United Nations Development Programme

Република Србија
МИНИСТАРСТВО ЕНЕРГЕТИКЕ, РАЗВОЈА
И ЗАШТИТЕ ЖИВОТНЕ СРЕДИНЕ
Број: 312-01-2332/2013-04
23.07. 2013 год.
БЕОГРАД

Serbia

Project Document

Project Title:	Introducing Energy Management Information System in the Public Buildings
UNDAF Outcome(s):	Environment and Sustainable Development
Expected CP Outcome(s):	Improved energy sector performance through enhanced market mechanisms, renewables and demand-side initiatives
Expected Output(s):	Energy Management Information System in public buiildings established
Implementing Partner:	Ministry of Energy, Development and Environmental Protection (MEDEP)
Responsible Parties:	Ministry of Energy, Development and Environmental Protection, UNDP

Brief Description

Purpose

This project will support the Ministry of Energy, Development and Environmental Protection (MEDEP) in acquiring and setting up the Energy Management Information System in public buildings (EMIS). EMIS was developed by UNDP Energy Efficiency Project in Croatia with the purpose of monitoring, analysing and reporting on energy and water consumption in public buildings.

Objective

To establish monitoring of energy and water consumption in public buildings in Serbia

The project will deliver the following three results:

- Fully established EMIS.
- Improved capacity of MEDEP and municipal energy managers for monitoring of energy consumption.
- Established comprehensive electronic data base on energy and water consumption in public buildings that will used for calculation of energy efficiency indicators and identification of energy efficiency projects.

Programme Period:	2011-2015
Key Result Area (Strategic Plan): Environment and Sustainable Development	
Atlas Award ID:	_____
Atlas Project ID:	_____
Start date:	June 2013
End Date	December 2014
PAC Meeting Date	_____
Management Arrangement	National Implementation

2013-2014 budget:	44.290 USD
Total resources required	1.044.290 USD
Total allocated resources:	1.044.290 USD
• Other:	
○ MEDEP	44.290 USD
In-kind Contributions, UNDP (Copyright for EMIS)	1.000.000 USD

Agreed by Ministry of Energy, Development and Environmental Protection:

Agreed by UNDP:

Background and context

Serbia and other countries of Western Balkan have signed the Energy Community Treaty and have committed themselves to transpose into national legislation and to implement the EU aquis related to energy efficiency, namely: Directive on Energy End Use Efficiency and Energy Services 2006/32/EC, Directive on Energy Performance of Buildings 2002/91/EC and Directive on the Indication by Labelling and Standard Product Information of the Consumption of Energy and Other Resources by Energy-Related Products 2010/30/EU.

In line with the aforementioned Directives, the Republic of Serbia has adopted the Law on Efficient Use of Energy in March 2013.

The Directive 2006/32/EC defines and sets energy saving targets on the national level, and requires action by each Member State. Member States must achieve a minimum annual energy savings target of 9% by the ninth year in the period from 2010 to 2018 and an intermediate national indicative savings target in 2012 and 2015. Accordingly, each national government has to produce National Energy Efficiency Action Plans (NEEAPs) in 2010, 2013 and 2016. The NEAPs are intended to set energy savings targets and propose concrete measures and actions at the level of each country that would contribute to meeting the targets. Furthermore, the NEEAPs describe how the countries intend to comply with the provisions on an exemplary role of the public sector and the provision of information and advice to final consumers. According to its first NEEAP, which was adopted by the Government in June 2010, Serbia needs to achieve cumulative saving in final energy consumption of 9% (0.7524 Mtoe = 8.7504 TWh) in the period 2010 - 2018, with intermediate target of 1.5% (0.1254 Mtoe =1.458 TWh) in 2012. Serbia has finalised first NEEAP implementation period, and must timely perform the evaluation and reporting of achievements and prepare the second NEEAP.

The first NEEAP for the period 2010-2012 was a valuable first step. But, there are still a number of remaining barriers to promote energy efficiency in Serbia, which urgently need to be addressed. Although the long awaited Law on Efficient Use Energy set the legal conditions for the efficient use of energy, such as establishing energy management system, energy labeling and minimum energy efficiency requirements for products, setting the energy performance requirements for buildings, establishing financial incentives to energy efficiency and promotion of the market for energy services, it has to be complemented by a number of bylaws and system tools which will enable its implementation. Among them is an Energy Management Information System which is a prerequisite for setting up the Energy Management System on the local level.

I. ANNUAL WORK PLAN

YEAR: 2013-2014

EXPECTED OUTPUTS *And baseline, associated indicators and annual targets*	PLANNED ACTIVITIES *List activity results and associated actions*	2013				2014				RESPONSIBLE PARTY	PLANNED BUDGET		
		Q 1	Q 2	Q 3	Q 4	Q 1	Q2	Q3	Q4		Funding Source	Budget Description	Amount (USD)
Monitoring of energy and water consumption in public buildings established: *No electronic database on energy and water consumption in public buildings* ***Indicators***: *Fully established EMIS* ***Targets***: *Data on energy and water consumption in 50 public buildings in selected municipalities gathered and entered into electronic database in 2012.* ***Related CP outcome:*** *Improved energy sector performance through enhanced market mechanisms, renewables and demand-side initiatives*	1. Hardware and system software acquired: - Outsourcing of two servers (one for Oracle database and the other one for the web application with Apache Tomcat) and maintenance of the database. - Acquisition of system software: Oracle 11gR2 Standard Edition One (32bit) and Apache Tomcat 6.0			X						MEDEP/UNDP	MEDEP	72800 Supply with the equipment 73300 Leasing	13,000

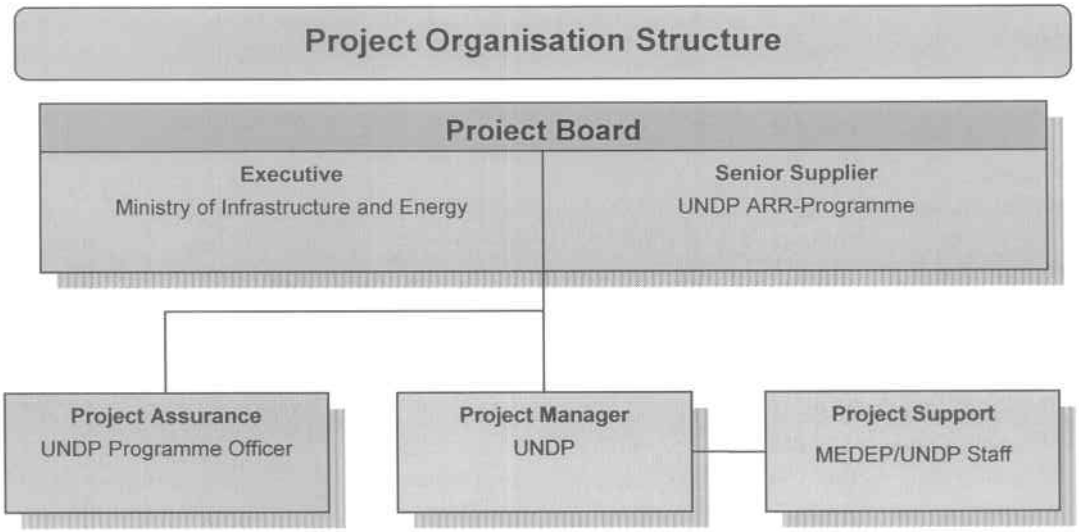
	2. EMIS software installed in MEDEP, functionalities demonstrated and system administrators trained. - Installation and initial customization of EMIS software application on servers in MEDEP. - Initial education and training of system administrators and other key personnel of MEDEP for use of EMIS. - Training of municipal energy managers for collecting data on energy and water consumption in public buildings.			X	X					MEDEP/UNDP	MEDEP cost-sharing	72100 Consultants (UNDP Croatia) 17 man days + 71600 travel	10,000

	3. Testing of EMIS performance in 10 selected pilot municipalities. - Data collection in municipalities - Online technical support to MEDEP during the testing of EMIS with the purpose to provide EMIS patching, troubleshooting and additional education necessary to support smooth running of EMIS. - Technical support to municipal energy managers during the data collection - Presentation of the results of data collection to municipal decision makers and Standing Conference of Towns and Municipalities,			X	X					MEDEP/UNDP	MEDEP cost-sharing	72100 Consultants (UNDP Croatia) 24 man days	10,000
	4. EMIS adjusted to conditions in Serbia - Further adjustment, upgrade and update of EMIS will be done on the basis of specific requests identified during the testing.				X	X	X	X	X	MEDEP/UNDP	MEDEP	72100 Contractual service with the company that produced ISGE	To be determined after testing APP. 10,000
TOTAL programmable													43,000
GMS												75100 GMS	1,290
TOTAL													44,290

II. MANAGEMENT ARRANGEMENTS

The project will be executed under the National Implementation Modality.

The Municipality of Ministry of Energy, Development and Environmental Protection a National Project Director (NPD) to take overall responsibility of the project implementation. If the need for UNDP support services arises during project implementation, a Letter of Agreement will be signed, detailing types and conditions for such services.



The **Project Board** is the group responsible for making by consensus management decisions for a project when guidance is required by the Project Manager, including recommendation for approval of project plans and revisions. Project Board decisions should be made in accordance to standards[1] that shall ensure best value to money, fairness, integrity, transparency and effective international competition. Project reviews by this group are made at designated decision points during the running of a project, or as necessary when raised by the Project Manager. This group is consulted by the Project Manager for decisions when tolerances (normally in terms of time and budget) have been exceeded. It ensures that required resources are committed and arbitrates on any conflicts within the project or negotiates a solution to any problems between the project and external bodies. The role of the Executive will be assumed by a representative of the Ministry of Energy, Development and Environmental Protection while the Senior Supplier will be a UNDP representative.

Project Assurance is the responsibility of each Project Board member. Due to other obligations and responsibilities that Project Board members have outside the project, the role can be delegated. The Project Assurance role supports the Project Board by carrying out objective and

[1] UNDP Financial Rules and Regulations: Chapter E, Regulation 16.05: a) The administration by executing entities or, under the harmonized operational modalities, implementing partners, of resources obtained from or through UNDP shall be carried out under their respective financial regulations, rules, practices and procedures only to the extent that they do not contravene the principles of the Financial Regulations and Rules of UNDP. b) Where the financial governance of an executing entity or, under the harmonized operational modalities, implementing partner, does not provide the required guidance to ensure best value for money, fairness, integrity, transparency, and effective international competition that of UNDP shall apply.

independent project oversight and monitoring functions. This role ensures appropriate project management milestones are managed and completed. For nationally implemented projects, the assurance role is usually assumed by UNDP staff. UNDP will assume the project assurance role accountable to the Project Board. Managerial and administrative accountability will be ensured through periodic field visits and spot checks.

The **Project Manager** has the authority to run the project on a day-to-day basis on behalf of the Project Board within the constraints laid down by the Board. The Project Manager is responsible for day-to-day management and decision-making for the project. The Project Manager's prime responsibility is to ensure that the project produces the results specified in the project document, to the required standard of quality and within the specified constraints of time and cost.

The **Project Support** role provides project administration, management and technical support to the Project Manager as required by the needs of the individual project or Project Manager.

All deliverables produced during the project term, will bear the **UNDP logo and visibility elements,** and, where appropriate, the standard **UNDP disclaimer**.

III. MONITORING FRAMEWORK AND EVALUATION

In accordance with the programming policies and procedures outlined in the UNDP's Programme, Operations Policies and Procedures (POPP), the project will be monitored through the following:

Within the annual cycle

- On a quarterly basis, the Project Manager will record progress towards the completion of key results, including the quality assessment An Issue Log shall be activated in Atlas or in Word document (if Atlas is not available) and updated by the Project Manager to facilitate tracking and resolution of potential problems or requests for change.
- Based on the initial risk analysis submitted (see annex 1), a risk log shall be activated in Atlas or in Word document (if Atlas is not available) and regularly updated by reviewing the external environment that may affect the project implementation.
- Based on the above information recorded in or outside Atlas, a Project Progress Reports (PPR) shall be submitted by the Project Manager to the Project Board through Project Assurance, using the standard report format (to be provided by UNDP).
- A project Lesson-learned log shall be activated and regularly updated to ensure on-going learning and adaptation within the organization, and to facilitate the preparation of the Lessons-learned Report at the end of the project.
- A Monitoring Schedule Plan shall be activated in or outside Atlas and updated to track key management actions/events.

Annually

- Annual Review Report shall be prepared by the Project Manager and shared with the Project Board.
- Annual Project Review. Based on the above report, an annual project review shall be conducted during the fourth quarter of the year or soon after, to assess the performance of the project and appraise the Annual Work Plan (AWP) for the following year. In the last year, this review will be a final assessment. This review is driven by the Project Board and may involve other stakeholders as required. It shall focus on the extent to which progress is being made towards outputs, and that these remain aligned to appropriate outcomes.
- Final Project Report (narrative and financial) shall be prepared by the Project Manager and shared with the Project Board at the end of the project.

Quality Management for Project Activity Results

Replicate the table for each activity result of the AWP to provide information on monitoring actions based on quality criteria. To be completed during the process "Defining a Project" if the information is available. This table shall be further refined during the process "Initiating a Project".

OUTPUT 1: Monitoring of energy and water consumption in public buildings established			
Activity Result 1 (Atlas Activity ID)	*Short title to be used for Atlas Activity ID* Hardware and system software acquisition		Start Date: July 2013 End Date: September 2012
Purpose	*What is the purpose of the activity?* To acquire hardware and system software which is necessary for installation of EMIS.		
Description	*Planned actions to produce the activity result.* Organizing public procurement of specified hardware and system software		
Quality Criteria *how/with what indicators the quality of the activity result will be measured?*		**Quality Method** *Means of verification. What method will be used to determine if quality criteria has been met?*	**Date of Assessment** *When will the assessment of quality be performed?*
Acquired hardware and system software fit the requirements of EMIS		Assessment by UNDP IT system administrator	September 2013
Activity Result 2 (Atlas Activity ID)	Short title to be used for Atlas Activity ID EMIS Installation		Start Date: September 2013 End Date: September 2013
Purpose	*What is the purpose of the activity?* To put EMIS in operation		
Description	*Planned actions to produce the activity result.* - Installation and initial customization of EMIS software application on servers. - Initial education and training of system administrators and other key personnel of MEDEP for use of EMIS. - Training of municipal energy managers for collecting data on energy and water consumption in public buildings.		
Quality Criteria *how/with what indicators the quality of the activity result will be measured?*		**Quality Method** *Means of verification. What method will be used to determine if quality criteria has been met?*	**Date of Assessment** *When will the assessment of quality be performed?*
Installation in line with the requirements of EMIS		Assessment by UNDP IT system administrator	October 2013
At least two system administrators trained to use EMIS		UNDP trainers feedback	October 2013
Participants satisfied with the training		Post training evaluation	October 2013
Activity Result 3 (Atlas Activity ID)	Short title to be used for Atlas Activity ID EMIS testing		Start Date: October 2013 End Date: March 2014
Purpose	*What is the purpose of the activity?* To establish data base on energy and water consumption in public buildings		
Description	*Planned actions to produce the activity result.* - Data collection in municipalities - Online technical support to MEDEP during the testing of EMIS with the purpose to provide EMIS patching, troubleshooting and additional education necessary for smooth running of EMIS. - Technical support to municipal energy managers during the data collection - Presentation of the results of data collection to municipal decision makers and Standing Conference of Towns and Municipalities,		
Quality Criteria *how/with what indicators the quality of the activity result will be measured?*		**Quality Method** *Means of verification. What method will be used to determine if quality criteria has been met?*	**Date of Assessment** *When will the assessment of quality be performed?*

Collected data fit for EMIS		Data base exists (yes/no)	March 2014
Intervention on EMIS		Municipal energy managers feed back	March 2014
Presentation of results		Assessment by MEDEP and municipal authorities	March 2014
Activity Result 4 (Atlas Activity ID)	Short title to be used for Atlas Activity ID EMIS adjusting		Start Date: October 2013 End Date: October 2014
Purpose	*What is the purpose of the activity?* To adjust EMIS adjusted to conditions in Serbia		
Description	*Planned actions to produce the activity result.* Adjusting ISEM		
Quality Criteria *how/with what indicators the quality of the activity result will be measured?*		**Quality Method** *Means of verification. What method will be used to determine if quality criteria has been met?*	**Date of Assessment** *When will the assessment of quality be performed?*
Number of adjustments performed		Assessment by MEDEP	November 2014

IV. LEGAL CONTEXT

This document together with the CPAP signed by the Government and UNDP which is incorporated herein by reference, constitute together a Project Document as referred to in the Standard Basic Assistance Agreement (SBAA); as such all provisions of the CPAP apply to this document. All references in the SBAA to "Executing Agency" shall be deemed to refer to "Implementing Partner", as such term is defined and used in the CPAP and this document.

Consistent with the Article III of the Standard Basic Assistance Agreement (SBAA), the responsibility for the safety and security of the Implementing Partner and its personnel and property, and of UNDP's property in the Implementing Partner's custody, rests with the Implementing Partner. To this end, the Implementing Partner shall:

a) put in place an appropriate security plan and maintain the security plan, taking into account the security situation in the country where the project is being carried;
b) assume all risks and liabilities related to the implementing partner's security, and the full implementation of the security plan.

UNDP reserves the right to verify whether such a plan is in place, and to suggest modifications to the plan when necessary. Failure to maintain and implement an appropriate security plan as required hereunder shall be deemed a breach of the Implementing Partner's obligations under this Project Document [and the Project Cooperation Agreement between UNDP and the Implementing Partner][2].

The Implementing Partner agrees to undertake all reasonable efforts to ensure that none of the UNDP funds received pursuant to the Project Document are used to provide support to individuals or entities associated with terrorism and that the recipients of any amounts provided by UNDP hereunder do not appear on the list maintained by the Security Council Committee established pursuant to resolution 1267 (1999). The list can be accessed via http://www.un.org/Docs/sc/committees/1267/1267ListEng.htm. This provision must be included in all sub-contracts or sub-agreements entered into under/further to this Project Document".

Click here for the standard text.

ANNEXES

Risk Analysis

[2] Use bracketed text only when IP is an NGO/IGO

RISK LOG

Project Title: Introducing Energy Management Information System	Award ID: 00062091	Date: June 2013

#	Description	Date Identified	Type	Impact & Probability	Countermeasures / Mngt response	Owner	Submitted, updated by	Last Update	Status
1	If the local government change after the elections, new local authorities may not be interested in pursuing the activities which might □□□□□□□□□ project suspension.	June 2013	Political	Enter probability on a scale from 1 (low) to 5 (high) P = 1 Enter impact on a scale from 1 (low) to 5 (high) I = 5	The project was prepared in cooperation with various local partners. Therefore, the assumption is that not all partners will change.	Project Manager	Project Developer		
2	Potential uncertainties with regards whose procedures apply (UNDP or national), may cause delays in implementation and reduce the project efficiency.	June 2013	Organizational	P =1 I = 4	Responsibilities agreed in advance.	Project Manager	Project Developer		
3	Initially planned project resources may not suffice to deliver all outputs, which may result in project failing to achieve its results.	June 2013	Financial	P = 2 I = 5	Recalculate all planned costs, confirm budget availability and agree the allowable budget tolerances.	Project Board	Project Developer		