

# ***U.S.-Russian Far East Partnership Activity***

**Implemented by**



## **Success Story**

### **A City Under the Sun**

#### **Project "Improving the Energy Efficiency of Vladivostok's Social Infrastructure Facilities"**

**Funded by the Mission to the Russian Federation of  
the U.S. Agency for International Development**



## A City Under the Sun

Do you want to have running hot water at home even though the utility company is doing the usual maintenance and repairs and for a long period you do not have running water? Even when you don't have electricity? Right now every person in Vladivostok would be interested to express an opinion on these questions.

If you get a solar heating unit, you will always have hot water, because the sun can't be switched off. Some of the advantages of solar power are that it's safe and environmentally-friendly. Power plants annually burn million of tons of coal and petroleum products and pollute the atmosphere. They are to blame for global warming, which we feel more and more each year.

MIR International Cooperation Fund focuses on introducing environmentally friendly technology, especially, solar heating units. MIR Fund collaborates with the Institute of Marine Technology Problems, Far Eastern Branch of the Russian Academy of Sciences (IMTP FEBRAS), who is the leader in development and installation of heating systems, which use renewable energy sources: sun, wind, etc. Together MIR Fund and IMTP FE-

BRAS started a project "Improving the Energy Efficiency of Vladivostok's Social Infrastructure Facilities". However, to implement it they needed an American partner, who would provide informational and technical support. Thanks to the Internet, the partner, CTG Energetics from Santa Monica, California, was found! After being awarded a grant from the program "U.S.-Russian Far East Partnership Activity", of the Foundation for Russian American Economic Cooperation (FRAEC), the partners began working.

One of the most extraordinary events happened on December 10, 2003. Yuri Kopylov, Mayor of Vladivostok, Carol Viperman, President of FRAEC, scientists of IMTP FEBRAS, representatives of MIR Fund, Tom Lunneberg, Vice president of CTG Energetics, Steven Long, CTG Energetics, and staff and kids of the Social Rehabilitation Center for Minors, plus, numerous representatives of media, were present at the opening of a unique solar heating unit. The unit surface is 40 m<sup>2</sup>; water temperature goes up to 55°C; the output is up to 2.5 tons of water per day, which will provide 70 kids and 60 employees of the Social



Meeting with the Environmental Programs Division of the City of Santa Monica, a leader in implementing energy-efficient programs in the U.S.

Rehabilitation Center for Minors with hot water. The center is a temporary home for homeless children. To make this happen, the partners had to resolve not only technical problem, but logistics issues as well. The city of Vladivostok did not have an infrastructure for implementation and management of environmentally-friendly technology. The solution, the partners and the city arrived at, will help to provide more city facilities with hot water.

The unit at the Social Rehabilitation Center for Minors has been working well and had received the status "experimental". The partners also developed a guideline "Using Renewable Energy to Solve a Municipality's Heat Supply Problems",

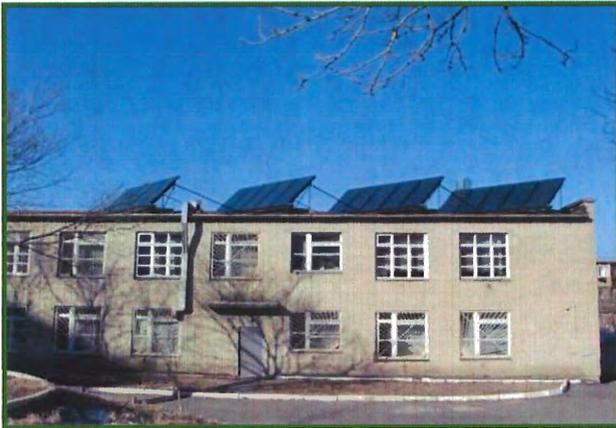
### A Partnership between:

**CTG Energetics, Inc (California)**

<http://www.ctg-net.com/energetics/EnergeticsHome.htm>

**MIR International Cooperation Fund (Primorye)**

<http://www.mirfund.ru/>



Solar heating units installed on the roof of the Social Rehabilitation Center for Minors

an effective information tool for the education of local communities about renewable energy and advancement of non-traditional energy technology.

The partners are discussing installation of a complex solar system at municipal facilities in Vladivostok with the Vladivostok city administration and a company "Informational Trunk Systems". If the parties agree, then six more units will be installed in Vladivostok and will be paid by the city in 2004-2005.

However, the main success is not the technological or logistic solution to many problems. The major result is changing of the stereotypes of the leading specialists and city administration about energy-efficient programs.

Success and tangible results were possible because of a successful

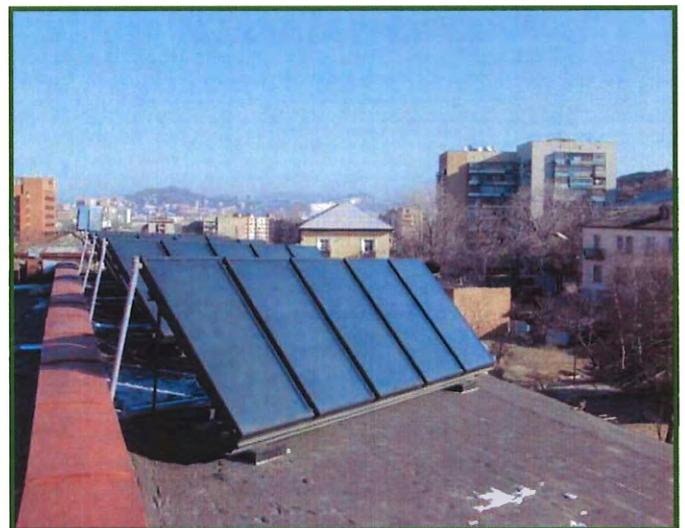
partnership with CTG Energetics. "It is luck! MIR Fund found us on the Internet and offered to work with them on a project, which would benefit children. We knew that we could provide technical and informational support. We are happy to work on the project and to see a great potential for future development. This is our first experience in Russia. We were impressed with the technical knowledge of the mayor, who offered several ideas for future projects. Of course, we hope to continue our relationship on a bigger scale" said Tom Lunneberg, vice-president of CTG Energetics.

Based on the experience of California, the partners created a guideline "Using Renewable Energy to Solve a Municipality's Heat Supply Problems" in Russian and English. This guideline lays out a plan for implementation of energy-efficient technolo-

gies in Vladivostok in 2004-2008 and is an invaluable resource for energy specialists and municipal administrators. Irvine and Santa Monica, California, are famous for their wide use of renewable energy sources for energy and electricity needs.

Currently, the partners are planning a new project – a Center of Energy Efficient Technology. The center will educate local communities about alter-

native sources of energy and implement non-traditional energy saving technology to provide people with hot water and heating. The center will work toward sustainability by doing facilities' surveys, installing heating units and other technologies. They also plan on developing energy efficiency building codes for Russia.



A close-up of the solar heating units at the Social Rehabilitation Center for Minors

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