

Reporting Agency: United Nations Development Programme
for Global Environmental Facility
Country: Armenia



STANDARD PROGRESS REPORT

No. and title: 00035799 Armenia-Improving the Energy Efficiency of Municipal Heating and Hot Water Supply" Project
Reporting period: January – December 2009

I. PURPOSE

The RA Ministry of Nature Protection on behalf of the RA Government and the UN Development Programme signed "Improving the Energy Efficiency of Municipal Heating and Water Supply" project document in January 2005.

The objective of the project is to reduce greenhouse gas (GHG) emissions resulting from current heat and hot water supply practices in Armenian cities by laying the foundation for the sustainable development of heat and hot water supply services in these cities while taking into account global environmental impacts. Within this framework the project aims:

- strengthen the role of condominiums in collectively organizing and managing heat and hot water supply services at the building level;
- support the restructuring and capacity building of the existing district companies to improve both their service quality and operational efficiency;
- support the heat supply new service providers to commercially run, market and diversify their businesses, in order to promote the use of alternative environmentally clean and energy efficient technologies and to structure financing for the required investments in areas that do not sustain the centralized district heating services;
- utilize the results, experiences and lessons learned for advancing the sustainable development of the heat and hot water services in Armenia with a specific emphasis on the GHG emission reduction aspects.

The proposed capacity building and other technical assistance activities complement, and it is implemented in close co-operation with the activities of the other donors funded activities in the field of energy and environment.

Additional opportunities for co-operation are also being explored with other donors, in the areas of urban development and promotion of local administration bodies, the promotion of small and medium-sized private-sector enterprises in regard to trade, production and services, and promotion of energy saving and renewable energy.

The Project contributes to UNDAF Outcome 4 and CP Outcome 7, CPAP Output 7.3.
The Implementing Partner for the Project is the RA Ministry of Nature Protection.

II. RESOURCES

The resources to the Project come in full from GEF allocations: 984,000.0 USD for the current year. A revision of the funds was performed in September and approved in October and the current year GEF funding was reduced by 300,000.0 USD.

III. RESULTS

The Project actual outputs and activities are progressing in relation to the Project components and planned outcomes in the current period. The following activities were performed during the reporting period and the following outputs were achieved:

1. Provided consultancy and institutional support to multi-apartment buildings management bodies that are involved in heat supply rehabilitation projects by National Association of Condominium Owners" NGO subcontractor organization. Conducted heating quality monitoring;

a number of surveys in pilot buildings in Yerevan, Spitak and Aparan cities; and explanatory works among the residents of Varujan residential area of Avan district who denied to be connected to the centralized heat supply systems. Developed TV program for public awareness raising on heat supply systems supported by the Project (particularly Avan DH rehabilitation project and #70 Avetisyan heat supply system with solar water heaters).



2. Analytical report on legal and regulatory framework of economically feasible energy saving potential in buildings is prepared.

3. In the framework of the task on multi-apartment buildings passport application, identification and analysis of problem areas and barriers the following were developed: a) energy audit procedure, methodology and application, b) energy audit report template, c) building passport application and common-shared property registration issues and problems analysis and improvement recommendations, d) conducted buildings energy performance surveys (measurements) in 5 multi-apartment buildings. The results were presented to stakeholders on June 30, which were evaluated as worth for researching and prospective for the development and improvement of the management of multi-apartment buildings. It was also highlighted the importance of continuing the works and developing concrete suggestions towards the buildings passport application and energy audit.

4. Recommendations on the improvement of the gas tariff pricing principles prepared by the Project have been discussed with the representatives of the PSRC of the RA and “ArmRosGasProm” CJSC as well. These recommendations along with corresponding substantiation have been approved and according to the results of the meeting taken place in PSRC on 19.06.2009 the PSRC should provide the further progress of improvements proposed by the Project according to relevant procedures.

5. Technical assistance has been provided to the Avan District Heating Restoration Project – 225 heat and hot water meters at apartment level were granted to “ArmRosCogeneratsia” CJSC (Investor Company). Social survey in 46 multi-apartment buildings was conducted with the aim to reveal the residents willingness to be connected to District Heating System. Two TV-broadcasts with participation of investor’s representative and the Head of Avan district administrative management as well have been arranged and prepared by the Project to increase residents awareness on the Avan District Heating Restoration Project current status and its further steps to be implemented before forthcoming heating season with the aim to increase residents connection rate to the Avan DH system.

6. The “ArmRosCogeneratsia” CJSC expressed interest in Centralized Heat Supply rehabilitation of 32 buildings in 16th district of Ajapnjak Community, and in this regard the company applied to the Project with the request of conducting surveys among the residents of 16th district of Ajapnjak Community (32 buildings) to reveal the residents’ willingness to be connected to centralized heat supply system. Business proposal for Restoring of the Heat and Hot Water Supply for 32 buildings in 16th district of Ajapnjak Community is developed to be submitted to The “ArmRosCogeneratsia” CJSC.

7. Tender for procurement of heat and flow meters to be installed at the building level and in energy source for Avan DH system was announced.

8. Terms of reference was developed for monitoring the centralized heat supply systems in Avan in Yerevan aimed at evaluation of the centralized heat supply quality, energy efficiency and GHG emission.

9. English version of the feasibility study of the Sevan District Heating Restoration Project (41 multiapartment buildings) was provided to the investor for contracting of loan. Project’s representatives took part in discussions held with this aim. Design documents of the magistral, distribution as well as internal networks have been developed and provided to the investor.

10. According to the Ministry of Nature Protection relevant orders the following papers were developed:

a) Feasibility study for Restoring the Heat and Hot Water Supply for 32 multi-apartment buildings of 16th district of Ajapnjak Community (65 pages, in Russian), which was submitted to the

Municipality of Yerevan, the Ministry of Energy and Natural Resources and local governmental authorities of Ajapnjak with the aim to attract possible investors.



b) By the request of the chairman of the “Shen Ojakh” condominium of the Arabkir community of Yerevan City, a pre-feasibility study for Restoring the Heat and Hot Water Supply for 25 multi-apartment buildings was developed. The study has been submitted to the chairman of the “Shen Ojakh” condominium and the Arabkir community authorities.

c) Pre-feasibility study for Construction of Heat and Hot Water Supply system for “AMA Compressor” factory and 21 multi-apartment buildings of the Gagarin residential area in Sevan was developed.

d) Pre-feasibility study for centralized heat supply system of Dilijan Art-School and neighboring buildings was developed.

11. Heat plan for 4 micro-districts (335 residential and 39 public buildings) of Nor-Nork district was developed and submitted to the relevant authorities.

12. Study is conducted on heat supply 20 small systems leased by the Yerevan Municipality to private sector as of August 20th with the aim to update the information on the status of these systems, and conducted monitoring of the hot water supply systems with solar water heaters installed on the roofs of # 43 Khanjyan and # 70 Avetisyan existing boiler-houses in Yerevan.

13. Technical assistance has been provided to the “Gjumri Kentron” condominium of Gjumri for operation of Khrimjan Hajrik 5/1 heat supply system. Numerous explanations on heat tariffs calculation, amounts due to payment by each apartment and estimation of monthly payments for forthcoming months were provided to the residents. However because of low rate of payments heat supply was leased at the end of January.

14. Technical assistance has been provided to the “Kentron-1” condominium of Spitak town for operation of centralized heat supply system for 7 multi-apartment buildings. Heat tariffs were calculated and all necessary documents of low-income households were collected for submitting to R2E2 Fund for provision of subsidies. The system was operated during the whole heating season. Developed terms of reference for extension of the system (16 more buildings) based on Spitak municipality co-financing, and collected those buildings’ low-income families’ documentation. Heating tariffs were calculated for extended heat supply system (23 buildings), technical assistance was provided during implementation of the external heating network reconstruction works, survey among the residents of the 16 buildings was conducted with the aim to reveal the residents willingness to be connected to the centralized heating system.

15. Technical assistance was provided for rehabilitation of centralized heat supply system of buildings #46 Baghramyan st. in Aparan (around 30 apartments). The Project constructed the external heat network; renovated a part of the internal heat network (the other part of that was renovated by the Municipality of Aparan); conducted testing of the system and the system is put into operation.

The condominium has requested assistance from the project for replacement of the doors and windows of the building entrance, and currently a market research is being conducted for the procurement of the doors and windows.

16. The construction of hot water supply system with solar heaters for Vazgenyan Seminary in Sevan (with participation of WCC Armenia Interchurch Charitable Round Table Foundation) was completed. The opening of the system was held in July 24; continuous monitoring of the solar energy system is underway.

17. An application was received from “Erfrez” OJSC on expansion of the heat supply system of #70 Avetisyan boiler-plant, and negotiations and discussions to connect 2 more buildings to that existing system is underway.

18. In the framework of the task on “Capacity building for cost-effective development and implementation of domestic gas appliances energy efficiency labeling program in Armenia” developed reports on testing methods, EE labeling procedures and labels design as well as

international experience; and domestic gas appliances energy efficiency labeling system awareness raising and promoting campaign implementation report. Summary report was developed and distributed to the national stakeholders for their consideration. Workshops are organized to present and discuss the Task main outcomes.



19. In the framework of the task on “Capacity building and market development for technical adjustment services for boiler houses, which supply heat to public and residential buildings in Armenia” the operational characteristics of 50 boilers were monitored, and thermo-technical adjustment works were conducted in 15 boilers, which had the worst operational characteristics, aimed at improving the energy efficiency of the boilers. Within the Czech Trust Fund financing, a mission of TODERO specialists to Armenia was organized. The aforementioned task’s progress results, Czech experience and boilers adjustment services development prospects in Armenia were presented and discussed at the round-table. Developed a guideline on gas boilers energy audits and testing equipment for boiler houses energy efficiency measurements by TODERO company. A study tour to Czech Republic for Armenian specialists was organized in April 2009.

20. In the framework of the task on “Capacity building for implementation of technical energy audit and commercialization of energy efficiency enhancement services proposed as a result of the audit in operating large-size boiler plants in Armenia” the measurements and energy audit of the involved boiler-houses are underway. The sub-contractor company collected data on currently operating large-size boiler-plants in the RA; conducted energy survey in 11 boiler-houses, and 4 of them were chosen for performing energy audit, conducting adjustment work and developing energy efficiency improvement measures. Measurements, energy audit and adjustment works were conducted in one of the mentioned boiler-houses.

21. Guideline/method of calculation of the hazardous emissions from the heat sources (boiler-houses) was developed and submitted to the Ministry of Nature Protection of RA. The comments were received and based on that the TOR for emission calculation methodology is developed and submitted to MNP for approval.

22. Environmental impact evaluation was conducted for pilot projects, including GHG emission reduction potential evaluation.

23. Continued awareness raising activities among the residents on heat supply organizational and energy efficient technologies application.

24. The Project supported participation of a representative of Ministry of Urban Development of RA in the session on residential energy efficiency held in Sofia in Bulgaria in April 21-22. Based on the agreements reached during that meeting the representative of MUD was invited for making presentation on workshop to be held in Vienna in November 2009.

25. The Project experience was presented at the seminar “Regional cooperation in the field of energy efficiency” organized in Alma-Aty by Kazakhstan UNDP/GEF in May 30, 2009.

26. Two articles (interviews) on the heat supply status in general and Project’s inputs to the development of the heat sector in RA were published.

27. Developed Project 2008-2009 progress analytical report (107 pages). Project’s reports, analytical papers and materials are published and posted on the Project’s website www.heating.nature.am

28. The Project progress report and work-plan for 2009-2010 were presented at the Project Steering Committee Meeting. Follow-up activities were conducted to receive comments and suggestions from Steering Committee Members on the progress report and work-plan, according to received comments and suggestions the Project work-plan for 2009-2010 was revised and updated, and the final version of the work-plan was agreed and approved by the Project Steering Committee Members.

29. Project Implementation Report (PIR 2009) was developed and submitted to UNDP regional office in Bratislava. The quarterly reports are developed and submitted to GEF and Ministry of Nature Protection.

IV. FUTURE WORK PLAN

In year 2010, the project work plan's tasks and activities as well as the budget allocation will be defined per the Project Document.

It is planned to continue activities towards: 1) Strengthening the role and capacity of condominiums to maintain mutually profitable relations with heat supply companies; 2) Support further study on multi-apartment buildings passport application issues, particularly clarifying buildings' energy efficient heat supply systems issues in pilot areas; 3) Awareness raising activities via different mass media; 4) Supporting the expansion of existing heat supply systems; 5) Continue supporting the implementation of energy efficiency improvement and renewable energy projects; 6) Develop feasibility studies for perspective residential areas on restoration or construction of centralized heat supply; 7) Conduct follow-up activities and monitoring for the implemented projects to evaluate the EE of the systems and provide consultancy for implementation of the heat supply projects in residential areas; 8) Continue cooperation with PSRC on natural gas consumer-groups and tariff formation principals improvements; 9) Monitoring the greenhouse gas emissions and polluting substances as a result of the pilot/demonstration projects according to GEF guideline.

V. FINANCIAL IMPLEMENTATION

The Project's actual expenditure from the GEF allocations for 2009 period totals to 368,000 USD (delivery rate: 61%). Up to the end of 2009 the total percent of the expenditure of the corresponding planned commitments will be 83% of the allocated amount.

