



The First Public-Private Energy Sector Partnership in Tajikistan

Synopsis

International Development Association (IDA) and International Finance Corporation (IFC) helped to establish a vivid example of how a public-private partnership can effectively work to provide affordable, reliable, and clean energy in a challenging environment. Electricity supply in the poorest region of Tajikistan has increased from three hours to 22–24 hours per day during the winter. An estimated 220,000 people, including more than half of which are women, have benefitted from improved electricity services. As a result of the project, schools, hospitals, and businesses can now stay open during the cold winter months.

Challenge

Gorno-Badakshan Autonomous Oblast (GBO) was the poorest and most isolated region in Tajikistan. Following the collapse of the Soviet Union and a five-year civil war, the power infrastructure in the region was in dismal shape; 60 percent of inhabitants had no energy during the winter and 15 percent had no energy at all. Frequent power outages were common for everyone. Together with GBO's mountainous and remote conditions, the population's low-income levels and political instability created a harsh environment unlikely to attract private investments. Due to the unreliable electricity supply, schools, hospitals, and businesses were frequently forced to close, especially during the winter, thus undermining economic and human development in GBO. Many of the residents in the region resorted to wood fuel for their heating and cooking needs, resulting in an increase in respiratory disorders and the loss of 70 percent of the area's tree cover between 1992 and 2002.

Approach

The project was designed as a public-private partnership between the Government of Tajikistan, the World Bank Group, and the Aga Khan Fund for Economic Development

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over 70% of consumers in GBO receive electricity 24 hours a day in winter

(AKFED). In order to reconcile the commercial objectives of private investors with the social objectives of the Government, the project was a combination of elements: a 25-year concession agreement with the Government of Tajikistan provided the basis for establishing Pamir Energy Company, a joint stock company owned by AKFED (70%) and the IFC (30%). In accordance with this agreement, the company manages most Government-owned electricity assets in GBAO. The project supported the rehabilitation of the hydropower infrastructure and transmission lines to increase electricity supply capacity. The affordability of electricity for the poorest households was ensured by a lifeline subsidy scheme funded primarily by a grant from the Government of Switzerland. As this subsidy was provided upon delivery of electricity services, the project also integrated the concept of output-based aid.

Results

The Pamir Private Project has helped to enhance development and improve welfare in GBAO by providing reliable, affordable, and clean electricity.

- Annual power generation has increased from 135,000 MWh per year in 2002 to 174,395 MWh in 2009 and 163,215 MWh in 2010 (lower demand). The total installed capacity increased from 33 to 43.5 megawatts.
- Over 70 percent of consumers in GBAO, including 127,000 people, 745 commercial consumers and 360 governmental entities, now receive around-the-clock electricity in winter compared to only three hours per day in 2002. About 27% of the consumers in isolated areas now receive an electricity supply of 8–16 hours per day. The supply service in GBAO is currently better than in most other areas in Tajikistan.
- Instead of rationing electricity, Pamir Energy is now also able to supply electricity to over 1,000 households as well as hospitals, schools, and businesses in neighboring Afghanistan.
- Technical and nontechnical losses in the transmission and distribution network have been reduced from 39 percent in 2006 to 19.9 percent in 2010; the collection of electricity bills has increased from 40 percent in 2002 to around 100 percent of sales in 2010.
- Affordable and clean hydropower displaced the use of high-polluting diesel generators and firewood as energy supplies.
- In contrast to the previously subsidized state-owned utility, the Pamir Energy Company's operating income and cash flow became positive in 2009.

Bank Contribution

IDA's concessional financing was critical for reconciling commercial objectives of the private sector and the social objectives of providing affordable and reliable electricity supply to poor consumers. IDA provided a \$10 million credit to the Government of Tajikistan to finance the initial capital expenditure of the project amounting to US\$26.4 million. After catastrophic flooding in February 2007, which severely damaged one of the hydropower plants, IDA provided an additional grant of \$2.5 million in order to help rehabilitate the damaged plant and prevent further accidents. In total, IDA was the largest financier in the project by contributing about 37% of financial resources. The World Bank Group through IFC also provided \$3.5 million in equity and \$4.5 million in debt, later converted to equity, to Pamir Energy Company.

100%

of electricity bills were collected
by Pamir Energy in 2010

MORE INFORMATION

- » Pamir Private Power Project (2002-2010)
- » World Bank Group Project Website
- » IFC Project Website
- » The World Bank in Tajikistan
- » Country Program Snapshot
- » RESULTS: Beaming Light on Tajikistan's Roof of the World

Partners

The public-private partnership was a successful outcome of the concerted actions and contribution of several donors. IFC partnered with AKFED to establish Pamir Energy Company. IDA and IFC's joint involvement was critical in mobilizing grant financing from the Swiss Government to support the lifeline subsidy scheme via an IDA-administered trust fund. Following the improvement of electricity services in GBAO, the project leveraged financial support from the U.S. Agency for International Development, the Roshan Company (part of the AKFED Network), and the Government of Norway to enable exports to neighboring villages in northern Afghanistan.

Moving Forward

Investments made under the project are expected to have a lifetime of at least 25–30 years. Pamir Energy will continue to manage and expand all Government-owned electricity assets in GBAO for the remaining 16 years of the concession agreement. The company has prepared a business plan for 2010–15 that includes an annual allocation of budgets for plant maintenance and further investment programs, such as the completion of the metering of all consumers by 2014. This would allow a further reduction in distribution losses and more targeted subsidies. The Government of Switzerland intends to provide further assistance to finalize the metering program and finance a World Bank-administered modified subsidy scheme for another three years.

Beneficiaries

Beneficiaries of the project are the people and businesses in GBAO and northern Afghanistan, who can now enjoy a reliable and clean energy supply. “We did not have electricity in the past and we had to use stoves which caused a lot of problem because of the wet wood and smoke in the rooms,” says Abdullahjan Abdulkhaliq, a school teacher in Afghanistan’s Shugnan Province. “[Since] we have electricity, we are able to use electric heaters and all electric appliances. We have ten computers in our ICT classroom. Children have regular classes and the education process has improved since the time of power supply.”