



### **BACKGROUND**

The Republic of Moldova is practically devoid of indigenous energy resources that would be sufficient to fully support its economy. It is 98% dependent on imported energy, and can hardly cope with the increasing fuel prices. Energy tariffs have been increasing gradually; though still have not reached market levels. End-user tariffs are not sufficient to cover the operating costs for the local utility suppliers, not to mention the costs for investment in upgrading the infrastructure and carrying out efficiency improvements. The existing energy supply infrastructure has substantial overcapacity, while insulated residential buildings dramatically inefficient, which results in heavy utility cost burden for the population.

In 2001, the Alliance to Save Energy (Alliance) launched the Municipal Network for Energy Efficiency (MUNEE) program in Moldova. Its efforts started with educating municipalities about the benefits of energy efficiency and have evolved to cover energy policy reform and consumer energy efficiency awareness.

#### **CHALLENGES**

Due to constantly growing energy prices, the issue of energy costs is becoming increasingly important to local governments in Moldova. Already, 20-40% of the community and household budgets are consumed by energy costs.

In absence of a developed industrial production sector, the residential sector is the biggest energy consumer. With ever-growing prices and a high incidence of poverty, end-user energy efficiency is an immediate issue that should be addressed.

The most effective way to cope with the price increases on the municipal level is through energy planning and implementation of energy efficiency projects in municipality-owned buildings such as schools and hospitals. Based on regional experience, energy consumption can be reduced by 20-40%, easing the burden on local budgets.

### **OBJECTIVES**

Under the MUNEE program in Moldova, the Alliance works with cities of Chisinau, Ungheni, Floresti, Ialoveni, Cimislia, Balti, and Straseni. The Alliance helps each city recognize the potential for energy efficiency to minimize energy costs in their budgets and lessen energy supply constraints. The Alliance also builds capacity within the cities to enable implementation of energy efficiency measures, especially weatherization of buildings.

#### **APPROACH**

In Moldova the Alliance applies a comprehensive approach to energy efficiency that covers four key areas such as (i) district heating policy reform on the national level; (ii) capacity building for municipal efficiency projects; (iii) creation homeowner associations; and (iv) public awareness and outreach on end-use energy efficiency. The Alliance provides technical assistance on legal review of heat policies, housing legislation, energy planning, implementation and monitoring of comprehensive energy efficiency programs and demonstration organization of energy management projects, seminars and study tours, and dissemination of informational materials for consumers. The Alliance focuses on ways to improve energy efficiency of heat consumption in public and residential buildings.

#### RESULTS

#### **District Heating Projects**

As a result of the 1999 heat sector crisis that emerged due to supply and cost problems, the Government of Moldova decided to implement a Heat Sector Reform project to create a favorable investment climate for the heat sector. Within the heat policy reform, the Alliance:

- Developed Moldova's Heat Sector Development Strategy, as technical assistance to the Ministry of Energy, approved by the Government in February 2003.
- Helped the Ministry of Energy draft the Heat Law which would enable the implementation of the Heat Sector Development Strategy. The draft law





covers the legal framework for production, transmission, distribution, supply and consumption of heat; it also defines the roles of central and local governments and the regulatory authority. Due to protracted debates among Moldovan law makers, the draft law is still pending approval.

- Worked with a variety of interest groups including local governments, non-governmental organizations, housing and private associations to explain the provisions of the Law and amass feedback on its clauses to assure that the Law fully reflects the needs of all stakeholders.
- Reviewed drafts of the Condominium Law, advised the Union of Home-Owners Associations on the draft Housing Law and supported the legal review and clarification of the Government Decision No. 191 regulating the supply of communal services.
- Produced dozens of articles, editorials, and press releases, which were published in national news, such as *Economicheskoye Obozrenie*, *Office*, *Welcome Magazine*, *Moldova Suverana*, *StroyBusiness*, and *Komsomoskaya Pravda*. The media outreach promoted heat reforms and increased transparency and public discussion about the causes of heat sector crisis and ways to address heat sector problems. A series of recent articles shared the experiences of energy efficiency solutions and financing mechanisms from other countries in the region.
- Advised the government on restructuring the National Agency for Energy Conservation, which occurred under **Decision 1452 on December 21, 2006**, and helped to identify technical assistance for legal framework revision and Agency's capacity-building.
- Advised the government on creation of a revolving fund for financing energy efficiency and renewable energy projects.

#### Home Owner Associations (HOAs)

The Alliance has worked extensively with the housing sector, particularly in the municipalities of Balti, Ungheni and Chisinau. The Alliance helped the Municipal Council of Homeowner Associations (MCHOA) from Chisinau to receive a \$14,000 grant from the World Bank for creation of an Advisory Center for Tenants and Home Owner Associations.

The Alliance also helped the MCHOA start the Locuinta (Dwelling) monthly magazine for housing managers and HOAs members. In conjunction with the Balti Municipal Council, the Alliance prepared and disseminated brochures about HOAs and their role in improving residential building comfort, and raised further awareness about energy efficiency in multifamily buildings through newspapers and television.

Other Alliance assistance has focused mainly on training and strengthening energy-related relationships between municipalities and the housing sector. Jointly with the MCHOA of Chisinau and Balti, the Alliance conducted seminars and events highlighting the positive relationship between successful HOA management and energy efficiency. The Alliance also organized numerous roundtables bringing together national and local decision-makers to address energy efficiency problems that the housing sector faces.

As part of institutional capacity building, the Alliance helped create the Union of HOAs from Moldova, which brought together HOA Managers from three main urban areas: Chisinau, Balti and Ungheni. The Union now vets the changes to the legal and regulatory framework. The Alliance also advises the Union on energy efficiency management in buildings, and on ways to eliminate the legal, accounting and managerial barriers to energy efficiency.

More recently, the Alliance developed draft *Guidelines for Housing Sector Administrators*. The guidelines provide advice for registration, management, accounting, and energy efficiency improvement of residential buildings.

### **Education & Awareness Campaign**

The Alliance has continuously worked to increase the public awareness about benefits of energy efficiency. Examples of Alliance's awareness campaign include:

• Broadcasted public advertisements on energy efficiency measures on two TV channels for over two months, and two talk-show interviews that





addressed the objectives of Heat Sector Reform and discussed the concepts of MUNEE.

- Cooperated with donors through forums, such as the Moldova Energy Donors Working Group and the respective website (www.edwg.md).
- Organized traditional monthly roundtables for energy market stakeholders that opened a dialogue between suppliers, consumers, decision-makers, donors, and media on hot energy efficiency topics. The goal of the events was to communicate the existing problems and jointly seek solutions.
- Drafted, published and distributed 1,000 energy efficiency advice booklets for condominium residents. The booklets consisted of energy-saving tips for use around the kitchen, household appliances, and other household energy hot spots. A similar booklet was published for managers of condominiums and public buildings addressing general energy-saving measures for buildings.
- Organized training courses on Energy Planning and Management for 10 municipalities. As a result, one of the municipalities developed an energy project and a business plan for decentralizing the heating system in the city.
- Organized study tours to Poland, Czech Republic and Lithuania and follow-up workshops for senior government representatives, municipalities, and energy experts. The workshop examined the legal framework and heat strategies of these countries, relationships between the consumers and suppliers, and the role of condominiums and energy efficiency in the housing sector.
- Provided recommendations to EU Energy Charter Experts with heat policy recommendations, which the Energy Charter incorporated into its report: Moldova In-Depth Review of Energy Efficiency Policies and Programs.
- *Published numerous articles* in national publications to elucidate the importance of energy efficiency jointly with other recognized energy experts in Moldova.

- Raised \$1,000 through sale of school-children's drawings. This fundraiser aimed to raise money and awareness about energy and created an online gallery of drawings where Moldovan pupils depicted their vision of energy efficiency (www.edwg.md). The funds were used for thermal renovation at the Municipal Orphanage No. 2 in Chisinau. This effort raised the indoor temperature from an unbearable 10°C to a more comfortable 15° 17°C, improving the well-being of both staff and students.
- Organized international events to disseminate energy efficiency practices:
  - ▲ "Removing Barriers to Residential Energy Efficiency in Central and Eastern Europe", Kiev, February 6-7, 2006. The event was supported by the Renewable Energy and Energy Efficiency Partnership (REEEP) and USAID, hosting over 90 experts from different countries who shared best practices in energy efficiency within the residential sphere;
  - "Financing Municipal Energy Efficiency in the Commonwealth of Independent States" Forum held on November 13-14, 2006 in Moscow, Russia. The Forum gathered over 60 participants representing more than 11 countries from the Commonwealth of Independent States, Central Europe, the Baltics, and Western Europe. The attendees represented central and local governments, energy businesses, banks, non-governmental organizations, and mass media.

## **Energy Efficiency Improvement Projects in Municipalities**

- Distributed weatherization materials to 15 schools and 2 hospitals. Provided by USAID, the materials increased indoor temperature by 3° 4°C, improving the indoor comfort and quality of education for more than 6,000 pupils.
- *Implemented 3 demonstration projects* in Chisinau. The Telecommunications College was selected for a pilot project to show the possibilities of saving energy and money while making classrooms





more comfortable during cold winters. Schools No. 95 and No. 83 were equipped with automated heat metering and control devices. The results show that it was possible to reduce energy consumption by 20%, and to increase indoor temperature from 17°C to 20°C.

### For More Information

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