



Energy Agency of the Republic of Macedonia

“Financing Energy Efficiency Investment for Climate Change Mitigation”

Current status of implementation

NPI-Energy Agency of the Republic of Macedonia

UN ECE 21 Grant No: ECE/GC/2008/031

XVsession of the AHGE, June 8-11, 2010 - Geneva



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- **Memorandum of Understanding between UNECE and EARM (NPI) is signed on February 9, 2009,**
- **New National coordinator is appointed by Ministry of Economy in June 2009,**
- **First payment in amount of 5.250 US is received on April 24, 2009,**
- **Second payment in amount of 7.000 US is received on November 3, 2009,**
- **Third payment in amount of 12.250 US is received on February 4, 2010.**
- **Progress report period covered February 6-March 6, 2009 is submitted on October 14, 2009.**
- **Interim Progress Report period covered March 6-August 6, 2009 is submitted on October 14, 2009**



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- **UNECE Project is part of Yearly Programs 2009 and 2010 of Agency approved by Government,**
- **Report of the progress of the project is regularly presented to the members of Steering Committee proposed by Ministry of Economy and nominated by Government and it is part of Yearly Report approved by Government,**
- **Project makes strongly improvement of capacity of Agency staff and enabling them to participate in preparing of national strategies, action plans, adopting of new legislation particularly by laws, public and experts debates and to be active members of governmental bodies relating to energy sector,**
- **Project improve position of Agency and capabilities to work and provide support for domestic and foreign investors.**



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Completed activities agreed in the MoU:

- **Filled in questionnaires as a preparatory work for National Project Web Site, National Energy Policy Information and National Case Study,**
- **Establishing the basic structure of national Project Web Site,**
- **Preparing Country Energy Profile,**
- **Preparing Case Study**

Activities relating to the Project

- **Establishing of data base of energy experts,**
- **Contact with more than 90 potential investors in energy projects,**
- **Creation of pipe line with app. 40 projects of potential investors,**
- **Establishing of pre-register for potential preferential producers.**
- **Issuing approval for measurement of RE potential, certificates for RE preferential producers and GoO.**



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Meetings and Interviews during the Project implementation:

- **Ministries of Economy and Environment ,**
- **Financial Institutions: European Bank for Reconstruction and Development, SEAF, Macedonian Bank for Development Promotion, and UNI Bank,**
- **MANU – Responsible academicians involved in preparation of Energy Strategies,**
- **Numerous private investors,**
- **4 Municipalities actively involved in EE and RES projects**
- **COGEL- Private Cogeneration Plant**
- **Toplifikacija (heating company) Engineering and AD ELEM**
- **NGO Sector: MACEF, TIMEL,**



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Activities to be completed:

- **Website with all requested elements to be operative in the second half of the year 2010,**
- **Preparing of the Final Report, to the end of the year 2010,**
- **To prepare few projects from the pipe line in to bankable project.**



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Strategic documents:

- **Energy Strategy prepared by MANU is approved by Government and adopted by Parliament,**
- **Energy Efficiency Strategy and EE Action Plan is prepared,**
- **Renewable Energy Strategy and RES Action Plan is prepared,**
- **National Program for EE in public building sector,**
- **Energy Law, adopted by the Parliament in 2006 is in final phase of harmonization. It is expected to be adopted by June 30, 2010.**
- **The Energy Law obliges municipalities and the City of Skopje to develop and implement five-years Local Energy Efficiency Programs and action plans for their implementation.**

Main weaknesses:

- **Quality of prepared documents (same approach, same team of experts mainly from academic and university sector,**
- **Lack of staff on National level (Ministry of economy and other related ministries, Energy Agency and Regulatory Commission).**
- **Lack of developed basic legislative including Energy Law which cause delay in adoption secondary legislations and operative document)**



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Secondary Legislation:

- **Rulebook for EE labeling of household appliance, adopted 2007, to be applied from January 1, 2010.**
- **Rulebook for EE of new buildings and reconstruction of new ones, to be applied from January 1, 2010.(Postponed for one year-undeveloped methodology)**
- **Rulebook for RES for production of electricity. Adopted 2009.**
- **Rulebook for acquiring the status of preferential producer of electricity from RES. Adopted 2009.**
- **Rulebook for issuing the GoO from RES. Adopted 2009**
- **Rulebook for acquiring the status of preferential producer of electricity from CHPP. Adopted March 2010.**
- **Rulebook for issuing the GoO from CHPP. Adopted April 2010.**



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Related Studies:

- **Study for development of wind power plants in the Republic of Macedonia (in final phase of preparation)**
- **Study for integration of wind power plants in the Macedonian Transmission System (in initial phase)**
- **Study for using of biogas in the city of Skopje (prepared)**



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Government Decision of the maximum installed capacity of preferential producers from RES

- **Hydropower plants up to 10MW without limitation,**
- **Wind power plants per plant up to 30MW and, in total 150MW**
- **Photovoltaic with install capacity up to 50kW up to 2 MW in total**
- **Photovoltaic with install capacity over 50kW not more than 1 MW, up to 8 MW in total**
- **CHPP (biomass) with install capacity up to 2 MW per plant, in total of 10MW**
- **Biogas power plants with install capacity up to 500kW up to 2 MW in total 2MW,**
- **Biogas power plants with install capacity over 500kW but not more than 2 MW, up to 8 MW in total**



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FEED IN TARIFFS IN MACEDONIA WITH RECENT CHANGES			
Block	SMALL HPP- Monthly Quantities kWh	Feed in Tariffs Ec/kWh	Changes
I	1-1.020.000	12.00	
II	1.020.001-2.040.000	8.00	
III	2.040.001-4.200.000	6.00	
IV	4.200.001-8.400.000	5.00	
V	Above 8.400.001	4.50	
	WIND POWER PLANTS	8.90	
	Electricity generation from BIOGAS (install capacity)		
I	≤500 kW	13.00	15.00
II	□501 kW -2000 kW	11.00	13.00
	PHOTOVOLTAIC(install capacity)		
I	≤50 kW	46.00	38.00
II	□51 kW – 1000 kW	41.00	34.00
	Electricity generation from BIOMASS(install capacity)		
	≤1000 kW		11.00
	□1001 kW – 3000 kW		9.00



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Energy Project implemented by Energy Agency

- **GEFSustainable Energy Project GEF grant of 5.5 Mio US\$,
Market framework (legislative, project identification, wind data base)
*ESCO and Guaranty and Loan Facilities (under restructuring)***
- **UN ECE- Financing in investment in EE project 0,35 US\$**
- **Project for establishing of Wind data base- grant from Italian MTES
0.75 Mio E,**
- **IPA- Capacity building of Ministry of Economy and Energy Agency, 2.1
Mio E,**
- **ADA- Energy Efficiency in the building sector 1,7 Mio E. (in
cooperation with Austrian Energy Agency) Project components:
capacity building, rule book EE in buildings and pilot project.**



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Current status of investments in energy production and in EE project

- **COGEL- CHPP- 30MW plus 14MW heating , 20 Mio E**
- **TETO- CHPP- 220 MW electricity, 120 MW heating 160 Mio E**
- **SIETO- photovoltaic, 10.2 kW**
- **Project pipeline; identified, prepared bankable project as Hotel Granit,
Gevgelija M1 photovoltaic 600 kW**
- **Clinic Centre EE Project 4 Mio E**
- **Status of the state tenders for 400 small hpp
problems are located in legislation, issuing concession on water and land, providing finance**



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POTENTIAL PRODUCERS IN EARM PREREGISTER

Investors	Number of Investors	Total Install Capacity	Total Investment
Wind Power Plant	9	376 MW	
Photovoltaic Up to 50 kW	22	1,1 MW	
Photovoltaic Up to 50 kW	34	29,6 MW	
Hydro Power Plant	19	7,5 MW	
Biomass	1	2 MW	
Total	85	416,2 MW	