Evaluation Title: Mid-Term Review – Removing Barriers to Promote and Support Energy Management Systems in Municipalities throughout Serbia

Evaluation Completion Date: June 2018

Varga

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Recommendation 1: Transfer the ownership of EMIS to MoME. After completion of the project all EMIS related administration, maintenance and support activities will need to be handled by MoME. Therefore, the sooner MoME starts preparing itself for that with the Project support - the better. The Project may prepare a 'Handover protocol' where the roles and responsibilities of both parties will be defined over a transitional period. The Handover protocol should also specify what kind of support (technical, financial, capacity strengthening, etc.) the Project will provide to MoME.

Project response: The recommendation is accepted. The project will continue to implement measures in line with the MTR recommendations to ensure full transfer of the ownership of the EMIS to MoME at the completion of the project.

Key activities	Timeframe	Responsible party	Note	
			Comments	Status
1.1 Providing hardware for server hall in the MoME	August-November 2018	Project, MoME	Construction company and IT support shall be contracted	Ongoing
1.2 Preparing a "handover" protocol, including description of the support that the project will provide to the MoME during the transition period.		Project, UNDP CO		
1.3 Supporting the elaboration of technical rulebook on EMIS to be adopted by MoME.		Project, MoME	Expert support shall be contracted	

Recommendation 2: Determining the final status of Central EE support unit. So far, the Unit is staffed by temporary staff. The Project should prepare a document on roles and responsibilities of Central EE support unit, inclusive of an organigram with necessary number of staff, their job description and required qualifications. It should be taken into account that number of EMIS users would increase for current 30-something municipalities towards 90 municipalities which are obliged by the Law to implement energy management practices. The biggest challenge would be limitation for new employment in government institutions.

			Comments	Status
2.1 Preparing a document on the roles	January – December	Project, UNDP CO	Expert support shall be	
and responsibilities of the central EE	2019		contracted	
support unit, including an organigram				
with necessary number of staff, their				
job description and required				
qualifications.				
2.2 Providing support to inspection	September 2018 - June	Project, UNDP CO	Equipment and vehicles shall	
service of MoME to enable on site	2020		be procured, local support	
monitoring of introduction of EMS and			shall be contracted	
EMIS in designated municipalities and				
public entities through Serbia.				

Recommendation 3: Supporting transition from energy data entry to energy management. Entering data on buildings and energy consumption into EMIS is the first step towards the introduction of energy management practice in municipalities. The second step is to start using this data to manage energy consumption on regular basis, and this is much harder. Not all of the nominated energy managers could be expected that they can master these skills easily. The Project team will need to provide continuous hands-on support to energy managers for developing necessary skills and confidence. As a part of the support mechanism, the Project may consider hiring local assistants who could maintain regular contacts with Energy managers.

Project response: The recommendation is accepted.

Key activities	Timeframe	Responsible party	Note	9
			Comments	Status
3.1 Providing support to designated municipalities in developing three year municipal energy efficiency programme and one year energy efficiency plans	November 2017 – March 2020	Project, MoME	Expert support shall be contracted	Ongoing
3.2 Providing support to introducing automatic billing module in EMIS which shall significantly support the monitoring of energy consumption.	March 2018 – March 2020	Project, MoME	Expert support shall be contracted	Ongoing
3.3 Organizing the network of energy managers assistants in large cities	January 2018 March 2020	Project, local technical faculties	Local support shall be provided	Ongoing
Recommendation 4 : Transfer web site h website at some of the partner institution Project response: The recommendation i	ns .	rategy, the Project sho	ould make arrangements for pe	ermanent hosting of the
Key activities	Timeframe	Responsible party	Note	9
-			Comments	Status
4.1 Arrangement for transfer of web	August 2019 – July 2020	Project, MoME		

Standing Conference of Towns and				
Standing Conference of Towns and Municipalities and Serbian Chamber of				
Commerce and Industry				
Recommendation 5: EMIS upgrades. It	is important that all softw	vare upgrades are wel	I documented on the softwa	re development side an
supported with prepared users guidelines				
Project response: The recommendation i				
Key activities	Timeframe	Responsible party	No	te
			Comments	Status
5.1 Upgrading of EMIS is permanent activity. Foer each new functionality or module the users guidelines will be developed.	June 2016 – June 2020	Project, MoME	Expert support shall be contracted	Ongoing
Recommendation 6: Strengthening out dissemination, communication and public			_	_
order to increase their understanding of energy managers at strengthening the continuation of EMS and EMIS practices. staff jobs description, so that a position of on, Pancevo and Kragujavec are appare municipalities achieving faster progress, i practices and approaches to other may continuity and sustainability. Project response: The recommendation i	ir role in municipalities The Project has to aim at s of dedicated energy manag ently the most advanced t would be useful to organi ors and energy managers.	ce, and of the work en management structure upporting municipalitie ers is firmly integrated municipalities in the g ze number of worksho	nergy mangers are doing. The es, to safeguard the progre es at making changes in munic into the municipalities' mana group that the Project is wor ps in Pancevo and Kragujevac,	Project needs to suppor ss made, and to secure cipalities' organigrams and gement structure. Furthe rking with. To help othe , and present their results
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SCTM in supporting energy managers after the Project's completion. The SCTM could provide support to energy managers for annual budget planning for EE as a part of municipal budget preparation.

Project response:				
Key activities	Timeframe	Responsible party	Not	te
			Comments	Status
7.1 Establishing of energy managers	August 2018 – June 2019	Project, SCTM		
network (EMN) within the structure of				
Standing Conference of Town and				
Municipalities				
7.2 Advocacy activities provided by	January 2018 – June	Project, SCTM	Expert support shall be	
EMN	2020		contracted	
7.3 Study tours to municipalities in	September 2018 – June	Project		
Croatia and/or Bosnia and Herzegovina	2020			
will be organized with the purpose of				
exchanging information and experience				
with municipalities in the region which				
also implement EMIS. Recommendation 8: Strengthening mon				
has to be proposed and documented. It of to EMIS The Project should also insist the integral part of a project, and provisions Project response: The recommendation is	nat during preparation of ne for specific metering arrang	ew investment proposa	al, monitoring and verificatio	n solutions have to be ar
Key activities	Timeframe	Responsible party	Not	te
			Comments	
8.1 Monitoring of the supported demo	September 2018 – June	Project, MoME		Status
projects shall be performed through				Status
performed through	2020			Status
EMIS in order to verify the projected	2020			Status
EMIS in order to verify the projected energy savings. The methodology for	2020			Status
EMIS in order to verify the projected energy savings. The methodology for calculation of energy savings will be	2020			Status
EMIS in order to verify the projected energy savings. The methodology for calculation of energy savings will be proposed and documented.				Status
EMIS in order to verify the projected energy savings. The methodology for calculation of energy savings will be proposed and documented. 8.2 Supporting installation of smart	2020 March 2018 – June 2020	Project, city of		Status Ongoing
EMIS in order to verify the projected energy savings. The methodology for calculation of energy savings will be proposed and documented. 8.2 Supporting installation of smart metering systems connected to EMIS in		Pancevo and city of		
 EMIS in order to verify the projected energy savings. The methodology for calculation of energy savings will be proposed and documented. 8.2 Supporting installation of smart metering systems connected to EMIS in in city of Pancevo and city of Kragujevac 				
EMIS in order to verify the projected energy savings. The methodology for calculation of energy savings will be proposed and documented. 8.2 Supporting installation of smart metering systems connected to EMIS in	March 2018 – June 2020	Pancevo and city of Kragujevac		Ongoing

reach an agreement with SCTM to include information sessions on EMS and EMIS in regular SCTM events. Towards the end of the project life time, a Conference of Mayors of Serbia could be organized to promote results and set the stage for scaling up and roll out the EMS and EMIS practices. Additionally, the Project could also promote introduction of EMS and EMIS practice for central government buildings.

ey activities	Timeframe	Responsible party	Note	
			Comments	Status
9.1 EMS and EMIS will be included into	September 2018 – June	Project,SCTM		
regular SCTM events	2020			
9.2 Support to introduction of EMS and	January 2018 – June	Project, MoME	Local support shall be	Ongoing
EMIS practice for central government	2020		provided	
buildings is being provided				
9.3 Support to estimation of investment	January 2018 – June	Project, MoME	Local support shall be	Ongoing
for energy efficiency retrofitting of	2020		provided	
central government buildings is being				
provided				

Recommendation 10: Modification of Output 4.3 on updating curricula. Updating curricula of schools is highly structured and time-consuming process which may happen only with Ministry of Education strong involvement. It is therefore unrealistic to expect that the Project may be able to achieve this target by the end of the project life time. It is therefore proposed to modify this particular activity, which still should be focused on capacity buildings, but instead of the vocational school, the target could be to develop a course for installer and maintenance staff related to EE and RES measures. The partner for that could be the Centre for Training of Energy Managers at the Faculty of Mechanical Engineering in Belgrade, which was originally supported by JICA. JICA could be approached if interested of extending its support for setting up training program for EE and RES professionals.

Project response: The recommendation is accepted.

Key activities	Timeframe	Responsible party	Note	
			Comments	Status
10.1 New training modules shall be developed for installers/maintenance staff in municipalities	-	Project, MoME, Faculty of Mechanical Engineering		

Recommendation 11: Modification of Output 4.5 Public outreach campaigns, events and facilities (such as EE info offices and stands). As described in the Communication section of the report, Energy management and EMIS have been frequently presented on various occasions (workshops, trainings, national and regional TVs, meetings, international events, etc.). However, setting up EE info offices and stands across Serbia, requires resources beyond the means of the project. The Project could advise municipalities that as a part of their EE action plans, they should plan local promotion and awareness campaigns aiming at providing citizens with information on how they could use energy more efficiently at their homes. The municipalities may decide to set up their own EE info centres. The project should invite providers of EE and RES equipment and services to the events that Project is organizing.

Project response: The recommendation is accepted.

Key activities	Timeframe	Responsible party	Note	
			Comments	Status
11.1 Guidelines for energy managers on	January 2019 –	Project, MoME		
public communication and outreach	November 2019			
shall be developed.				