

## CENTRAL ASIAN RENEWABLE ENERGY REMOTE COMMUNITY ASSISTANCE PROJECT

The Carnegie Endowment for International Peace has entered into a cooperative arrangement to assist Central Asia's Eco-Energy Alliance in a project designed to demonstrate how relatively limited resources devoted to renewal energy can help improve social conditions in remote regions in a way that furthers cross-border cooperation in potentially tense border regions.

Central Asia's Eco-Energy alliance is a region-wide organization of renewable energy experts, registered as an NGO in Tajikistan, Kyrgyzstan and Kazakhstan, and legally operating in Uzbekistan through a subsidiary of the Tajik organization. In cooperation with the Carnegie Endowment they have developed a project to develop small community centers in remote rural communities that are not connected to or rarely supplied by national electricity grids.

A variety of renewable energy sources will be used (solar panels, mini-hydro electric plants, wind, and biofuels), as appropriate to the location, with capacities varying from 2-10 KW. The systems chosen will be offer maximum durability, long-life and minimal maintenance. One of the goals of the project is to eventually produce many of the components of the renewable energy systems in use within the region to minimize unit cost and maximize regional cooperation. We will also prepare specialists in the service of these systems.

The energy will be used to support a small community education center, which will provide remedial education in math and science to students during the day, access to professional-technical education in after-school hours, and a community internet and voice-over-computer telephone center at night. The latter use will help defray some of the ongoing costs of paying for internet access.

The centers will use inexpensive energy-saving computers, which will be linked to a VSAT satellite system. In addition, where necessary, a small refrigerator for storing medicine will be provided and as necessary facilities for purifying and heating water.

Using local educators and in consultation with specialists in the region with experience in computer based long-distance learning in the ministries, and in technical universities in the region, we will develop a curriculum in remedial math and science education, for lower, middle and secondary schools. A single curriculum will be developed and offered in six different languages (Kazakh, Kyrgyz, Tajik, Uzbek, English and Russian), which will help facilitate better educational opportunities for ethnic minorities, and increased opportunities for rural youth to receive education beyond the borders of their country. While there is already a certain amount of computer based distance-learning going on in Central Asia, it is unevenly developed across the region, its focus is usually advanced and not remedial education, and it is not available in areas without electricity

In addition we will also introduce a pilot curriculum on vocational-technical education, which will include continuing education training in occupations (such as nursing assistant, basic satellite and renewable energy equipment repair). As the project develops, additional courses will be introduced, with an eye to enhancing the prospects for developing and micro and small business in the region.

We believe that the timing of this project is critical, and that we take advantage of the opportunities offered to us to provide remedial educational materials to minority populations in the region. In addition to providing social relief to remote communities lacking electricity, the success of this project could serve as a model for confidence building measures in potentially tense border regions in Central Asia. Over time, this project could also be expanded to include remote communities in Turkmenistan and Afghanistan.

If the pilot project is successful, and a full-scale regional project is launched Carnegie will assist the EcoEnergy Alliance to develop in-country capacity to meet international accounting standards and disperse funds in a transparent fashion.