



ROUND I

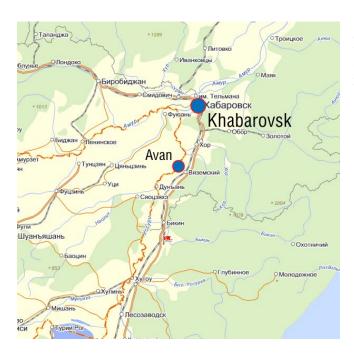
Table of Contents

№	Project	Page
1	# CDSP-ICT-01.	2
	Heat Saving in Avan School.	
2	#CDSP-ICT-02.	4
	Improvement of recreation facilities for youth and other community members	
	in Mukhen	
3	#CDSP-ICT-04.	6
	Green Power Engineering at Terneiles	
4	#CDSP-ICT-06.	8
	Creating comfortable conditions for education and development with the use	
	of ICT	
5	#CDSP-ICT-12.	10
	Independent solar battery power supply for the checkpoint of	
	anti-poaching teams in Krasnyi Yar	
6	#CDSP-ICT-07.	12
	From energy-efficiency to development (transition to alternative sources of	
	energy)	
7	#CDSP-ICT-08.	15
	Replacement of incandescent lamps with light-emitting diodes in Lake Baikal	
	shoreline villages (with the use of ICT to promote public participation and	
	dissemination of experience)	
8	#CDSP-ICT- 09.	16
	Automation of energy resources metering devices in Svirsk social institutions	
9	#CDSP-ICT- 10.	18
	Increasing the efficiency of heat supply in educational institutions in Sysert	
	Urban District	
10	#CDSP-ICT- 11.	20
	Introduction of a computer-based energy control system at Arzamas	
	Middle School # 15	

CDSP-ICT-01.

Heat Saving in Avan School

Requested amount \$13 000 Grantee and other contributions \$12 202 Total cost \$25 202



Vyazemsky Municipality in Khabarovsk Krai has a population of 6,400. The settlement of Avon located in this municipality has 786 residents. 164 children attend the local school.

Community problems addressed by the Project:

- 1. Heat preservation and provision of comfortable conditions in the school;
- 2. Protection from severe weather conditions and aggressive external environment;
- 3. Noise insulation;
- 4. Absence of environmentally friendly windows;
- 5. Safety and health improvement for teachers and students;
- 6. Saving school budget funds intended for heat and electricity.

Project summary:

The project was aimed at improving conditions in the school of Avan settlement for 120 students and 39 teachers and technical staff. Grant funds were used for installing 15 new windows. The administration of Vyazemsky Raion donated an additional 4 million rubles to the grant amount of 400,000 rubles (\$13,000) for replacing all the other windows in the school building. Thanks to the new modern energy-efficient windows that have replaced the old wooden ones, the temperature in the school is now from 6 to 10 degrees higher. Illumination has improved, the rooms can be aired and the level of noise protection has increased. This has resulted in a lower illness rate among students and teachers and also allows saving considerable municipal funds spent for heat and power. Project activities included a contest for the best energy-saving mini projects among older students. Project information was placed on the websites of the school and the municipality.

Project results:

- 1. 15 new windows were installed. The administration of Vyazemsky Raion donated an additional 4 million rubles to the grant amount of 400,000 rubles (\$13,000) for replacing all the other windows in the school building.
- 2. The amount of coal burnt at the central boiler plant in the settlement decreased by 25 t/month, which allowes saving from 200,000 to 210,000 rubles during the heating season;
- 3. High degree of protection from exhaust gas, street dust and boiler plant smoke.

Contact person:

Margarita Redkina, teacher at Avan school

Contact information:

9 Shkolnaya St., Avan, Vyazemsky Raion, Khabarovsk Krai Tel 8(42153)44230 vyz-s-avan@yandex.ru

Organization:

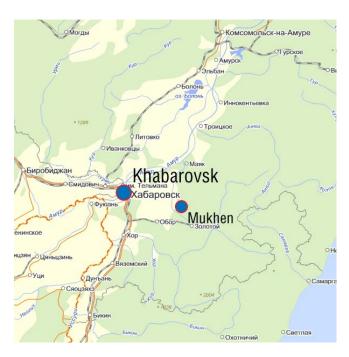
Title	Category	Profile
Avan Middle School	Municipal	Educational activities

Duration (months) 6 **Start date** 01.12.2011 **End date** 31.05.2012

#CDSP-ICT-02.

Improvement of recreation facilities for youth and other community members in Mukhen Settlement

Requested amount \$12 953 Grantee and other contributions \$33 616 Total cost \$46 569



Mukhen is an urban settlement in Lazovsky Raion, Khabarovsk Krai, with a population of 4,619 located in the southern part of the region to the northwest of the raion capital Pereyaslavka.

Community problems addressed by the Project:

High incidence of diseases and poor attendance of the cultural center by community members; high heat energy consumption for heating the gym, vestibule, and study rooms; lack of adequate exchange of information on citizen initiatives in communities of Khabarovsk and Primorsky regions.

Project summary:

Replacement of 15 old stained glass windows on the façade of the LAD Cultural Center in Mukhen with multiple glass-plastic units instead of the planned 10. The local Culture Department increased co-funding by over 100,000 rubles. Volunteers and own municipal resources were used for subsequent repair work after the replacement of the windows. ICT were used to address community issues by involving activists from Lazo, Vyazemsky, Khabarovsky, Bikinsky and other raions.

Project results:

- 1. Attendance to the Cultural Center by children, youth and adult community members grew by 20%.
- 2. Annual municipal power costs decreased by 6,380 rub.;
- 3. Energy consumed for heating the study and reading rooms at the Children's Library decreased by 18 Gcal or by 28,089 rubles per heating season.

Contact person:

Svetlana Fefelova, director

Contact information:

1 Sportivnaya St., Mukhen, Lazo Raion, Khabarovsk Krai 682916, Tel. 8(42154) 41674 zentrlad@mail.ru

Organization:

Title	Category	Profile
Sodruzhestvo, an independent non-profit civic initiatives organization, Mukhen	Non-profit	Integration of the efforts and resources of NGOs, government and businesses for implementing civic initiatives aimed at addressing community issues.

Duration (months) 7 **Start date** 01.03.2012 **End date** 30.09.2012

#CDSP-ICT-04.

Green Power Engineering at Terneiles

Requested amount \$11 000 Grantee and other contributions \$7 600 Total cost \$18 600



Plastun is the largest settlement in Terneisky Raion, the most northern and largest in Primorsky Krai.

Community problems addressed by the Project:

Lack of information about the practical utilization of energy-efficiency technologies. Terneiles, an open joint-stock company, has been using such technologies for over 30 years. The company's central boiler plant that burns wood waste provides heating for local residential and industrial buildings. In 2009, it installed a US made boiler plant that not only heats the wood veneer factory, but also has a substantial reserve for heating the settlement and generating electricity for the company.

Project summary:

Grant funds were used for opening an Energy-Efficiency Technologies Museum in the middle school of Ternei settlement. A a virtual museum Terneiles Energy-Efficiency Technologies was created on the websites of the Charitable Fund for Northern Primorye Development and the local school; and a conference on this subject was held for local high school students. Six articles about project activities were printed in the raion newspaper Vestnik Terneya and the public newspaper Plastunsky Vestnik. High school students were trained to use a new computer program Microsoft Office Visio. Their drawings prepared with the use of this program served as the basis for setting up the school museum. During the preparation of the museum, old luminescent lams were replaced with energy-efficient ones. This work was joined by students from the Experiment Study Group who assembled 10 such lamps using a prototype. As a result, schoolchildren have acquired useful practical skills and the future museum was provided with new lamps. In the process of acquiring new ICT knowledge, project participants created 11 versions of the Energy-Efficiency Booklet. The best works were submitted for an international contest. The project made it possible to involve youth in learning new ICT and increase awareness of the broad public about modern energy-saving technologies. It also promotes the dissemination of successful experience of non-waste production; advertises new vocations; and promotes the development of technical creativity in students.

Project results:

- 1. A real museum with a scale model of Terneiles industrial facilities demonstrating energy-efficiency technologies used by this company was created by local schoolchildren.
- 2. The building of the museum itself serves as an example of energy-efficiency in residential and non-residential buildings it has new windows that prevent heat loss, energy-saving lamps and new hot water heating radiators that save heat.
- 3. Not only schoolchildren took part in the project, but volunteers from local business firms as well.
- 4. Increased awareness of Plastun community about energy saving in residential and industrial buildings.

Contact person:

Olga Tremasova, chairperson of the Board

Contact information:

13 Lermontova St., # 3, Plastun, Terneisky Raion, Primorsky Krai 692152 Tel. 8 (42374) 34030 tremasova@mail.ru

Organization:

Title	Category	Profile
Charitable Fund for Northern Primorye Development	Non-profit	Mission: Increase the level of comfort in communities where the Fund operates, protect the environment and wild nature, promote education, science, culture and art, and support the spiritual development of the personality.

Duration (months) 7 **Start date** 01.12.2011 **End date** 30.06.2012

#CDSP-ICT-06.

Creating comfortable conditions for education and development with the use of ICT

Requested amount \$13 000 Grantee and other contributions \$3 800 Total cost \$16 800



The rural settlement of Topolevo is located in Khabarovsky Raion, Khabarovsk Krai, in close proximity to the regional capital and has a population of 4,400. The middle school in Topolevo is a general education establishment aimed at forming responsible citizens, adapting students to life in society and instilling in them respect for human rights and freedoms and an appreciation for their country and people around them. There are 45 teachers, 20 assistant staff members and 360 children in the school, of whom 79 are inmates of the local orphanage.

Community problems addressed by the Project:

- 1. Increased incidence of chronic respiratory illnesses among schoolchildren.
- 2. High level of noise and air pollution in the school which is located near a traffic intersection.
- 3. Uneven distribution of heat in the classrooms due to flaws in the design of the school building.
- 4. Disinterested attitudes toward energy-saving in the community.

Project summary:

Replacement of 15 old windows and installation of 3 noise-insulating doors at emergency exists. Preparation of materials for publication in the media: 3 for Topolevo radio station, 3 for the raion newspaper *Selskaya nov* and 2 for local television. Project information was placed on the school's internet site. Two webinars and 1 drawings contest were conducted on the subject of energy-efficiency.

Project results:

Increased level of knowledge about ICT among the pupils and a greater interest of community members in the use of energy-saving technologies. Improved conditions in the school: decreased noise and pollution levels in the school and smaller incidence of respiratory illnesses.

Contact person:

Olga Kirilkina, school principal

Contact information:

4A Shkolnaya St., Topolevo, Khabarovsky Raion, Khabarovsk Krai 680510 Tel. 8 (4212) 49-64-54, topolevo-sp@mail.ru

Organization:

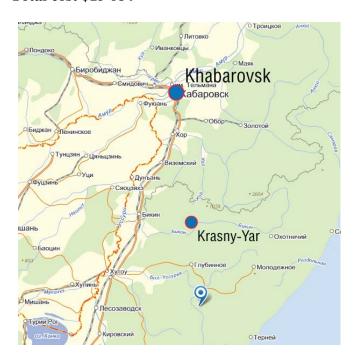
Title	Category	Profile
Topolevo middle school	Government	Education activities

Duration (months) 8 **Start date** 01.02.2012 **End date** 30.09.2012

#CDSP-ICT-12.

Independent solar battery power supply for the checkpoint of anti-poaching teams in Krasnyi Yar

Requested amount \$9 000 Grantee and other contributions \$6 684 Total cost \$15 684



The *Tiger* territorial neighborhood community of small indigenous peoples in the settlement of Krasnyi Yar, Pozharsky Raion, consists of 3,000 residents involved in traditional nature management.

Community problems addressed by the Project:

The existing checkpoint lacked an independent power supply system needed for around-the-clock activities of local anti-poacher teams in the area of traditional nature management of small indigenous peoples in the watershed of Bikin River. The installation of such a system helps control poachers and protect this cedar and broadleaf woodland, which is the habitat of the Amur tiger, from deforestation.

Project summary:

- 1. A checkpoint was built near the road by which illegally harvested forest products are transported. This will increase the efficiency of anti-poaching teams in the *Tiger* community. An independent energy supply system with solar batteries was purchased and installed in the house built by the project. This system, which provides around-the-clock supply of electricity for household and other needs (such as charging the batteries of photo and video devices, walkie-talkie sets and GHS navigators), made it possible to improve the working conditions of rangers and anti-poaching teams. It saves time and resources that would otherwise be spent for delivering fuel for generators and stoves.
- 2. Project information was broadly disseminated both in the region and beyond it to promote replication, since independent power supply systems in conditions of poorly developed roads and remoteness of settlements in the Russian Far East and Siberia may be quite useful for many communities

Project results:

1. Improved working conditions and efficiency of anti-poaching teams made up of Krasnyi Yar residents. There is no longer a need in regular deliveries of firewood and fuel. Illegal tree felling

for firewood has been checked. Poachers usually act during darkness, but thanks to around-theclock illumination, it is now possible to draw up reports and record violations with the use of photographic and video equipment.

2. Information about project results was conveyed to tourist camps, bee yards, small farms, remote settlements, social institutions, checkpoints of the Ministry of Interior, etc.

Contact person:

Yevgeny Lepeshkin, project coordinator, WWF Amur Branch

Contact information:

6/1 Leniniskaya St., Krasnyi Yar

Tel: 318617; fax: 37665, olipka@wwf.ru

Organization:

Title	Category	Profile
Tiger, a territorial neighborhood community of small indigenous peoples	Non-profit	Preservation of a traditional living environment for local cultural development and sustainable nature management. Hunting and harvesting food and medicinal plant resources. Provision of services for environmental and ethnographic tourism.

Duration (months) 8 Start date 01.02.2012 End date 30.09.2012

#CDSP-ICT-07.

From energy-efficiency to development (transition to alternative sources of energy)

Requested amount \$10 000 Grantee and other contributions \$8 000 Total cost \$18 000



The city of Shelekhov and Shelekhovsky Raion with a combined population of 49,200 are situated in the south of Irkutsk Oblast in the valley of the rivers Irkutsk and Olkha at a distance of 17 km from the regional capital. Problems related to the systematic growth of energy prices and interruptions in energy supply, as well as high heat losses and low capacity of heating devices, especially in children's institutions, may be resolved by reducing heat losses and shifting to modern alternative energy sources.

Community problems addressed by the Project:

- 1. High cost of energy and heat supply for social (children's) institutions of the raion in conditions of inadequate funding, high heat losses (90% equipment deterioration) and ineffective heat output of heating devices;
- 2. Frequent interruptions of hot water supply prevent normal operation and lead to systematic closures of the kindergarten and worsen conditions for the children attending it;
- 3. Poorly developed normative and legal framework regulating energy savings reinvestment into community development programs in social institutions;
- 4. Only a few pre-school institutions in the city practice energy and heat saving and even this experience is not promoted and, in general, ICT are hardly used to increase public awareness about energy-efficiency.

Project summary:

The installation of a system of solar water heating (by the number of sunny days Irkutsk Oblast matches Crimea and Northern Caucasus – the annual number of sunshine hours in the southern areas of the region reaches 2500) will solve the problem of independent hot water supply to the kindergarten's kitchen and will ensure the permanent operation of this institution. ICT will be used to advertise project results with the aim of replicating experience in both Shelekhov and its raion and also in other areas of the region. Information about best energy-efficiency practices will be disseminated through the media, the internet site of the local administration and at the advanced education course for educators (the kindergarten is the pilot site of Irkutsk Teachers' Advanced Training Institute). A presentation on the benefits of energy-efficiency and project activities will be made in the course of an online seminar for local high school students and placed on the sites of

these organizations. This will increase public awareness and competence regarding the efficient use of energy resources and the dissemination of modern energy supply technologies.

Project results:

- 1. The installed Universal Solar Water Heating System guarantees the uninterrupted work of the kindergarten's kitchen, which helps improve the health of over 200 children and adult employees;
- 2. Reduction by 30% of the kindergarten's hot water costs (90,000 rubles a year), since 350 m3 of consumed hot water is now heated by solar water heaters (by the number of sunny days Irkutsk Oblast matches Crimea and Northern Caucasus the annual number of sunshine hours in the southern areas of the region reaches 2500);
- 3. Reinvestment of energy savings into other energy-efficiency activities in other parts of the kindergarten;
- 4. Introduction of ICT to facilitate a broad dissemination of information about the achieved energy savings and efficient utilization of energy resources based on alternative energy sources (best energy-efficiency practices were disseminated through the media (2 articles in the local press, the internet site of Shelekhov Raion Administration and seminars);
- 5. Increased level of knowledge of the staff of educational institutions after information about best energy-efficiency practices was presented to 30 regional educators at seminars and courses at Irkutsk Teacher's Advanced Training Institute (the Alyonka Kindergarten is the training base of Irkutsk Teacher's Institute).

Contact person:

Alena Suvorova, director of Kindergarten # 14

Contact information:

7 Section 7, Shelekhov, Irkutsk Oblast 666034

Tel. 8 (395 10) 4 58 64, fax 8 (395 10) 4 58 11 (for A. Suvorova), e-mail alenas@yandex.ru

Organization:

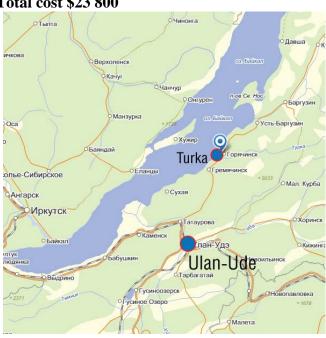
Title	Category	Profile
Kindergarten # 14	Municipal o	Education and development for pre-school children.

Duration (months) 11 **Start date** 01.12.2011 **End date** 30.11.2012

#CDSP-ICT-08.

Replacement of incandescent lamps with light-emitting diodes in Lake Baikal shoreline villages (with the use of ICT to promote public participation and dissemination of experience)

Requested amount \$11 800 Grantee and other contributions \$12 000 Total cost \$23 800



The rural settlement of Turkinskoye with a population of 3,000 is located in Pribaikalsky Raion in the Republic of Buryatia at a distance of 180 km from Ulan-Ude on the eastern shore of Lake Baikal. Starting from 2008, the federal project of establishing the Baikal Harbor Tourist and Recreation Special Economic Zone (TR SEZ) is being implemented in this area. Energy-efficiency development is an important means of improving both the quality of life of local residents and the natural environment of the region, as well as an incentive for involving investors, residents of the zone, in addressing local energy supply issues.

Community problems addressed by the Project:

- 1. High cost of energy for schools located in rural settlements on the shoreline of Lake Baikal due to the use of obsolete and deteriorated power equipment, including incandescent lamps, and scarce material and technical infrastructures;
- 2. Need to shift to the use of energy-efficient lighting equipment, which is already being done in the country under the New Light Federal Project;
- 3. Lack of an energy-savings reinvestment mechanism through which funds will be channeled to municipal social programs on the basis of a Social Contract concluded in 2010 among the local administration, NGOs and businesses and with the use of funds provided by investors in the TR SEZ;
- 4. Low quality power networks operating in rural areas;
- 5. Health issues of schoolchildren, such as vision disorders;
- 6. Inadequate use of ICT for increasing public awareness and involvement in addressing energy-saving and other community issues.

Project summary:

Installation of light-emitting diodes in School # 1 in Turka, where the Baikal Harbor Tourist and Recreation Special Economic Zone (TR SEZ) is being set up. Replication the experience of this pilot project to other lakeshore settlements of the region. The project involves a reinvestment of energy savings into social programs in the community. To replicate best project practices and involve local residents in exchanging information and discussing and addressing energy and environmental issues, the following ICT will be used: the new public newspaper *Podlemorye* and its internet version with a forum on regional energy-efficiency initiatives in Baikal Region; an online newsletter on energy-efficiency; and community newspapers. Other mechanisms developed in the course of previous projects will also be used, such as the Social Contract of Pribaikalsky Raion government, businesses and NGOs that is being implemented since 2010; public advisory councils at relevant agencies of Buryatia; and contests of social projects in communities. To summarize the project, a final information and training webinar will be conducted with the participation of local officials, community members, owners of small ecobusinesses located on Baikal lakeshore and residents - TR SEZ investors. All information materials will be sent to FSD for placement on its portal and electronic journal.

Project results:

- 1. In School # 1 in Turka, in less illuminated classrooms facing north, 100 new light-emitting diode lamps were installed in accordance with GOST standards;
- 2. The quality of illumination in the school rooms was improved, which helped create more healthy conditions for the students and teachers and improve the working conditions of the latter;
- 3. The amount of waste was decreased due to the greater longevity (by 10 times) of the new lamps, thus also easing the burden on the environment.
- 4. Energy savings amount to 16,632 kW/h a year (\$2,500), thus providing resources for co-funding a contest of social projects aimed at promoting energy-efficiency projects and improving the health and quality of life in the community;
- 5. Additional funding was also received from the local Education Department for other energy-efficiency activities in the school, such as installing air curtains at the doors;
- 6. ICT were broadly used for promoting public participation in addressing community issues: a poll among at least 600 users was conducted to identify priority energy-efficiency areas and disseminate information, as well as a seminar for the public with recommendations for the raion and regional energy-saving programs based on replicating best practices and results at institutions funded from local budgets and located on the Baikal lakeshore (UNESCO World Heritage Site);
- 7. Three issues of a new public newspaper *Podlemorye* were printed covering the priority energy and environmental problems of the littoral zone of Lake Baikal;
- 8. Information about the project and the importance of energy-efficiency was disseminated with the use of ICT and a series of regional events: the digital media and websites of the Podlemorye Public Association pomors@googlegroups.com, http://podlemorie.infol the interregional site http://podlemorie.infol the interregional site http://ecodelo.org, FSD electronic journal and seminars FSD webinar on energy-efficiency, workshops on issues facing small indigenous peoples of the Arctic in Baikal Region and a meeting of the working group for developing Russian-American Eco NGO Cooperation Program (RAPSIGO) during the visit of Buryatia president Nagovitsyn to the project site in Turka.

Contact person:

Andrei Suknev, director of A.Y.Suknev Private Enterprise

Contact information:

9 Nakhimova Pereulok, # 2, Ulan-Ude Tel. 8 (3012) 642678

Organization:

Title	Category	Profile
A.Y.Suknev Private Enterprise	Business	Ecobusiness and publishing activities, support to environmental civic initiatives development projects in the following areas: social protection, youth policy, child development programs, environmental protection and culture; urban landscaping; creative and sports activities for children.

Duration (months) 7 **Start date** 01.12.2011 **End date** 30.06.2012

#CDSP-ICT-09.

Automation of energy resources metering devices in Svirsk social institutions

Requested amount \$8 965 Grantee and other contributions \$17 105 Total cost \$26 070



The city of Svirsk with a population of 14,700 is located in Irkutsk Oblast on the left bank of Angara River. The Svirsk Charitable Community Development Fund (founded in 2007) together with the local administration and the community have identified as one of the key issues the high cost of energy consumption due to the lack of automated metering devices, This, in turn, leads to excess payments for energy and increases time spent for eliminating failures in the city's utilities system.

Community problems addressed by the Project:

- 1. Difference between billed and actual energy consumption in social institutions and households;
- 2. Lack of a computer system for recording and monitoring energy consumption that leads to excess payments for consumed energy and also increases the time of warning and eliminating emergencies in the city, which is fraught with risks for social institutions especially children's and medical;
- 3. Low public awareness and involvement in critical city problems because of an inadequate use of ICT:
- 4. Need to develop a mechanism for reinvesting energy savings and investing additional funds raised by the community, business and government (consolidated budget) for conducting contests of social projects on energy-efficiency and the improvement of the material and technical situation of social institutions.

Project summary:

An information and measuring system and a control room, the first of its kind in the city, was installed for servicing 3 social institutions: Schools ## 1 and 2 and at the city hospital that services all the residents of Svirsk and its environs, as well as neighboring private houses. This allows the two schools and the hospital, as well as residents, to receive online information on energy consumption and adjust spending. Time and money spent on eliminating accidents and risks for the population and social institutions have been reduced. The need in energy-efficiency and in such a system was first discussed at public hearings organized by the Svirsk Charitable Community Development Fund in collaboration with the local administration. The city administration provided a control room. In the future all social institutions of the city will be connected to one control room.

The project includes distribution of information on energy-efficiency among utilities services, NGOs and businesses to promote fund-raising for community energy-efficiency programs and public participation in addressing critical issues.

Project results:

- 1. An information and measuring system was installed in the city of Svirsk and a dispatcher room for servicing the city's Center of Culture, Olymp Health Complex, Kindergarten # 1, Schools ## 1 and 2, City Hospital and a residential building (total number of beneficiaries 3,000 people);
- 2. Reduction of energy consumption and saving funds spent on utilities payments and maintaining meters (100, 000 rub./month) this will improve the quality of life in the community;
- 3. Reduction by 10-20 times of time spent for eliminating accidents at heat and water supply systems, as well as their consequences, and less damage from accidents (averted damage is estimated at up to 500,000 rubles);
- 4. Reinvestment of energy savings into projects in local social institutions involving upgrading heat and energy systems;
- 5. ICT (internet sites, information seminars for over 100 attendees, public debates and publications) were used for replicating successful experience and project results and also for increasing public awareness about energy-saving issues. On the city's site (svirsk.ru) a page was created showing real time energy consumption and emergencies;
- 6. The results of this pilot project served as a foundation for submitting proposals to the city administration on increasing the performance of the city energy-efficiency program.

Contact person:

Marina Zmanovskaya, director

Contact information:

9 Lenina St., # 24, Svirsk Tel. 8 (39573) 2-11-75

Organization:

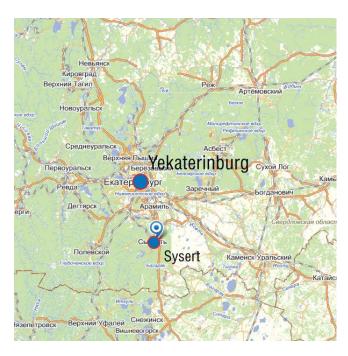
Title	Category	Profile
Svirsk Charitable Community Development Fund	Non-profit	Support and development of civic initiatives in the following areas: social protection, youth policy, child development programs, environmental protection and culture; urban landscaping; creative and sports activities for children.

Duration (months) 6 **Start date** 01.12.2011 **End date** 31.05.2012

#CDSP-ICT-10.

Increasing the efficiency of heat supply in educational institutions in Sysert Urban District

Requested amount \$11 400 Grantee and other contributions \$43 657 Total cost \$53 657



The city of Sysert with a population of 21,000 is located in the south of Sverdlovskaya Oblast at a distance of 43 km from Yekaterinburg. Sysert is the administrative center of Sysert City District that includes 7 rural administrations. There are 38 populated centers in this municipality.

Middle School # 56 in the settlement of Dvurechensk is the site of the project.

Community problems addressed by the Project:

- 1. Inefficient heat energy consumption during autumn, spring and weekends;
- Impossibility to control heats supply levels in the building in accordance with outdoor temperature;
- 3. The use of tentative figures for billing for heat instead of actual consumption figures;
- 4. Lack of a heat supply automatic control system (SART).

Project summary:

Project activities included a preliminary examination of the building of Kindergarten # 56 located in the settlement of Dvurechensk to identify its actual heat consumption. A specialized firm drew up design documentation for installing a heat supply automatic control system (SART) in the kindergarten. This system maintains the required temperature that depends on the temperature of outdoor air. The elimination of heat losses results in additional energy savings: heat consumption dropped by 15-20%, municipal budget spending was decreased, and the kindergarten premises became more conformable and comply with sanitary standards. The management of the kindergarten acquired SART equipment and organized a seminar for the staff of the municipal utilities services on how to install modern heat consumption control systems and heat meters.

Project results:

- 1. Installation of one SART system in Kindergarten # 56 that is attended daily by 220 children and 60 adults, which helps improve conditions in the kindergarten and bring it into compliance with sanitary standards; this helps prevent illnesses among the children;
- 2. Demonstration of the possibility to save energy by installing SART in a standard building this will help to broadly utilize this technology in residential buildings in this and other communities;
- 3. Thermal imaging conducted in the kindergarten identified point of heat loss;
- 4. Reduction of heat energy consumption by 180 Gcal/year after the installation of one SART system in the building;
- 5. Reduction of payments from the municipal budget by 130,000 rub/year as a result of a 15-20% drop of the need in heat energy;
- 6. 8 technicians were trained at a specially organized seminar to design, install and operate heat supply automatic control systems;
- 7. To broadly advertise the benefits of energy-saving technologies, the Sysert Administration and the management of the kindergarten in partnership with the Ural Center for Energy Saving and Ecology and the management of the local housing and utilities service placed a series of publications in the local press and on the city website devoted to the energy-efficiency program development in Sysert and the results of the work of the SART system in the kindergarten. This information was of special interest to the housing and utilities system management and the city's budget-funded institutions overall. Project information was also placed on the website of the Ural Center for Energy Saving and Ecology to facilitate broad knowledge sharing on SART systems with the staff of other municipalities of the region.

Contact information:

23 Mira St., Office 227, Yekaterinburg 620049, Russia Tel. 8 (343) 374-15-74; mail@ucee.ru

Organization:

Title	Category	Profile
Ural Center for Energy Saving	Business	Examination of energy equipment and
and Ecology LLC		developing and implementing energy-
		efficiency programs for industrial facilities
		and municipal institutions.

Duration (months) 7 **Start date** 01.12. 2011 **End date** 30.06.2012

#CDSP-ICT-11.

Introduction of a computer-based energy control system at Arzamas City Central Hospital

Requested amount \$10 016 Grantee and other contributions \$61 000 Total cost \$71 016



The city of Arzamas with a population of 100,000 is located 110 km from Nizhny Novgorod. The industrial complex of the city includes 18 large and middle-sized and 36 small-sized enterprises representing a broad range of industries: machine-building, radio and instrument making, construction and food production. The city administration actively supports energy-efficiency projects that are being carried out under the municipal energy-efficiency program.

Community problems addressed by the Project:

- 1. Lack of optimized systems of energy resources consumption in municipal institutions;
- 2. Accounting organizations and the municipal administration are unable to monitor energy-consumption;
- 3. Impossibility to guarantee the safe functioning of municipal institutions in winter;
- 4. Absence of experience in implementing pilot projects involving the installation of computer-based energy resources control systems.

Project summary:

Installing a three-level computer-based system for data collection and heat control in Middle School # 15 in Arzamas. The first level - information and measuring (metering and regulation devices); the second level— data reception, conversion and storage (network integrators); and the third level—computer and online access.

Project results:

- 1. 5 heat meters, 5 energy parameter control units (network integrators) and a computer-based commercial energy metering system were installed in Middle School # 15 in Arzamas;
- 2. Energy-resources consumption decreased by 20%;
- 3. Energy consumption is now monitored constantly by accounting organizations and the municipal administration;
- 4. Greater safety in the school;

- 5. Internet access to the school's energy-consumption data at all times;
- 6. Project information was broadly disseminated in Nizhny Novgorod Oblast and other regions of the country via the internet.

Contact person:

Vadim Martynov, deputy director

Contact information:

Vaneeva St., Office 207, Nizhny Novgorod 603105 Tel. 831 - 428-37-66

Organization:

Title	Category	Profile
Managing Partner LLC	Business	Design and utilization of energy- efficiency technologies for municipal institutions and industrial enterprises; energy auditing and energy services.

Duration (months) 4 **Start date** 01.12.2011 **End date** 31.03.2012