NA - MU (S in prospect)

Strategy	Objectively verifiable indicators				Rating
	Indicator	Baseline	Targets End of Project	Achievement as of MTE	
Project Objective: Reduction of energy consumption in buildings in low-income households and regions of Romania	MWh in heat energy per year saved as a direct result of this project by EOP	2,197	43,374	645 MWh/year – based on 7 pilot projects	NA -MU (S in prospect)
	Volume of investments in EE buildings leveraged (cumulative USD by end-of-project)	0	10,741,000	21 million USD leveraged by MDRAP since 7/2011 with limited project intervention (through the amendment of Ordinance 18/2009 and Ordinance 69/2010 with Ordinance 63/2012)	S (HS in prospect)
	No. of people living in EE buildings by EOP	4,500	110,616	1,012 people attending/working in 7 pilot schools/kindergartens, effect of ROP not included	NA - MU (MS in prospect)
Outcome 1: Romanian energy policy integrates fuel poverty issues and addresses EE needs in low-income communities	No. of national-level Government institutions integrating the reduction of fuel poverty through EE/RE into their programs and policies by EOP	0	3	3 in process: MDRAP, MECC, ANRE	NA - S (S in prospect)
	No. of municipal or county-level Government institutions integrating the reduction of fuel poverty through EE into their programs and policies by EOP	0	2	0 as of MTE, under implementation	NA (S in prospect)

Strategy	Objectively verifiable indicators			Rating	
	Indicator	Baseline	Targets End of Project		Achievement as of MTE
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	Cumulative no. of building engineers, architects and energy auditors qualified, certified and using the information in their work for the application of EE measures (and applicable Renewable Energy Technologies-RETs) and in the use of sustainable, locally available/produced building materials by EOP	0	200	868 in total; 96 directly trained experts, total of 576 trained experts Each of 96 directly trained trainers trained other 5 experts; municipal employees trained in Craiova (23) and in Petrosani (19) Additional 250 trained municipal employees at RDAs in 2013	HS (no quality control over secondary trainings, no feedback yet from utilization of the information)

Strategy	Objectively verifiable indicators			Rating
	Indicator	Baseline	Targets End of Project	
projects	Percentage of households that plan to/have already implemented EE measures due to the public information points and other public education activities of the project in the two main counties of the project at EOP	0	10%	<p>A market survey has been implemented targeting 1 229 households nationally, of which 306 households from 2 pilot counties. The survey has established an awareness baseline level for EE issues, and will represent a starting point in assessing the final percentage of households that will acquire general knowledge of EE issues and will be willing to implement EE measures in pilot counties. According to the survey, 39% of interviewees in 2 counties have already implemented EE measures, while another 46% would rehabilitate their homes should the state authorities provide subsidies (as already in place via the National Building Rehabilitation Program)</p> <p>Achievement (increase of % due to project activities) is not enumerated at MTE (the estimate provided in PIR is not considered to be representative enough).</p>

Strategy	Objectively verifiable indicators			Rating	
	Indicator	Baseline	Targets End of Project		
	No. of building materials and construction companies within the two pilot counties which are producing and selling locally produced, sustainable EE materials at EOP	0	6	<p>0 – under process</p> <p>The project has identified one building material which is based on locally available raw organic materials made out of wood waste and other vegetal waste, and the project is supporting the process of certification; the producer agreed to open a small production plant in the pilot areas in partnership with local municipalities and to use this material for EE rehabilitations in the pilot areas.</p> <p>A second material has been identified in another locality (Brasov) and the project has linked the producer with local municipalities in order to explain possible collaboration.</p>	NA - MU (MS in prospect)
	No. of additional counties (beyond the 2 pilot counties) which have expressed interest in replicating project activities due to the information campaign activities at EOP	0	3	12 (Alba, Sibiu, Mures, Gorj, Mehedinți, Olt, Vâlcea, Brasov, Covasna, Harghita, Arges, Ilfov)	HS

Strategy	Objectively verifiable indicators			Rating	
	Indicator	Baseline	Targets End of Project		Achievement as of MTE
	No. of additional countries (beyond Romania) which have expressed interest in replicating project activities due to the information campaign activities EOP	0	2	0	NA (MS in prospect)
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	Cumulative no. of apartment blocks implementing EE/RE measures in Romania by EOP	360	1474	1468 supported by the original national Thermal Rehabilitation Programme – not directly supported by the Project. The project manager has been involved in the working group that has drafted the Government Ordinance 63/2012, therefore directly influencing the expansion of the original national rehabilitation programme to cover supplementary EE measures and municipalities	NA (S in prospect)
	Cumulative no. of social buildings in the poorer counties implementing EE measures using project resources or TA from the project by EOP	0	40	7	NA - MS (S in prospect)

Strategy	Objectively verifiable indicators				Rating
	Indicator	Baseline	Targets End of Project	Achievement as of MTE	
	Cumulative no. of houses implementing EE measures using locally produced, sustainable materials by EOP	0	150	0 140 buildings have been identified, energy audits of typical buildings under implementation (delayed as of December 2013).	NA - MU (MS/S in prospect)
Outcome 4: Data and information available for decision-makers for designing programmes to address fuel poverty	No. of county/ municipal Governments using an adapted methodology for evaluating fuel poverty by EOP	0	2	0	NA (S in prospect)
	No. of buildings documented within the building registry by EOP	0	1,500	0 – in progress in pilot municipalities	NA (MS in prospect)
Output 1.1: Established national-level, functional multi-organisational working group that formulate and facilitate the approval and adoption of policy recommendations and action plans for EE which integrate poverty alleviation into their working group members' programmes	Cumulative no. of working group meetings by EOP	0	8	4 The project has established and effectively supported coordination among institutions and stakeholders in the energy sector	NA - S (HS in prospect)
	No. of actions taken to change programs/policies in order to address fuel poverty by the institutions involved in the working group by EOP	0	3	0	NA

Strategy	Objectively verifiable indicators				Rating
	Indicator	Baseline	Targets End of Project	Achievement as of MTE	
Output 1.2: Identified fuel poverty-related EE improvement activities that are integrated into, and implemented within, development plans and energy plans of selected municipalities/ counties; including leveraging funding sources for EE improvements	Cumulative no. of counties with action plans implemented to address fuel poverty by EOP	0	2	0 Action plan has been developed and submitted for review to the IOW (inter-organizational working group)	NA (HS in progress)
	Cumulative no. of new sources of funding identified along with concrete project plans developed for their financing by Year 3.5	0	2	0	NA (MS in prospect)
Output 2.1: Increased numbers of building professionals, local government authorities and technical personnel capable of providing technical advice and services on the application of EE measures and techniques in the design, construction and operation of buildings	Cumulative no. of building professionals trained and certified in the target counties by end of Year 2	0	300	576 in total, 96 directly	HS
	No. of professional training courses for building professionals incorporating materials on EE measures due by end of Year 2	0	4	6 Petrosani, Craiova, Bucharest, Iasi, Craiova and Cluj, Bucharest	HS

Strategy	Objectively verifiable indicators			Rating	
	Indicator	Baseline	Targets End of Project		Achievement as of MTE
	No. of handbooks of training activities, best practices and lessons learned in carrying out retrofitting distributed by end of Year 2	0	1,000	0 handbooks on best practices distributed – to be developed and distributed after pilot projects 138 training proceedings on a CD distributed to each of 138 trained experts. By the end of 2013 additional 868 experts and municipal employees were trained and received training proceedings.	U
	No. of municipal employees trained on identifying critical issues and major energy losses in their buildings by end of Year 2	0	60	42	MS
Output 2.2: Information points in selected public municipalities within two counties for promoting public education on EE measures using commonly used and locally-available technologies	No. of information points within municipalities distributing information and materials on how to implement EE measures into houses, sources of funding and on locally-available materials by EOP	0	50	6	NA - MU (S in prospect)
	No. of households receiving informational materials on the basics of EE measures - including information on how to implement EE practices in their homes by EOP	0	50,000	0 4.7 million inhabitants addressed by the awareness rising media campaign in October – November 2013	NA (MU) HS

Strategy	Objectively verifiable indicators				Rating
	Indicator	Baseline	Targets End of Project	Achievement as of MTE	
Output 2.3: Local building material producers and building construction companies highly qualified and capable of producing and applying, respectively, EE building materials	No. of local building material producers and building construction companies trained in producing and applying EE building materials by end of Year 2	0	20	0 1 producer identified, product certified for commercial use, production expected in 2014	U
	No. of counties with active producers of locally produced, sustainable EE materials by EOP	0	2	0 The project has facilitated discussions in 2 counties so far; active production not materialized yet though, product certified at the end of 2013, production expected in 2014	NA (HS/S in prospect)
Output 2.4: Information campaign results and EE success stories disseminated within Romania, UNDP and in the international community	No. of stories in the media in Romania related to government EE/RE programs influenced by the project/related to fuel poverty by EOP	0	20	14	NA - S (HS in prospect)
	No. of awards ceremonies carried out for EE/RE measures by EOP	0	3	0	NA
	No. of stories in the media/on servers at EU or international level on EE activities in Romania by EOP	0	15	1	NA - MU

Strategy	Objectively verifiable indicators			Rating	
	Indicator	Baseline	Targets End of Project		Achievement as of MTE
Output 3.1: Standard EE building design analysis for key types of existing apartment blocks and retrofitted thermal systems of selected apartment blocks	No. of apartment building types with technical properties analyzed for EE/RE possibilities and available for public use by EOP	0	50	0 - under implementation. More than one year delay in the bidding process organized by the ministry for the selection of the company which assesses the buildings designs and prepares model energy audits; delays in delivery of audits. The assessments delivered at the end of 2013, audits postponed till January 2014.	NA – U (S in prospect if no further delays)
	No. of apartment buildings undergoing thermal rehabilitation through using technical analysis and/or through the MDRT programme for thermal rehabilitation by EOP	50	900	545 (MDRAP reporting; PIR 2012 – 398 apt. buildings; PIR 2013 – 97 apt. buildings)	NA - S (S in prospect)
	No. of sustainable heating systems installed in houses influenced by the project/as a part of the MEF programs by EOP	310	484	The project is conducting feasibility analysis for 15 sustainable heating systems, 5 financing agreements signed.	NA - MU (MS in prospect)
	No. of apartment buildings undergoing thermal rehabilitation using alternative, needs-based, subsidy scheme by EOP	0	40	0 Due to delays of the MDRAP with organizing tenders and delivery of audits	NA - U (S in prospect)

Strategy	Objectively verifiable indicators			Rating	
	Indicator	Baseline	Targets End of Project		Achievement as of MTE
Output 3.2: Thermally retrofitted social buildings (schools, kindergartens, municipal offices and social houses/residences owned by the local government) in selected counties	No. of social buildings which have undergone EE measures by EOP in selected counties	0	40	7 small scale pilot projects implemented	NA - MU (S in prospect)
Output 3.3: Houses built/refurbished using energy efficient, locally-produced materials	No. of houses built/ refurbished using EE, locally produced materials by EOP	0	150	0 by MTE The project has identified potential producer of locally produced insulation material (based locally available natural raw materials), material certified. Implementation planned for 2014	NA - U (S/MS in prospect)
Output 4.1: Regionally-adaptable methodology for fuel poverty assessment proposed and a guide for municipal decision-makers on fuel poverty issues	No. of methodologies adopted at the national level for measuring fuel poverty by EOP	0	1	0 as of MTE The methodology has been developed and submitted for comments and approval by the Ministry of Labour and Social Assistance	NA (HS in prospect)

Strategy	Objectively verifiable indicators				Rating
	Indicator	Baseline	Targets End of Project	Achievement as of MTE	
	No. of local municipalities/counties which have adopted a methodology and begun measuring fuel poverty by EOP	0	2	0 as of MTE The project is working with municipalities to develop local strategies and guidelines for mainstreaming fuel poverty measures and energy efficiency considerations in their local development plans	NA (HS in prospect)
	No. of reports developed on the costs and benefits of implementing EE measures to address fuel poverty using locally-produced sustainable materials by End of Year 3	0	1	0 – in progress	NA - S (HS in prospect)
	No. of guides developed for policy-makers on the costs and benefits of implementing EE measures to address fuel poverty using locally-produced sustainable materials by EOP	0	1	0 - Under development currently for the 6 pilot municipalities; to be shared at national level through the Association of Municipalities	NA - S (HS in prospect)
	No. of guides and reports distributed to building sector actors by EOP	0	1,000	0 – planned for the next year	NA - MU (HS in prospect)
Output 4.2: Local and regional registries/databases of building stock	No. of existing central registries of buildings which include information on the buildings by end of Year 1	0	1	0 Implementation started in October 2013	U

Strategy	Objectively verifiable indicators				Rating
	Indicator	Baseline	Targets End of Project	Achievement as of MTE	
	No. of donors/ investors with access to the building registry by EOP	0	10	0 Planned to be finalized by end of 2014	

After initial delays the project team has overcome and bypassed slow and bureaucratic governmental procedures at the PIU/MDRAP and project implementation has been significantly accelerated due to implemented adaptive management. Key project deliverables are under development and/or scheduled to be implemented in 2014 (pilot projects). In some cases the planned end-of-project targets have been already formally met and even exceeded (trainings). Integration of fuel poverty into national energy efficiency policies has been linked with transposition of the EED 2012/27/EU Directive which provides high probability/certainty that the fuel poverty will be integrated, although the integration became more complex and lengthy process.

The overall rating of the interim results and attainment of objectives is **Moderately Unsatisfactory** because of delivery delays by PIU/MDRAP. Due to implementation of adaptive management of the UNDP CO the project managed to improve its delivery in 2013, although the delays have not yet been fully compensated. Despite the delays the project still has a prospect to deliver expected results by planned end-of-project in mid 2015 – however, with an assumption that no further delays will occur.

Highly Satisfactory	Satisfactory	Moderately Satisfactory	Moderately Unsatisfactory	Unsatisfactory	Highly Unsatisfactory
			MU		

4.3.2 Relevance

The project and its goal to increase energy efficiency in low-income households and communities and thereby reducing GHG emissions is highly relevant with GEF and UNDP priorities as well as with country priorities.

The project is 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.

The project is also closely aligned with existing national priorities in Romania, namely with:

- National Development Plan, which specifies public development investment priorities, and specifically with three of the six national development priorities:
 - Protecting and improving the quality of the environment
 - Developing human resources, promoting employment, social inclusion and strengthening administrative capacity
 - Diminishing development disparities between country regions
- National Energy Strategy 2007-2020, which was adopted in 2007 and includes the objective of “improving energy efficiency”
- National Action Plan on Climate Change, Action 6.3, in its effort to “promote energy efficiency among energy end users”

Project relevance is rated **Relevant**.

Relevant	Not Relevant
R	

4.3.3 Effectiveness and efficiency

Effectiveness of project implementation

The project implementation suffered from slow start, lengthy bureaucratic procedures, delayed procurement of project services that were caused as a result of political crises, changes in top positions of the Ministry of Regional Development and Public Administration (MDRAP) that serves as an implementing partner, and weak political country ownership. In response to delayed delivery on the side of PIU/MDRAP the UNDP CO has implemented adaptive management and signed ISS letter with MDRAP, LOAs with municipalities and MCGAs with project partners (AAECR, RoGBC) and thus took direct control and responsibility for delivery of trainings, first series of 7 pilot projects and other activities. The main responsibility of PIU/MDRAP to administer tender for selection of a company that will develop structural and energy audits of buildings to be retrofitted was significantly delayed and the actual delivery of audits by the contracted company has been reported in December 2013 to be at significant risk of additional delays or at a risk of not being delivered at all.

The UNDP CO managed to overcome to some extent the implementation delays and positioned currently the project to be able to implement designed activities by the end-of-project if the project implementation will be effective enough over the whole remaining implementation period.

Rating of effectiveness of project implementation is **Moderately Unsatisfactory** due to delays in delivering results under direct responsibility of PIU/MDRAP.

Highly Satisfactory	Satisfactory	Moderately Satisfactory	Moderately Unsatisfactory	Unsatisfactory	Highly Unsatisfactory
			MU		

Efficiency/cost-effectiveness of project implementation

The project has spent by December 31, 2013 total of 861 647 USD, or 28% of total project budget. Remaining unspent budget is 2 163 195 USD. About 1.5 million USD are planned for investment in demonstration projects in 2014. The low spending at MTE reflects delayed implementation of pilot projects. However, the annual spending rate is increasing.

UNDP and PIU have spent by September 2013 for project management a total of 100 734 USD, i.e. 3.6% of total budget. Combined expenditures for project management and M&E are 118 757 USD, i.e. 4.3% of the total budget.

Projected costs of direct GHG savings are 4.72 USD/tCO_{2eq} (641 344 tCO_{2eq} direct lifecycle savings, 3 024 840 USD of combined GEF and UNDP grant). Calculation of costs of GHG savings achieved in the middle of project implementation, when most of GHG savings have not yet been delivered, but costs for project implementation, including components not delivering direct GHG savings, have been partly spent, does not say much about real cost-effectiveness of project implementation. But it clearly

shows the fact that direct GHG emission reductions have not been delivered in the reporting period (except for GHG reductions from 7 small pilot projects). The calculated “cost” of GHG savings as of September 2013 is 176.6 USD/tCO_{2eq} (3 980 tCO_{2eq} lifecycle savings, 702 795 USD spent on project implementation by September 2013), and 216 USD/tCO_{2eq} as of end of 2013 (3 980 tCO_{2eq} lifecycle savings, 861 647 USD spent).

The project has a good chance to reach acceptable costs of GHG savings (close enough to projected costs, or ca < 10 USD/tCO_{2eq}) by the planned end-of-project in mid 2015, if it will successfully deliver planned GHG savings.

Rating of the project cost-effectiveness/efficiency is **Moderately Unsatisfactory**.

Highly Satisfactory	Satisfactory	Moderately Satisfactory	Moderately Unsatisfactory	Unsatisfactory	Highly Unsatisfactory
			MU		

4.3.4 Country ownership

The project concept has been initiated by UNDP CO Romania and the project document has been developed jointly by local and international consultants who broadly consulted with key relevant local stakeholders.

During project implementation the project has set up an Inter-Organizational Working Group (IOWG) consisting of key stakeholders in the country. Meetings of the IOWG are held twice a year and disseminate information and experience from project implementation to relevant stakeholders in the country, provide a forum for feedback for project team, and support creation of effective country ownership among decision makers and professionals.

However, political instability and changes in a position of minister and state secretary have weakened political ownership of the project which resulted, together with lengthy bureaucratic procedures at MDRAP, in significant delays in project implementation.

The UNDP/GEF project is of another nature compared to other locally or internationally funded energy efficiency initiatives: it has relatively small budget compared to national energy efficiency financing programs (3 million USD versus budgets of dozens or few hundred USD), and in case of this UNDP/GEF project it is even only a fraction of the relatively small budget that is allocated for direct financial support of pilot projects implementation (ca 1.5 million USD). The key focus of the UNDP/GEF project is on policy and capacity development. Smaller projects might attract less attention at the level of the implementing partner than projects with large budgets.

Country ownership on a professional level, involvement of national stakeholders, experts and decision makers especially on a local level, is rated Satisfactory. However, the country ownership on a political level is rated **Unsatisfactory** due to significant delays of the PIU/MDRAP in delivery (installation of PM, setting up PIU, procurement for project services).

Highly Satisfactory	Satisfactory	Moderately Satisfactory	Moderately Unsatisfactory	Unsatisfactory	Highly Unsatisfactory
				U	

4.3.5 Project Impact

The situation in Romania has changed since the project has been initiated and also since it was launched in 2011. The National Thermal-Rehabilitation Programme has spent between 2009 and 2013 150 million USD on direct investment support to improve energy efficiency in buildings. The EU funded programme (Regional Operation Programme – ROP) has a total budget of 304 million EUR (of which 150 million EUR from EU budget and 154 million EUR from local/national sources), and it has been approved for additional programming period 2014 - 2020.

Thanks to these financial support programs there are already several multi-apartment buildings insulated in practically each city in Romania – a significant change compared to the 2009/2011 situation when there were only very few such examples. The experience from and benefits of energy efficiency retrofits has been shared among other building owners and some of them have implemented energy efficiency improvements including building wall insulation without any subsidies. Common energy saving technologies and commercial insulation materials (mainly polystyrene) have been already sufficiently demonstrated on a local level.

The EU funded programme provides already also preferential conditions for co-financing for low-income households. Local authorities cover 10%, 20% or 30% of required 40% co-financing if 50% of households have monthly income per member of household lower than 500, 350 or 150 EUR respectively. However, the most vulnerable households with the lowest income still cannot afford to finance the required minimum 10% of investment and thus cannot benefit from these programs.

Pilot projects implemented so far in public buildings helped municipalities to improve heat supply and energy efficiency in their schools and kindergartens; however no solutions have been demonstrated for the most vulnerable households with the lowest income yet.

The proposed policy changes within component 1 that aim at converting annual energy costs subsidies to up-front financial support to improve energy efficiency in low-income households will require significant additional budget. Current/planned financial support schemes targeted at low-income households (ROP programme) provide 60-90% subsidies and are eligible for households with monthly income per member of household lower than 500 USD. However, the problem is the capacity and willingness to provide required 10%-30% co-financing in privately owned apartment buildings.

The project has changed its focus from privately owned apartment buildings, where the capacity and willingness to pay part of upfront investment costs is limited, to demonstrating energy efficiency in public buildings, including social housing provided by municipalities in their buildings to the most vulnerable groups. Demonstration projects are scheduled for implementation in 2014.

The project also works to support wider and easier replication and to decrease transaction costs of energy efficiency retrofit projects through development of standard energy efficiency solutions (energy audits) for typical building types, and dissemination of practical information on suitable energy efficiency solutions.

Trainings delivered by the project represent a good example of a cost-effective activity with long-term impact. Trainings were complex, well received and raised additional demand for further trainings. The project thus decided to extend training activities above originally planned targets and to delivery further training sessions with local partners.

The ambition of the UNDP/GEF is not to compete with large funding schemes available in the country. The ambition is to work with and utilize these available funding mechanisms, to integrate fuel poverty, and to facilitate energy efficiency project implementation. The project managed to redefine eligibility criteria and to include additional energy efficiency measures eligible for financing and additional low-income regions/municipalities by amendment of the Ordinance 18. The programme financed by ROP has been designed to provide preferential funding for low-income households already before UNDP/GEF project was signed – without its direct impact.

Additional ambitious goal of the project is to demonstrate in pilot projects locally developed sustainable insulation material that can be produced with local labour force in low-income communities. If the developed solution will prove its technical and financial feasibility and competitiveness of such solutions compared to business-as-usual solutions based on polystyrene (or mineral wool), it will generate energy and GHG savings and create local employment opportunities – and thus it will have double impact on reducing fuel poverty. However, developing and commercializing new product is associated with lots of business risks, and the real impact of this activity will be demonstrated in the next implementation period only.

The project was able to organize and set up communication with practically all relevant stakeholders in the country, for example through the IOWG and bilateral meetings, raise awareness of energy efficiency and fuel poverty among decision makers on a central and local level, and among inhabitants/energy end-users. Fuel poverty as a concept has been already partially integrated into legislation related to national programs. The project facilitates national discussions on fuel poverty integration. Full integration of fuel poverty has been aligned with transposition of the EED Directive, which gave additional momentum to these activities. On the other hand, the transposition of the whole Directive is a complex and lengthy process.

Large country-wide media awareness raising campaign has been implemented in autumn 2013, addressing 4.7 million citizens.

Through activities implemented by MTE (effective awareness rising among policy and decision makers on fuel poverty and energy efficiency, facilitation of policy discussions on integration of fuel poverty in energy efficiency policies through transposition of the EED Directive, energy efficiency awareness raising among general public, legislation influenced, professionals and municipal officers trained, first 7 pilot projects implemented), the project has delivered lasting impact, although it is still very limited in scope.

The rating of the project impact based on limited results actually delivered during the first half of the implementation period is **Moderately Unsatisfactory**.

Highly Satisfactory	Satisfactory	Moderately Satisfactory	Moderately Unsatisfactory	Unsatisfactory	Highly Unsatisfactory
			MU		

4.3.6 Prospects of Sustainability

The project has been designed to deliver sustainable results in all four components. However, as of MTE, these goals have not yet been reached.

In addition to successful delivery of project results by the end-of-project, the critical factor will be availability of funding specifically allocated for up-front financing of energy efficiency measures in low-income households which cannot afford to co-finance complex energy efficiency improvements of their housing. Existing national programs provide financing for energy efficiency retrofits in multiapartment buildings; the EU/ROP financed programme is already specifically targeted at low-income households. Funding availability on the national level is secured in a long term – till 2020. Local governments/municipalities play a crucial role in this scheme since they provide 10% - 30% of co-financing for energy efficiency retrofits in low-income households. Financial capacity of municipal budgets might be a critical factor for wide implementation of energy efficiency retrofits in low-income communities.

Romanian policy does not fully integrate fuel poverty and energy efficiency policies yet; the concept of fuel poverty has been introduced and adopted already, however not fully validated by the government and implemented. The newly proposed EU funded programme through ROP for 2014-2020 does provide preferential financing for low-income households; however the most vulnerable households seem not to be able to provide necessary co-financing of 10% of investment costs.

Direct training has been provided to 96 municipal servants – trainers, and each has trained additional 5 persons, and additional trainings have been implemented based on the growing demand from municipalities; in total 697 professionals have been trained already. Trainings have supported development of sustainable knowledge at local level. There still is a demand and need for further specifically tailored trainings for different target groups of technical professionals, project developers and decision makers. The project has extended its training activities and delivered in 2013 additional 8 trainings in cooperation with Regional Development Agencies to 250 professionals and decision makers from regional/local authorities.

7 pilot projects have been implemented in public buildings in pilot municipalities, and additional projects are planned to demonstrate utilization of locally produced sustainable insulation materials. However no activities have targeted so far directly low-income households.

Financial risks – risks associated with partial conversion of annual energy costs subsidies to upfront energy efficiency subsidies for low-income households are rated medium to high. Currently the provisions of the new ROP programme provide 60% grant from EU funds and state budget, and require co-financing of 10-30% from low-income households, that should be accompanied by additional grant co-financing of 30-10% from budgets of local authorities. However, local authorities don't get compensated for these expenditures. Thus it is not clear how big and sustainable funds dedicated at the local level specifically for energy efficiency improvements of housing of low-income households will be.

Socio-political risks – the socio-political risk is rated low to medium. There is already a clear recognition of the fuel poverty problem, and there are some actions implemented with the project support on a national/local level (preferential funding/higher subsidies for energy efficiency improvements for low-income households). Integration of fuel poverty into national legislation is also supported by transposition of the EU Energy Efficiency Directive, however, the process is rather lengthy and it is not clear if the EED directive will be transposed in due time by June 2014.

Institutional framework and governance risks – is rated high to medium.

The capacity of the national implementing partner, the Ministry of Regional Development and Public Administration, to effectively implement the project on an operational basis through its Project

Implementation Unit has been significantly weakened by political instability, changes on top policy and management positions and lengthy bureaucratic decision making procedures at the Ministry. Delivery of project results has been significantly delayed. The UNDP project team managed to bypass the ineffective decision making process and to implement effective adaptive management through ISS letter, LOAs and MCGAs. However, since UNDP has no control over the performance of the implementing partner, the implementation risk of underperformance is still rated high.

Regarding prospects of sustainability the situation is different. Once the expected project results will be delivered, institutional framework and governance risks regarding prospects of sustainability are rated medium. There is already an institutional framework established for administration of national programs that finance energy efficiency retrofits specifically in low-income households.

Environmental risks – is rated low. The project is designed to reduce energy consumption in buildings through installation of energy efficiency measures and/or renewable energy sources, and thus to reduce GHG emissions and local emissions of pollutants from energy sources. The project is also working to test and demonstrate locally produced sustainable insulation materials made from local raw and natural materials, and thus to reduce life-cycle GHG emissions of insulation materials. No negative environmental impacts have been identified.

Based on an assumption that planned project results will be delivered by the end-of-project, prospects of sustainability are rated **Moderately Likely**. As described earlier, most of project results and outputs – if delivered – are sustainable in principle (policy integration of fuel poverty, capacity development, energy efficiency reconstructions) and do not necessarily require additional external support after project termination – except for financial support for implementation of energy efficiency improvements in low-income households.

Likely	Moderately Likely	Moderately Unlikely	Unlikely
	ML		

5. Conclusions, Recommendations, Lessons Learned

5.1 Conclusions

The project document was well designed and based on thorough situation analysis. The project aim is to mitigate fuel poverty and to reduce GHG emissions by facilitating increase of investment in energy efficiency in low-income households/communities; utilization of existing energy efficiency financial programs; integration of fuel poverty into national policies and financial programs; decreasing transaction costs of project development; and transformation of annual energy bill subsidies into up-front subsidies for energy efficiency retrofits of buildings of low-income household/communities.

The planned project outcomes are:

1. Fuel poverty integrated into national legislation and national energy efficiency funding schemes
5. Energy efficiency project development capacity strengthened and professionals trained
6. Buildings reconstructed to be more energy efficient or using sustainable energy efficient technologies
7. Data and information available for decision makers to design programs addressing fuel poverty

The project is implemented according to the *National Implementation Modality (NIM) with advances* by the implementing partner (IP) – the Ministry of Regional Development and Public Administration (MDRAP) who hosts the Project Implementation Unit and the Project Manager and has full responsibility for project management. Other project partners include Ministry of Environment and Climate Change, Association of Energy Auditors for Buildings (AAECR), and Romanian Green Building Council (RoGBC). The project works with six partner municipalities (Craiova, Calafat, Petrosani, Petrila, Vulcan and Calan) in two counties. Cooperation with RoGBC was terminated in 2012 because the quality of trainings delivered by RoGBC was evaluated not to be sufficient.

This implementation modality requires effective project management at PIU and a strong and effective support from- and decision making at the Ministry/implementing partner in order to deliver expected results effectively. Unfortunately, this was not the case especially in early phases of this project – primarily due to political crisis and weak country ownership.

The project faced significant delays: inception workshop has been organized 4 month after project start in June 2011, the Project Manager and project staff were designated officially by MDRAP only in December 2011 (MDRAP regulation 90882/EC/8.12.2011) and the Project Implementation Unit was established in 2012 through a Minister Order. During implementation, the project incurred significant delays with the organization of procurement services at the Ministry (MDRAP). These delays were caused by a combination of lengthy bureaucratic decision making procedures at the Ministry, bureaucratic public procurement process which has respected the national legislation, and political instability in the country. The political instability has led to a change in a position of a National Project Director as well as several changes in top political and management positions at the Ministry and thus the country political ownership was rather weak. The UNDP team also faced two changes of the staff holding the Task Leader position (third Task Leader appointed within two years of project implementation). However, UNDP CO has actively used its human resources including senior

management and used adaptive management to mitigate major risks to the implementation; therefore the project delivery has gradually improved by 2013. Annual project spending have increased in 2013 to 15% of total budget (compared to 11% in 2012), and preparatory works for key investment of ca 1.5 million USD (50% of total project budget) into demonstration projects have progressed in 2013, and the investment is scheduled for 2014.

The adaptive management approach was based on anticipation of challenges by the early identification of risks, strengthening of UNDP supervision, and implementation of changes in the execution modality, as follows:

UNDP signed two Micro Capital Grant Agreements (MSGAs) in 2011 with the two partner NGOs, namely AAECR and RoGBC, followed by a second MCGA with AAECR in order to deliver the training activities under Outcome 2 even before the Project Implementation Unit (PIU) has been set up with IP; further in 2012 UNDP signed an ISS (Implementation Support Services) letter with the Ministry of Regional Development and Public Administration (MDRAP-Implementing Partner-IP), and later on in the year Letters of Agreement (LOAs) with six local authorities representatives in order to shift the execution of the first six building retrofitting activities from central to local authorities at which level the public procurement process can be delivered significantly faster.

The ISS Letter signed with MDRAP allowed UNDP support project implementation namely in:

- (i) Identification and recruitment of project personnel
- (ii) Identification and facilitation of training activities
- (iii) Procurement of goods and services

The implemented adaptive management and strengthened UNDP implementation support allowed for an improved delivery and some recovery of delays in 2013.

The key project achievements as of MTE are summarized below:

Component 1: Improved policies to support energy efficiency in low-income communities

The concept of fuel poverty was defined, draft methodology developed and submitted to the Ministry of Labour and Social Protection for review, definition of “vulnerable consumers” submitted to the government for consideration and inclusion in the governmental programs and ordinances (18/2009). The project has set-up an Inter-Organizational Working Group (IOWG) with member representatives of the main stakeholders in the energy sector, governmental and parliamentary policy makers engaged through workshops and bilateral policy oriented advocacy meetings. The project positioned itself as an active facilitator for fuel poverty awareness raising and official adoption of policy recommendations that integrate fuel poverty and energy efficiency aspects actively supporting the transposition of Energy Efficiency Directive 2012/27/EU, especially Article 7 on energy efficiency obligation schemes.

The project has developed studies, methodologies, financing proposals and action plans on fuel poverty and recommendations for mitigation measures, and it works with the Ministry of Labour, Family and Social Protection on a development of a financial impact study that will give the government the overview on cost estimates of the proposed mitigation scheme and allocation of adequate budget. The project has developed a set of draft normative acts for the implementation of distinct support schemes for fuel poverty households; it has organized number of meetings with key

stakeholders, worked closely with the National Energy Regulatory Agency (ANRE) on energy tariff policy, and has proposed a definition of fuel poverty to be integrated by the government in the domestic legislation that will transpose the 2012/27/EU Directive. It has also influenced the revisions of the national thermal-rehabilitation programme (Governmental Ordinance 18) to include additional energy efficiency measures and municipalities in low income areas.

Implementation is in process; fuel poverty has not yet been fully adopted and implemented, it is aligned with the complex and lengthy process of transposition of the Energy Efficiency Directive, hence the official adoption into national legislation might be delayed.

The amendment of the governmental ordinance 18/2009 that extended energy efficiency measures eligible for financing from the national thermal-rehabilitation programme has also a potential to generate additional GHG savings within the same programme budget. These extended energy efficiency measures were also included in the thermal rehabilitation programmes with financing from EU funds and implemented by the MDRAP. Extension of regional scope and focus on low-income households redirects GHG savings to low-income households within the national programme, but does not necessarily generate additional GHG savings.

Component 2: Improved capacity at the local level to reduce fuel consumption in low-income communities

800+ professionals and municipal officers have been trained in relevant energy efficiency legislation and suitable energy efficiency and renewable energy technical solutions in different building types. Based on a positive feedback and further demand, the PIU proposed and supported a series of 8 additional trainings that were delivered in 2013 in cooperation with Regional Development Agencies, and additional 250 professionals and regional/municipal decision makers were trained. AAECR was contracted by UNDP to deliver these trainings.

Awareness-raising information materials have been distributed through partner municipalities to general public, country wide media campaign has been implemented in October-November addressing 4.7 million inhabitants through TV and radio spots, outdoor billboards and internet banners.

After poor quality of results of the first expert on sustainable insulation materials and subsequent delays, UNDP contracted another expert of INCERC Research Institute of Iasi recommended by the AAECR to conduct a comprehensive market research on potential locally available sustainable and environmental friendly insulation materials. A potential producer of locally produced sustainable insulation material has been identified - the MOPATEL PROIECT SRL, a company located in Northern Romania, Suceava county, with a patented Mopatel SuperLight insulation material. The Mopatel SuperLight insulation material has met the construction materials certification requirements in December 2013 and can thus be commercialized and used in demonstration projects.

Component 3: Direct reduction of energy consumption through community-based retrofits and market development

Since the beginning of the project, a total of 1 468 residential buildings have implemented energy efficiency or renewable energy measures with the financial support of the National Thermal Rehabilitation Programs of MDRT and Casa Verde programme of the Ministry of Environment and

Climate Change (without direct support from the project yet). Inventory of buildings in pilot municipalities has been conducted in 2012 in order to identify 50 most common apartment building types to be reconstructed. 140 standard building types have been selected for development of energy audits with standardized energy efficiency solutions. The PIU was in charge to prepare tendering package according to the public procurement rules for energy audits to be performed in selected pilot buildings in order to properly design energy efficiency retrofits that are planned for implementation in 2014. The company that was contracted for this task by the PIU did not deliver the results by December 2013 and the process of energy auditing and implementation of demonstration projects is in a threat of being delayed. 7 energy efficiency/renewable pilot projects have been implemented by UNDP directly in schools and kindergartens in 6 partner municipalities and public buildings have been identified for implementation of 40 pilot projects demonstrating locally produced sustainable insulation materials (expected delivery in 2014).

7 small demonstration projects in six partner municipalities generated 199 tCO₂ direct annual savings, out of a total 600 tCO₂ direct annual savings from retrofits envisaged in Activity 3.2.1 by end-of-project.

Component 4: Information for improved decision-making

Guidelines for municipal decision-makers on fuel poverty, which is an EOP target, are under development. The project has developed a draft methodology for fuel poverty assessment and local draft normative acts and guidelines for a fuel poverty and energy efficiency diagnosis in order to identify priorities. These activities will continue in 2014 and will aim at including the energy efficiency/fuel poverty assessment into the local development plans that are currently being updated at local level.

The building registry database development has not started yet, only preliminary discussions with the MDRAP PIU around the structure of the future database and hosting have been carried out so far. The future database will serve as an important tool for the identification of the priority areas of interest (particularly poverty stricken areas) for the National Thermal Rehabilitation Programme run by the Ministry.

Due to accumulated delays, the project has delivered by MTE only partial results. Delivery of key project results is scheduled for 2014. In case the project delivery would face further delays and lengthy decision making at the MDRAP as in early phase of project implementation, the project would be at a high risk that expected results would not be delivered by the planned end-of-project. However, despite the initial delays, and due to the adaptive management implemented by UNDP to bypass delays in delivery of the PIU/implementing partner (UNDP has signed MCGAs, ISS letter, LOAs), as of MTE the project is still in a position to achieve designed results by the planned end-of-project, including its goal to reach direct annual savings of 43 374 MWh and 22 227 tCO_{2eq} respectively if MTE recommendations will be implemented.

Overview of GHG savings achieved by MTE

- 199 tCO₂ direct annual savings generated from 7 small pilot projects implemented in 2013 in 6 municipalities (energy efficiency retrofits and installation of biomass boilers in schools and kindergartens)

Estimated savings generated by activities delivered/under development at the MTE

- 25 866 tCO₂ direct annual savings are estimated to be generated by the end-of-project by the national thermo-rehabilitation programme by amendment of the Ordinance 18 and extension of energy efficiency measures eligible for financing, and extension of geographical programme focus on additional low-income regions/municipalities
- 15 274 tCO₂ direct annual savings are estimated to be generated by energy efficiency reconstruction of 100 apartment buildings that will use model energy audits that are under development for 50 typical building types

Note: Before reporting this type of GHG savings it should be verified, based on analysis of the national programme and its spending, if these GHG savings are additional to GHG savings that would have been generated without the UNDP/GEF project, or if these savings have been redirected to low-income households without being additional.

Main outcomes to be achieved

Component 1:

In addition to already adopted eligibility extension of national thermal-rehabilitation programme (Ordinance 18), adoption of “fuel poverty” into Romanian legislation is linked with transposition of the Energy Efficiency Directive 2012/27/EU, which allows newly developed compulsory energy efficiency obligation scheme to be implemented as a priority in fuel/energy poor households. This is why the project facilitates the transposition of this Directive (and specifically article 7 that is referring to the vulnerable consumers), although it is a very lengthy process that might be finalized after planned project termination in mid-2015. The project has submitted its proposals to address fuel poverty to the government however, the project has no alternative solution than to support the institutional dialogue and advocate for the inclusion of its proposals into the overall legal framework development process.

Component 2:

Trainings and information dissemination (handbooks, how-to guides) are planned to be continued and extended in scope and scale within the budget availability, and to cover specifically simple energy efficiency measures suitable for poor households and specific information on available financial support schemes for low-income households, municipal information points are planned to be strengthened and scaled-up.

The project intends to continue its support for development of local market (production and application) of sustainable building insulation materials – and apply these materials within component 3.

Component 3:

The project will continue the cooperation with MOPATEL PROIECT SRL, which is willing to invest locally and open a branch in one of the project areas to produce locally sustainable insulation material.

Delivery of the MDRAP hired company has failed to comply with deadlines and deliverables were not submitted by the end of 2013 and thus also implementation of energy efficiency pilot projects scheduled to be implemented and delivered in 2014 to demonstrate locally produced sustainable materials are at risk.

UNDP CO should implement additional adaptive management to offset this delay and implement pilot projects in due time in 2014.

Best practices and lesson learned based on pilot projects will be developed and disseminated locally and internationally.

15 installations of building level mostly biomass heat boilers (with heat output of 40 to 200 kW) are scheduled for 2014. Financing agreements have been prepared by UNDP, and already signed with three municipalities. Estimated costs are 0.2 million USD.

Component 4:

Development of a building registry in order to support the National Thermal Rehabilitation Programme in its targeting to low income areas.

After initial delays the project has significantly improved its implementation and delivery in 2013 due to implemented adaptive management by UNDP CO, with a potential to deliver EOP results in a due time. However, as all time reserves have been already utilized, the project is on a critical path and cannot afford any further delays should it deliver expected results by planned end-of-project. The overall evaluation of the project as of MTE is due to delayed delivery **Moderately Unsatisfactory**.

Highly Satisfactory	Satisfactory	Moderately Satisfactory	Moderately Unsatisfactory	Unsatisfactory	Highly Unsatisfactory
			MU		

5.2 Recommendations

1. UNDP should take full formal responsibility and direct control over project implementation (Direct Implementation Modality)

The project has been implemented with a “National Implementation Modality with advances”. In such case the full responsibility for proper project implementation and delivery of results lies formally with a national implementing partner – Ministry of Regional Development and Public Administration (MDRAP) which was also in charge to set up and staff the Project Implementation Unit. Due to changes in political representation, changes in top political and decision making positions at the MDRAP, related weak political ownership of the project and lengthy bureaucratic decision making

procedures at the Ministry, the project delivery was significantly delayed since its very beginning. The PIU was established and staffed only in December 2011, 5 months after official project launch, procurement (and thus also project activities and delivery) were significantly delayed by months, in some cases up to about a year.

UNDP Country Office, although it is not formally responsible for nationally implemented projects, has a primary responsibility to GEF, the project sponsor, for successful delivery of project results. Thus UNDP CO decided to support MDRAP and its PIU and to help to overcome some of the bureaucratic delays. UNDP CO signed first Micro Capital Grant Agreements even before the PIU has been established, so that trainings under component 2 could have been developed and delivered without delays. In 2012 UNDP signed with the Ministry an Implementation Support Services Letter (ISS Letter) that allowed UNDP CO to actively support PIU/MDRAP and implement necessary project activities. After procurement for first demonstration projects failed to be organized in time, UNDP signed Letters of Agreements with municipalities that allowed implementing first pilot projects without further delays. UNDP CO took over responsibility for delivery of most activities that were developed and delivered for the project by external parties.

UNDP CO offered the MDRAP to change the implementation modality from “NIM/NEX with advances” to “NIM/NEX with full Country Office support” that would better reflect the actual situation. However, MDRAP declined this offer on February 14, 2012.

Procurement and contracting for feasibility analysis/energy audits of energy efficiency retrofits of typical multi-apartment buildings has been the main responsibility of the PIU/MDRAP outsourced to external party. Delivery of these energy audits is critical for implementation of demonstration projects. After delays in procurement and contracting, also the delivery of results has been delayed and the deadline has been extended from November to January 2014. This deadline is already on a critical path: any further delay would delay also implementation of demonstration projects planned for 2014, and the results and savings could not be delivered and monitored in 2014/2015 heating season.

The current implementation setup is thus not sustainable anymore. The necessary and active UNDP support to the PIU/MDRAP, far above a standard support typical for this implementation modality, does not seem to motivate MDRAP to take full responsibility for effective implementation and delivery of project results on time.

UNDP, which has the ultimate responsibility to GEF, should thus take over a direct responsibility for project implementation, and change accordingly the implementation modality to Direct Implementation Modality.

2. The project should have one full-time project manager fully responsible for management and coordination of all project activities.

Under the new implementation modality, UNDP should make sure that the project will have one full-time project manager who will devote 100% of his/her time capacity to project management.

Current project manager, as a MDRAP employee, has been actively involved also in other activities of the MDRAP and thus she could not devote her full time capacity for effective project management,

supervision and coordination of all project activities, including those that are implemented by UNDP through the ISS letter.

The project should have as a standard one full-time project manager that effectively manages all project activities. This is urgent especially in case when implementation delays have reached their critical path already, and the project has no more time reserve to accommodate any potential further delays.

UNDP should hire an experienced and effective project manager who will be able to devote full-time of his/her time capacity to the implementation of all project activities, coordination of all project team members, and ensuring effective communication among all relevant project partners – and thus also to be fully responsible for the whole project delivery.

3. Address also the most vulnerable households with lowest income – provide information on cheap solutions for do-it-yourself installation, demonstrate suitable solutions through on-the-job trainings, disseminate practical how-to guides for the most vulnerable groups.

The most vulnerable households – low-income apartment owners in multi-apartment buildings - that cannot provide co-financing for energy efficiency retrofits cannot benefit from existing/planned national financing schemes. The same applies for the most vulnerable households living in old simple family houses. The project has refocused its activities to the most vulnerable groups living in social housing provided by municipalities. The project should consider also developing and demonstrating appropriate simple do-it-yourself solutions for these income groups. Technical solutions would include simple and inexpensive materials and measures and tips how to reduce energy losses, i.e. how to keep houses warm with less fuel. Information dissemination and demonstration might be linked with on-the-job training of trainers, and include but not be limited to elimination of draft and chimney effect (weatherization/air tightening of old window frames, exterior doors, and attic entrance), optimal operation of stoves (burning of sufficiently dry fuel wood with sufficient air inlet), improvement of single glazed windows (with second layer of glass or plastic), or even do-it-yourself roof and wall insulation using traditional technologies and cheap natural materials (reed, straw, clay), etc. These technical measures do not provide maximum energy/GHG savings, but typically rank among the most cost-effective measures or significantly improve the indoor thermal comfort in case of underheating. The project is considering extension of trainings specifically targeted to the most vulnerable groups, and the evaluator supports extension of such activities.

4. Strengthen the link of the project with national programs and activities supporting energy efficiency in buildings to maximize its impact and additional direct GHG savings

The project has managed already – through the MDRAP PIU - to have amended the governmental decree 18 and to extend the scope of eligible energy efficiency measures and to prioritize low income localities in national thermal rehabilitation program. The more direct support and technical assistance the UNDP/GEF project will provide to energy efficiency project development/implementation in low-income households that could be counted as additional to original programme design/implementation practice, the bigger impact and more direct GHG emission reductions could be assigned by the project as direct project GHG emission savings. The project should continue its efforts in this field and extend

its practical trainings, and disseminate information, how-to and financing guides to facilitate implementation of energy efficiency projects on a local level. Practical trainings and information dissemination rank among the most cost-effective strategies how to support implementation of additional energy efficiency projects.

5. Strengthen and expand trainings and information dissemination

The project has delivered already more and good quality trainings than originally planned. However, with increased number of energy efficiency retrofits implemented, there is also growing need and opportunity for further dissemination of more specific information and experience.

Thus the project is encouraged to further extend targeted training activities and information dissemination and support capacity development of both professionals and do-it-yourself home owners in technical and financial best practices in development of affordable and cost-effective energy efficiency projects (focus on technical details, thermal bridges, elimination of condensation, proper ventilation, realistic payback of different technologies/measures). Information can be disseminated also through events organized (and paid for) by third parties.

The project should strengthen information dissemination based on local hands-on examples and include practical information and how-to guides for decision makers, professionals, home and apartment owners and general public on how to prepare, finance and implement energy efficiency projects, how to operate retrofitted buildings (for example how to avoid problems with condensation and mould - sufficient manual ventilation/short-time window opening needed after installation of new windows with tightened plastic frames), including tips on basic energy efficiency do-it-yourself improvements for the most vulnerable groups. The web portal should be updated (hosted perhaps at some project partner website) and kept operational even after project termination, and link it with practical information and existing information sources/youtube videos on proper energy efficiency insulation technologies etc.

6. Develop back up/mitigation plan B for demonstration of alternative sustainable insulation solutions based on local raw materials

Within the Component 3 the project is focusing on demonstration of new, locally produced sustainable insulation materials. Utilization of locally produced sustainable insulation materials has additional positive environmental impact, including additional product lifecycle energy and GHG savings, and positive social impact by creation of local employment opportunities. However development of the whole new supply chain for a new product, including distribution network and marketing is a very demanding and costly task, which includes lots of specific business risks. How successful this new product will be depends not only on the quality, thermal parameters and total installation costs of this insulation material, but also on a feasibility of the business model/plan of the producer, actual demand for such products, and a business (marketing/sales) capacity of the company.

While the demonstration of locally produced sustainable insulation materials is a secondary project aim (the primary goal are sustainable energy/GHG savings), the project team should develop a backup plan B that would be implemented in case there were some unexpected delays or technical/quality problems with this new product that would put at risk implementation of pilot projects and the ultimate

goal of the UNDP/GEF project - to deliver energy and GHG savings by the end of project in July 2015.

The backup plan should be developed in early 2014 so that it could be deployed if necessary in pilot projects in 2014 in case the production and application of newly produced local sustainable materials would turn out not to be feasible.

This does not say that the project should resign on demonstration of locally produced sustainable materials. This suggests that the project should prepare a mitigation plan for the case that some unexpected problems related to these new materials would arise, and the implementation of these demonstration projects would be at risk of delays (such as delayed local production etc).

The mitigation plan then might focus on traditional technologies and locally available non-commercial natural insulation materials (reed, straw, clay, adobe) to be demonstrated – in limited scope - at small suitable buildings. The project should also explore if any certification is required also for home-made natural insulation materials and if so for what application of these materials in do-it-yourself mode, without trading of such materials.

7. Work also with associations of apartment owners in multi-apartment buildings in low-income households to disseminate experience in implementing and financing energy efficiency

Implementation of energy efficiency retrofits in multi-apartment buildings is always more difficult because of numerous partners are organized in Association of Apartment Owners (AAO), specific procedures exist for decision making, and for potential debt recovery. Especially challenging this is in case of low-income households which cannot afford or willing to provide up-front co-financing. Thus the project has gradually refocused on low-income families living in social housing provided by municipalities.

Although the situation in privately owned apartment buildings (AAOs) is much more difficult, and the project might not be able to deliver actual energy/GHG savings from projects in these types of buildings, the project should not resign on this important segment of low-income households. The project should explore opportunities how to eliminate upfront co-financing with support of additional dedicated funds, revolving funds or loans from local utilities, municipalities, etc. and address specific issues and problems that associations of apartment owners have to solve when developing energy efficiency retrofit projects in multi-apartment building with low-income households and disseminate the lessons learned and best practices to decrease transaction costs, for example: specific information on real cost/benefits of energy efficiency improvements based on hands-on experience from implemented projects, model financing schemes with repayment of initial co-financing by reduced energy bills, model tenders and contracts of AAOs with suppliers, including quality control.

When working with AAOs the project would benefit from working with a local entity that has already experience in this field and has demonstrated capacity to work with individual apartment owners associations in low-income regions/municipalities.

5.3 Lessons learned

1. Effective management of any project requires the project team to have one single full-time dedicated and experienced project manager who is fully responsible for delivery of overall project results. Any other arrangement is more complicated and tends to be less effective. The project should also have clearly defined responsibilities (and powers) of all team members.
2. UNDP CO managed to overcome delays and underperformance of the national implementation partner, the Ministry of Regional Development and Public Administration (MDRAP), even in case when the implementing partner has full formal responsibility for the PIU and project management. UNDP CO implemented effective adaptive management through signature of Implementation Support Services (ISS) letter with MDRAP, and thus took over responsibility to deliver specified project activities, and signed Micro Capital Grant Agreements (MCGA) with AAECR and RoGBC, and Letters of Agreement directly with pilot municipalities.
3. The more detailed description of project activities is provided in the Project Document, the better guidance for project implementation team. But on the other hand in such case the project manager might tend to be more bound to originally designed project activities and more reluctant to adopt changes – especially if s/he does not have prior experience with UNDP/GEF adaptive management. Detailed description of project activities in the Project Document should serve as an instruction manual, but it is not intended as a binding prescription on what has to be and what cannot be implemented. UNDP/GEF projects aim to be typically innovative projects. Thus project manager is thus not expected only to implement prescribed activities, but – in contrast with most other internationally funded projects – s/he is expected to regularly revise and update implementation plan according to actual development and specific needs so that the project objectives will be reached in most effective way. Adaptive management implemented by the UNDP CO in the form of ISS letter, MCGAs and LOAs can serve as the best practice in eliminating accumulated delays.
4. The number of LogFrame indicators should be kept limited. Otherwise their importance tends to be leveled. Maximum number of LogFrame indicators should not exceed ca 10-15 indicators (in exceptional cases ca 20).
5. Projects should use two different sets of project indicators and targets:
 - i. LogFrame indicators for reporting to GEF: Set of indicators and targets for project objectives and outcomes (and eventually for key outputs) that would be used for evaluation of project achievements and delivery of project results for strategic decision makers, steering committee, external project evaluation, and GEF. The number of indicators should be kept reasonably low (dozen +).

- ii. Activity level indicators for operational project management: More detailed time-bound activity and output level indicators and targets that should be used primarily by the project manager to evaluate project progress on a frequent basis (monthly, quarterly, annually). The number of indicators should reflect the complexity of tasks in specific project period.

Annexes

Annex 1: Evaluation mission itinerary

September 22-28, 2013

Day 1 – Monday, 23 Sep		
09:30 to 10:00	Briefing meeting at UNDP	UNDP offices
10:00 to 13:00	Discussions with the Project team: main stakeholders, achievements to date, the Project's log frame and indicators	UNDP offices (conference room)
13:00 to 14:30	Lunch	
15:00 to 18:00	Meeting with the Project team (PIU, EE task leader) discussions on the Project's log frame and indicators	MRDPA or UNDP offices
18:00	Dinner	
Day 2 – Tuesday, 24 Sep		
09:00 to 9:30	Meetings with the Ministry of Regional Development (State Secretary Mr. Iulian Matache)	Ministry of Regional Development and Public Administration
10:30 to 12:30	Meeting with the Ministry of Environment and Climate Change (Mr. Narcis Jeler – EU Affairs Councilor)	Ministry of Environment and Climate Change
13:00 to 14:30	Lunch	
15:00 to 15:30	Meeting AAECR (implementation partner)	AAECR

16:00 to 20:00	Departure to Calafat	
20:00	Dinner with the vice mayor	
Day 3 – Wednesday, 25 Sep		
09:00 to 10:30	Meeting the local partner (Calafat municipality)	Calafat Cityhall
10:30 to 12:00	Travel to Craiova	
12:00 to 13:30	Meeting the local partner (Craiova municipality)	Craiova Cityhall
13:30 to 15:00	Lunch	
15:00 to 18:00	Travel to Petrosani	
19:00	Dinner	
Day 4 – Thursday, 26 Sep		
09:00 to 11:00	Meeting the local implementation partners (Petrosani, Petrila, Vulcan, Calan municipalities)	Petrosani municipality
11:00 to 19:00	Travel to Bucharest, lunch	
19:00	Dinner	
Day 5 – Friday, 26 Sep		
09:00 – 11.00	Meeting the national experts on “fuel poverty”	UNDP CO
11:00-13:00	Debriefing meeting with Mr. Andrei Oprea (Head of Office) and Ms. Monica Moldovan (Head of Program)	UNDP CO
13:00-14.00	Lunch	
14:00-17:00	Conclusions and recommendations	UNDP CO

Annex 2: List of persons interviewed

Mr. Andrei Opera, Head of Office, UNDP CO Romania

Ms. Monica Moldovan, Head of Programme, UNDP CO Romania

Ms. Gina Elena Petrescu, Project Manager, Ministry of Regional Development and Public Administration

(Mr. Iulian Matache, State Secretary, Ministry of Regional Development and Public Administration – meeting cancelled)

Mr. Raul Pop, Task Leader, UNDP CO

Mr. Narcis Jeler, EU Affairs Counselor, Ministry of Environment and Climate Change

Ms. Andreea Ihos, Administrative Assistant, UNDP CO

Ms. Adina Ghidura, Project Assistant

Mr. Constantin Miron, Market Research/Sustainable Materials specialist, National Project Consultant

Ms. Lavinia Andrei, Technical Coordinator, National Project Consultant

Ms. Diana Poputoaia, National Expert on Romanian Policy and Legislation, National Project Consultant

Ms. Dumitra Mereuta, National Expert on Energy Efficiency Financing, National Project Consultant

Mr. Nicolae Diaconu, Local Coordinator, Petrila Municipality, National Project Consultant

Mr. Virgil Musatescu, National Energy Efficiency Policy Advisor, National Project Consultant

Ms. Cerna Emilia Mladin, President, Romanian Association of Energy Auditors for Buildings

Mr. Popa Cristian, Municipal Energy Efficiency Officer, Vulcan Municipality

Ms. Carmen Andreescu, Municipal Energy Efficiency Officer, Craiova Municipality

Mr. Doru Mituletu, Vice Mayor, Calafat Municipality

Ms. Cătălina Gheoancă, Municipal Energy Efficiency Officer, Calan Municipality

Ms. Teodora Mititica, Municipal Energy Efficiency Officer, Petrosani Municipality

Mr. Vargatu Toma, Municipal Energy Efficiency Officer, Petrila Municipality

Annex 3: List of documents reviewed

General documentation

- UNDP Programme and Operations Policies and Procedures
- UNDP Handbook for Monitoring and Evaluating for Results
- UNDP Evaluation Guidance for GEF-Financed Projects, Version for External Evaluators, 2011
- The GEF Monitoring and Evaluation Policy 2010
- GEF focal area strategic programme objectives

Project documentation and reporting

- GEF approved project document and Request for CEO Endorsement
- ISS Letter UNDP-MDRT
- Project Inception Report
- Annual Work Plans 2011, 2012, 2013, Multiannual AWP Project Activities, Multiannual AWP Budget
- Annual Project Reports 2011, 2012
- Project Implementation Review 2012, 2013
- CDR 2011, 2012, ROU EEFF project budget revision June 11.07.2013
- Quarterly Reports (QR 4/2011, QR 1/2012, QR 2/2012, QR 3/2012, QR 4/2012, QR 1/2013, QR 2/2013)
- Inter-Organizational Working Group meetings (IOWG): 1th IOWG MOM 15 December 2011, 2nd IOWG MOM 26 June 2012, 3rd IOWG 5 December 2012 (Article 7 EE Directive Oct 2012, Concept note conference Art. 7, MoM Report roundtable EE 5 Dec2012, Presentations), 4th IOWG 27 June 2013 (MoM IOWG 27.06.2013, Presentations)
- Project Steering Committee Meeting minutes: MOM 1st NSC 28.03.2012, MOM 2nd NSC 01.08.2012, Presentation 2nd NSC meeting 01.08.2013, Speech Iulian Matache 01.08.2012, MOM 3rd NSC 10.04.2013
- Financial Audit Reports for 2011 and 2012
- Project internal financial records (financial spreadsheet)
- GEF CC Mitigation Tracking Tool 77064 Romania
- Project Mission Reports 2012 and 2013
 - Mission Report Craiova Bogdan D 17-18.05.2012, HD DJ Bogdan D 18-22.06.2013, Sibiu Adina G/Bogdan D 8-11.07.2012, Sibiu Doru 8-18.07.2012, Petrosani Adina G /Doru /Parviz F 25-26.09.2012, Hunedoara 25-26.09.2013, HD DJ Doru 30.10-01.11.2012, Lavinia Brasov 05.03.2013, Gina Petrescu 11-16.04.2013, Lavinia Iasi 18.04.2013, Lavinia A /Raul P Petrosani 27.05.2013, Andreea I /Raul P /Adina G 15-17.07.2013, Petrica Vasilescu 27-30.08.2013
- Project team meetings 2011-2013:
 - September 15 2011, October 10 2011, AAECR October 31 2011, October 31 2011, November 9 2011, January 25 2012, Local Authorities Training Session Craiova May 2012, Work-plan 32.01.2013, Consultant Mr. Georgescu 26.02.2013, Memo EBRD 04.03.2013, Memo Environment State Secretary meeting Elena Dumitru 07.03.2013, experts 09.05.2013, draft PIR 17.05.2013, field visit municipalities 27-29 May 2013, experts 31 May 2013, experts 19 June 2013, 02.07.2013, Habitat for Humanity 12.07.2013, municipalities 26.08.2013, experts 06.09.2013
- LOA Municipalities: LOA Calafat, LOA Calan, LOA Craiova, LOA Petrla, LOA Petrosani, LOA Vulcan

Project web site:

http://www.undp.ro/projects.php?project_id=63

Project deliverables

Electronic copies of project outputs – newsletters, booklets, manuals, technical reports, articles:

1. List of press materials
2. Press release project inception workshop 20.10.2011
3. Project inception workshop Mediafax 21.10.2011
4. Roundtable Conclusions BIPE 16.03.2012
5. EU Sustainable Energy Week 27.06.2013
6. Press release Craiova workshop 05.2012
7. Project Flyer

Technical reports, presentations, training materials

AAECR

Micro Capital Grant Agreement (MCGA) 2011-2013: contracts and deliverables
MCGA EE AAECR 2011, Amendment no. 1, 2011 Final report, 2012, Final report, 2013
Report, Presentations: Training programme, Module 1, Module 2, Module 3_1 and 3_2,
Module 3_3 and 3_4, Module 3_5, Module 3_6 and 3_7, Module 4

RoGBC

MCGA ROGBC: contract, deliverables, conclusion of the contract
Feedback to ROGBC on Petrosani Training, Letters regarding the issues with ROGBC,
Final report, ROGBC 2011 audit report, Presentations

Socio-economic monitoring data

1. Contract survey services
2. Executive Summary Report
3. Survey report RO (long version)

Media Campaign:

Contract, deliverables

Contracts and deliverables of national and international experts

Assessment Report on Fuel Poverty – draft

Annex 4: Overview of formal project meetings and workshops

No	Meeting	Date	Location	Topic	No of participants
1	Project Inception workshop	20.10.2011	MDRT, 38 Dinicu Golescu Blvd., Bucharest	Official launch of the project with the presence of all project partners.	30
2	The first authorities training session	28.11.2011	University of Petrosani, Petrosani	Training of municipal employees on identifying critical issues and major energy losses in buildings under Activity 2.1.4 - the first session	26
3	The first meeting of the Inter-Organizational Working Group	15.12.2011	Orange Concept Store, Calea Victoriei, Bucharest	the presentation of the Project and of the Working Group's mandate	24
4	The first meeting of the National Steering Committee of the Project	28.03.2012	MDRAP, 38 Dinicu Golescu Blvd., Bucharest	the presentation of the Project, feedback about national partners deliberables	15
5	The second authorities training session	18.05.2012	Europeca Hotel, Craiova	Training of municipal employees on identifying critical issues and major energy losses in buildings under Activity 2.1.4 - the second session	26
6	The second meeting of the Inter-Organizational Working Group	26.06.2012	UN House, 48A Primaverii Str., Bucharest	the presentation of the project policy recommendations for increasing energy efficiency and reducing fuel poverty (based on experts' works)	26
7	The second meeting of the National Steering Committee of the Project	01.08.2012	MDRAP, 38 Dinicu Golescu Blvd., Bucharest	the analysis of the progress of the project and discussion about the future activities	19
8	Fuel Poverty National Roundtable and the third meeting of the Inter-Organizational Working Group	05.12.2012	Capital Plaza Hotel, 54 Iancu de Hunedoara Blvd., Bucharest	discussions about concrete modalities of implementation in Romania of the Article 7 of the 2012/27/EU Energy Efficiency Directive	68
9	Training of building professionals on EE measures and the use of sustainable, locally available/ produced building materials	november-december 2012	Bucharest, Iasi, Craiova, Cluj-Napoca	Training of building professionals on EE measures and the use of sustainable, locally available/ produced building materials (ToT)	96
10	Meeting UNDP-EBRD	04.03.2013	EBRD Romania, Bucharest	discussions about the possibilities of collaboration on Energy Efficiency	4
11	Mission to Brasov (UNDP-MDRAP)	05-06.03.2013	Transilvania University Brasov	Research for new thermal insulation materials in line with the project activities (the materials composition is mainly by wood wastes).	3
12	Meeting with the State Secretary of the Ministry of Environment and Climate Change	7.3.2013	Ministry of Environment and Climate Change, Bucharest	Presentation of the project, emphasizing the project activities which will need the input of the MECC.	4
13	The third meeting of the National Steering Committee of the Project	10.04.2013	MDRAP, 38 Dinicu Golescu Blvd., Bucharest	the analysis of the progress of the project and discussion about the Annual Work Plan	17
14	Training of building professionals on EE measures and the use of sustainable, locally available/ produced building materials -	12.04.2013	South-West Oltenia RDA Premises, Craiova	Training of building professionals on EE measures and the use of sustainable, locally available/ produced building materials	38

	South-West Oltenia Regional Development Agency				
15	Training of building professionals on EE measures and the use of sustainable, locally available/ produced building materials - Centre Regional Development Agency	15.04.2013	Centre RDA Premises, Alba-Iulia	Training of building professionals on EE measures and the use of sustainable, locally available/ produced building materials	23
16	Mission to partner Municipalities (UNDP-MDRAP)	27-29.05.2013	Calafat, Craiova, Petrila, Petrosani, Vulcan, Calan	Addressed topics: review of the project implementation status; Short and medium term subsequent activities within the project; Identification of local, low-cost insulation materials; Conclusions of the internal UNDP audit; Setup of information points for population, referring to EE measure in Buildings; Other local details regarding EE measures aimed at residential- and social buildings.	9
17	The fourth meeting of the Inter-Organizational Working Group	27.06.2013	Capital Plaza Hotel, 54 Iancu de Hunedoara Blvd., Bucharest	the presentation of the current stage of fuel poverty recommendations with the proposed evaluation methodology, fuel poverty definition, the analysis of the possibilities of funding for reducing fuel poverty, the analysis of the current stage of 2012/27/EU and 2010/31/EU Directives, the fuel poverty concept in the national legislation	37
18	Meeting UNDP-MDRAP-partner municipalities	02.07.2013	UN House, 48A Primaverii Str., Bucharest	detailed discussions on the activity of installing the central boilers, discussions about the mission to Suceava and Iasi, the list of additional buildings for audit and design services	11
19	Meeting of the project team and the representatives of Habitat for Humanity	12.07.2013	UN House, 48A Primaverii Str., Bucharest	discussions about the possibilities of collaboration for the thermal rehabilitation of buildings in partner municipalities	6
20	Mission to Suceava and Iasi (UNDP-MDRAP, partner municipalities)	14 – 17.07.2013	Suceava, Iasi	Suceava - a visit to the Mopatel Proiect SRL Company's production facility Iasi - visiting the National Institute for Research and Development in Constructions, Urban planning and Sustainable Territorial Development "URBAN-INCERC", Iasi Branch and a single-family dwelling, in Iasi, currently under thermal rehabilitation	13
21	Meeting UNDP-MDRAP-partner municipalities-design company	26.08.2013	UN House, 48A Primaverii Str., Bucharest	discussions about audit and design services, the activity of installing the central boilers, the draft of the local council decision, the mission to Brasov in September 2013	13

Annex 5: Overview of media coverage

Title	<i>Elena Udrea și Yesim Oruc au semnat "Improving Energy Efficiency in Low-Income Households and Communities in Romania"</i>
Release date	20.10.2011
Publication / profile /central or local media / city	<i>Bursa</i> / Print and online/ Daily/ Economic/ Central
Link (for online news and articles)	http://www.bursa.ro/elena-udrea-si-yesim-oruc-au-semnat-improving-energy-efficiency-in-low-income-households-and-comm...&s=politica&articol=144808.html
Author	F. A.
Article size	Medium
Photo	-
Mentions project title, UNDP, GEF, MRDPA, and partners	UNDP, GEF, MRDPA, national partners
News source / to what extent it includes the information contained in the press release	The article includes only a part of the relevant information contained in the press release (only the national partners, project budget, only a part of the expected outcomes etc.)

Title	<i>3 milioane de dolari pentru restaurarea a 40 de clădiri sociale</i>
Release date	21.10.2011
Publication/ profile/ central or local media / city	<i>Nine O` Clock</i> / Print and online/ Daily/ General/Central
Link (for online news and articles)	http://www.monitorizare.mediafax.biz/App/pozitionareExtern.aspx?artId=1747894
Author	-
Article size	Small
Photo	-
Mentions project title, UNDP, GEF, MRDPA, and partners	UNDP, MRDPA, national partners
News source / to what extent it includes the information contained in the press release	The article includes only a part of the relevant information contained in the press release (only the national partners, project budget, only one expected outcome etc.)

Title	<i>Udrea a semnat un proiect de 3 mil. \$ pentru reabilitarea de clădiri sociale</i>
Release date	21.10.2011
Publication / profile /central or local media / city	<i>Wall Street/ Print and online/ Daily (from Monday to Friday)/ Business/ Central</i>
Link (for online news and articles)	http://www.wall-street.ro/articol/Economie/111218/Udrea-a-semnat-un-proiect-de-3-mil-pentru-reabilitarea-de-cladiri-sociale.html
Author	-
Article size	Medium
Photo	One photo: Minister of Regional Development and Tourism, Elena Udrea
Mentions project title, UNDP, GEF, MRDPA, and partners	UNDP, GEF, MRDPA, national partners
News source / to what extent it includes the information contained in the press release	The article includes only a part of the relevant information contained in the press release (only the national partners, project budget, only a part of the expected outcomes etc.). Also, the article contains information about the importance of the thermal rehabilitation of buildings and about the others programs on energy efficiency implemented by MRDPA (ex-Minister Elena Udrea point of view)

Title	<i>Trei localități din Valea Jiului sunt beneficiare într-un nou programme pilot privind eficiența energetică: orașul verde</i>
Release date	24-30.10.2011
Publication / profile /central or local media / city	<i>Afaceri in Valea Jiului / Print and online / Weekly / Local Business news / Local / Vulcan</i>
Link (for online news and articles)	http://afacerivj.files.wordpress.com/2011/10/afaceri_337.pdf
Author	<i>Tiberiu Vințan</i>
Article size	<i>Large</i>
Photo	<i>3 photos: 2 from the inception workshop (Minister of Regional Development, Elena Udrea, and project manager and partners), small size photo: Gheorghe Ile, Vulcan mayor.</i>
Mentions project title, UNDP, GEF, MRDPA, and partners	<i>UNDP, GEF, MRDPA, partners</i>
News source / to what extent it includes the information contained in the press release	<i>The article includes all the relevant information contained in the press release (partners, project objectives and expected outcomes, project budget, etc.). At the same time, the article presents the importance of the Project for the Jiu Valley and the arguments for selection Vulcan municipality as one of the project local partners</i>

	<i>(Gheorghe Ile – Vulcan mayor’s point of view)</i>
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Title	<i>Eficiență energetică cu MDRT Seminar pe tema eficientizării energetice a clădirilor</i>
Release date	<i>28.11.2011</i>
Publication / profile /central or local media / city	<i>Gazeta de Dimineață/ Online/ Daily/ General local News – Hunedoara and Gorj counties/ Petroșani</i>
Link (for online news and articles)	http://gazetadedimineata.ro/diverse/eficienta-energetica-cu-mdrt-seminar-pe-tema-eficientizarii-energetice-a-cladirilor#
Author	<i>Monika Kis</i>
Article size	<i>Medium</i>
Photo	-
Mentions project title, UNDP, GEF, MRDPA, and partners	<i>MRDPA, partners</i>
News source / to what extent it includes the information contained in the press release	<i>The article contains information about the first training session on energy efficiency for the municipal employees. Also, it includes information about the importance of the Project for Hunedoara county and a short mention of others thermal rehabilitation programs implemented by MRDPA.</i>

Title	<i>Măsuri de creștere a eficienței energetice a clădirilor</i>
Release date	<i>18.05.2012</i>
Publication / profile /central or local media / city	<i>Ecomagazin/ Online/ Daily/ Newsletter / Central</i>
Link (for online news and articles)	http://www.ecomagazin.ro/masuri-de-crestere-a-eficientei-energetice-a-cladirilor/
Author	-
Article size	<i>Large</i>
Photo	-
Mentions project title, UNDP, GEF, MRDPA, and partners	<i>UNDP, GEF, MRDPA, partners</i>
News source / to what extent it includes the information contained in the press release	<i>The article includes all the relevant information contained in the press release (partners, project objectives and expected outcomes, all the relevant details about the second training session on energy efficiency for municipal employees etc.)</i>

Title	<i>Cursuri pentru profesioniștii din primării</i>
Release date	<i>18.10.2012</i>
Publication / profile /central or local media / city	<i>Liderul de Opinie/ Print and online/ Daily (from Monday to Friday)/ Local News/ Local/ Constanța</i>
Link (for online news and articles)	http://lideruldeopinie.ro/82094/cursuri-pentru-profesionistii-din-primarii
Author	<i>A.H.</i>
Article size	<i>Large</i>
Photo	-
Mentions project title, UNDP, GEF, MRDPA, and partners	<i>UNDP, GEF, MRDPA, national partners</i>
News source / to what extent it includes the information contained in the press release	<i>The article includes all the relevant information contained in the press release (national partners, all the information about the energy efficiency trainings etc.)</i>

Title	<i>Cursuri pentru profesioniștii din primării care lucrează în proiecte de eficiență energetică a clădirilor</i>
Release date	<i>19.10.2012</i>
Publication / profile /central or local media / city	<i>Ziarul Ialomița/ Online/ Weekly/ Local News/ Local/ Slobozia</i>
Link (for online news and articles)	http://www.ziarulialomita.ro/index.php?action=view&articol=21753&PHPSESSID=0a8d203b7d32d54f3645877902850d69
Author	-
Article size	<i>Large</i>
Photo	-
Mentions project title, UNDP, GEF, MRDPA, and partners	<i>UNDP, GEF, MRDPA, national partners</i>
News source / to what extent it includes the information contained in the press release	<i>The article includes all the relevant information contained in the press release (national partners, all the information about the energy efficiency trainings etc.)</i>

Title	<i>Cursuri pentru a deveni expert în eficiența energetică</i>
Release date	<i>19.10.2012</i>
Publication / profile /central or local media / city	<i>Bună ziua, Brașov/ Print and online/ Daily (from Monday to</i>

media / city	<i>Saturday)/ Local News/ Local/Braşov</i>
Link (for online news and articles)	http://www.bzb.ro/stire/cursuri-pentru-a-deveni-expert-in-eficienta-energetica-a8556
Author	<i>Ionuţ Dincă</i>
Article size	<i>Medium</i>
Photo	-
Mentions project title, UNDP, GEF, MRDPA, and partners	-
News source / to what extent it includes the information contained in the press release	<i>The article includes only a part of the information contained in the press release (information about the energy efficiency trainings, no information about the Project)</i>

Title	<i>Cursuri de specializare pentru angajații primăriilor</i>
Release date	<i>19.10.2012</i>
Publication / profile /central or local media / city	<i>Telegraf online/ Online/ Daily (from Monday to Saturday)/ Local News/ Local/ Constanța</i>
Link (for online news and articles)	http://www.telegrafonline.ro/1350594000/articol/215490/cursuri-de-specializare-pentru-angajatii-primariilor.html
Author	<i>Robert Nenciu</i>
Article size	<i>Medium</i>
Photo	-
Mentions project title, UNDP, GEF, MRDPA, and partners	<i>MRDPA</i>
News source / to what extent it includes the information contained in the press release	<i>The article includes only a part of the information contained in the press release (information about the energy efficiency trainings, Project name)</i>

Title	<i>Cursuri pentru cei care lucrează în proiecte de eficiență energetică a clădirilor</i>
Release date	<i>20.10.2012</i>
Publication / profile /central or local media / city	<i>Amos News/ Online/ Daily/ General/ Central</i>
Link (for online news and articles)	http://www.amosnews.ro/cursuri-pentru-cei-care-lucreaza-proiecte-de-eficienta-energetica-cladirilor-2012-10-20

Author	-
Article size	<i>Large</i>
Photo	-
Mentions project title, UNDP, GEF, MRDPA, and partners	<i>UNDP, GEF, MRDPA, national partners</i>
News source / to what extent it includes the information contained in the press release	<i>The article includes all the relevant information contained in the press release (national partners, all the information about the energy efficiency trainings etc.)</i>

Title	<i>Recepție de lucrări pe un program al ONU la Petrila / Obiectivul vizat: Școala Generală nr. 4 Jieț</i>
Release date	14.11.2012
Publication / profile /central or local media / city	<i>Ziarul Văii Jiului/ Print and online/ Daily (from Monday to Friday)/ General/ Local/ Petroșani</i>
Link (for online news and articles)	http://www.zvj.ro/articole-15371-Recep+ie+de+lucr+ri+pe+un+program+al+ONU+la+Petrila++Obiectivul+vizat++++coala+General+++nr++4+Jie.html
Author	Corneliu Bran
Article size	Large
Photo	One photo: Ilie Păducel, Petrila Mayor and two other persons
Mentions project title, UNDP, GEF, MRDPA, and partners	UNDP, GEF, MRDPA, partners
News source / to what extent it includes the information contained in the press release	The article is about a social building - Primary School in village Jiet-Petrila – that was improved with regard to the energy performance, within this UNDP-GEF project. At the same time, the article includes relevant information about the project and other local achievements.

Title	<i>Inter-Organizational Working Group on Energy Efficiency</i>
Release date	<i>June 2013</i>
Publication/ profile/ central or local media / city	<i>The EU Sustainable Energy Week - An initiative of the European Commission/ Online</i>
Link (for online news and articles)	http://www.eusew.eu/component/see_eventview/?view=see_event_detail&index=2&countryID=181&sort=-1&pageNum=0&eventid=1212&mapType=europe&keyword=&city=&organiser=&eventDate=&eventType=-1

Author	-
Article size	<i>Large</i>
Photo	-
Mentions project title, UNDP, GEF, MRDPA, and partners	<i>UNDP, GEF, MRDPA, partners</i>
News source / to what extent it includes the information contained in the press release	<i>The material presents, within the sustainable energy week (24-28 June 2013), the description of one important event, namely the fourth meeting of the Inter-Organizational Working Group on Energy Efficiency of the Project.</i>

Title	<i>Blocurile din patru localități hunedorene, inventariate de MDRT</i>
Release date	03.09.2013
Publication / profile /central or local media / city	<i>Cronica Văii Jiului/ Print and online/ Weekly/ local News/ Local/ Petroșani</i>
Link (for online news and articles)	http://cronicavj.ro/wp/?p=18745
Author	Carmen Cosman
Article size	Large
Photo	Two photos (different buildings)
Mentions project title, UNDP, GEF, MRDPA, and partners	UNDP, GEF, MRDPA, partners
News source / to what extent it includes the information contained in the press release	The article contains information about the audit and design works.

Annex 6: Mid-term evaluation TOR



UNITED NATIONS DEVELOPMENT PROGRAMME

TERMS OF REFERENCE / INDIVIDUAL CONTRACT