



HIPP KEY ACTIVITY:

- **Developing Quality Engineering and Technical Information**
- **Providing Targeted and Effective Investor Outreach and Promotion**
- **Supporting Institutional Strengthening and Capacity Building**
- **Partnering Programs and Opportunities to Stimulate Investment**



PAW in Machakhela Community, Khelvachauri Region, Adjara Autonomous Republic, Georgia

“HIPP held numerous public awareness (PAW) workshops across Georgia to allow public involvement in decision making process for selecting, siting and designing new hydropower plant facilities”

HYDROPOWER INVESTMENT PROMOTION PROJECT ENTERS ITS THIRD YEAR

By January 2012, Hydropower Investment Promotion Project (HIPP) efforts had resulted in nearly 200 MW of new run-of-river plants under development and the leveraging of over \$6 million of HPP development costs. Feedback from many of the developers HIPP has presented Georgian hydro opportunities to have made it clear that the introduction of an electricity trading mechanism to enable the commercial sale of power along the new 400 kV connection between Georgia and Turkey would significantly enhance the attraction of investment into the Georgian hydro sector. Both USAID and the Ministry of Energy and Natural Resources (MENR) have agreed that the priority for HIPP should now be the development of this mechanism. HIPP has therefore been supporting the MENR’s efforts to continue improving the enabling environment since the 1st Quarter of 2012. That being said, HIPP continues to promote Georgian HPP sites to investors (interest is still high from potential investors that regularly contact HIPP for information), provide robust, high quality data for investors such as electricity market studies for Georgia, Turkey and Southeast Europe, and build the capacity of the MENR staff and electricity market entities. HIPP is also continuing to publish high quality prefeasibility studies for new run of river sites, including 4 new studies released during the 1st Quarter of 2012: Khumpreri HPP, plus 3 in a possible cluster (Dolra 1, Dolra 2, Dolra 3) in Upper Svaneti. During this period, 15 new sites potentially suitable for HPP development with a total capacity of 410 MW were also identified in Upper Svaneti, in the upper Enguri Basin. 15 project identification studies for these sites were also finalized.



Dolra - Tributary to Upper Enguri River

PROMOTING ADOPTION OF INTERNATIONAL EIA AND SEA STANDARDS

HIPP continues to produce pre-feasibility studies using the “EU Strategic Environmental Assessment Principles” and improve awareness of the potential social and environmental impacts of hydro development among stakeholders. HIPP made specific efforts to reach a number of target groups including governmental and non-governmental entities, local communities, international organizations and academia, through meetings, presentations, seminars and public awareness workshops over January – March 2012, HIPP:

- Participated and monitored EIA public hearings of ongoing HPP projects.
- Attended two public hearings - Nenskra HPP (300 MW).
- HIPP and WWF Caucasus Office agreed to implement joint activities in future.
- HIPP had bilateral meetings with “Green Alternative” during which gaps in implementation of EIA and SEA procedures for HPPs and other projects and possibilities of use of international standards was discussed.



PROVIDING HIGH QUALITY INFORMATION FOR POTENTIAL HPP DEVELOPERS

HIPP's Special Studies Group began researching and publishing reports on regional electricity markets in order to enable potential private sector developers, governments, IFIs and other stakeholders to better understand the economics of investment into Georgian HPPs.

After commencing with monthly reports on the Turkish Day-Ahead-Market (DAM) in the 7th quarter of the project, HIPP began coverage of established DAMs in Romania, Hungary and Slovenia in Quarter 8. These markets are considered potential sales outlets for new Georgian run-of-river hydro plants in the foreseeable future and trends in those markets are therefore interesting from Georgian HPPs' perspective. In addition, observation of the functioning of competitive power markets in the EU is beneficial to Georgian electricity industry stakeholders as it gives them a better understanding of a possible development path.

In developing these reports, HIPP analyzed 2010 and 2011 data for Turkey and 2011 for the three southern European countries. Our analysis observed price and system load behavior by months, weekdays and hours. Consecutively, strong and logical relationships were identified. With these market patterns in the regional competitive power markets, potential HPP developers/lenders can make judgments regarding the structure of the power plant and feasibility of the electricity trading on the Turkish and other regional day-ahead electricity markets.

ENHANCING ENABLING ENVIRONMENT FOR INVESTMENT INTO GEORGIA'S HYDROPOWER

The first quarter of 2012 was an exciting time for HIPP's Enabling Environment Team (EET).

CROSS BORDER ENERGY TRADING AGREEMENT

The Cross Border Energy Trading Agreement (CBETA) between the governments of Turkey and Georgia was signed in January 2012. HIPP was instrumental in this process – creating the original concept and developing the first draft of the CBETA, building the capacity of the Georgian officials in many aspects of the Agreement and providing support to Georgian officials during the year-long negotiations with their Turkish counterparts. The CBETA sets out the general agreement of the parties regarding the cross border trading of electricity on the soon to be completed Black Sea Transmission Project, a €300 million high voltage electricity transmission line that will connect the power systems of Georgia and Turkey. The EET's first post - CBETA activity is to support GSE in developing the Interconnection Operation Agreement (IOA), which describes the coordination of activities between the two transmission system operators for power flows from Georgia to Turkey and vice-versa. HIPP is working closely with GSE in the continuing development of the IOA, scheduled to be executed by the parties by June 2012.

ELECTRICITY TRADING MECHANISM

Aware of its significance to the country's plans to encourage private sector led development of its energy industry, the Government of

Georgia has decided to develop an Electricity Trading Mechanism (ETM). ETM is the term used to describe the framework required (structural, technical, legal, contractual and regulatory) to support electricity trading from Georgian HPPs into Turkey and other regional competitive electricity markets. The ETM will require significant effort on the part of IFIs and the donor community and the Georgian energy sector service companies such as GSE and ESCO. During this quarter the EET has developed several key documents to support the development of the ETM.

Statement of Intent. This document sets down the Government of Georgia's plans with regard to the ETM and agreement by USAID and the MENR to cooperate in the development of the ETM.

GEMM 2015. This 40-page document provides the Vision of the Georgian Electricity Market Model by the end of 2015.

Road Map. This document identifies and describes the key actions that the Government of Georgia will be required to undertake during the next four years in order to achieve GEMM 2015.

Implementing Parties Action Plans. The implementing parties are identified as MENR, ESCO, GSE, and GNERC. In order to implement the ETM, they will be required to continuously coordinate their inter-related ETM tasks. This document provides a month-by-month and year-by-year task list for each implementing party.

Technical Assistance and Infrastructure Improvements. This document provides 9 specific tasks and with numerous subtasks that the donor community should provide to support the action plans of the implementing parties.



HIPP Legal Experts with the GSE Management

HIPP has contributed a lot to signing of The Cross Border Energy Trading Agreement (CBETA) between the Governments of Turkey and Georgia.



HIPP Enabling Environment Team visiting GNERC, Kutaisi

BUILDING CAPACITY OF ENERGY SECTOR PROFESSIONALS

HIPP's ENGINEERING TEAM continued to implement initiatives in the energy sector that support USAID Forward during the 1st Quarter of 2012. Significant in-house capacity building was carried out by the HIPP project during the 1st Quarter. Black & Veatch's Professional Energy Engineer provided intensive on the job training for HIPP's Georgian engineering team in the analysis of potential run-of-river hydropower plant sites and the development of prefeasibility studies. After a year of training, HIPP's Georgian engineering team is now able to produce prefeasibility studies of international standard without B&V's support. HIPP held two technical working group meetings with MENR staff during this period when technical details of HIPP proposed run-of-river hydro projects in Upper Svaneti were discussed. During these meetings, HIPP builds MENR capacity through the demonstration of the modern methodologies and approaches it has used when carrying out pre-feasibility studies prepared according to the international standards.

HIPP's SPECIAL STUDIES GROUP (SSG) provided two capacity building sessions during the quarter:

- **Turkish Day Ahead Market.** On March 30th, SSG gave a workshop for representatives of the MENR, GSE and ESCO. The workshop gave an Overview of the Turkish Day-ahead Market. And also an analysis of the Turkish Day-Ahead Market Price Curve. Attendees were particularly interested in the practical issues of power exchange operations in Turkey.
- **European Union Day-Ahead Markets.** SSG also gave a workshop to MENR and ESCO staff on electricity day-ahead markets in selected EU countries.

HIPP ENABLING ENVIRONMENT TEAM (EET) held a workshop to introduce the concepts of the Electricity Trading Mechanism to Georgian energy stakeholders. Representatives from the MENR, GSE, HIPP, ESCO and USAID attended. Based on strong interest by the workshop participants, follow-up workshops were scheduled with GSE and ESCO. HIPP's EET met with GSE representatives for a workshop and with representatives of ESCO for a similar session. Both workshops generated lively discussions and well defined questions. The EET will prepare written responses to each of the questions raised and circulate all questions and answers to ESCO and GSE with the aim of continuing to raise awareness of the principal issues and to keep the dialogue active. Though GNERC representatives were unable to attend the initial workshop, the GNERC Chairman asked HIPP to provide a workshop in Kutaisi at the beginning of the 2nd Quarter.

HIPP was very active and full of initiatives in local capacity building activities during the quarter.



HIPP capacity building workshops for Georgian energy sector professionals

INVESTMENT PROMOTION STRATEGY

HIPP's Investment Promotion Team (IPT) continues its efforts to generate interest from potential developers in Georgian hydropower opportunities through one-on-one meetings and by attending and organizing promotional events and activities for design/build/operate firms, private investors, venture capitalists, energy traders, energy sector leaders, financial institutions, multi-laterals, stakeholders, and others.

The IPT completed the Investor Web Portal, which accessible via www.hydropower.ge. It will also be accessible via the MENR website. The Web Portal contains HPP related legislation, transmission and HPP studies, an Information Memorandum for investors and all the pre-feasibility studies, project profiles, Turkish and EU power market studies and other HPP related information developed under HIPP. The portal is regularly updated with new information.

The IPT is continuing to promote run of river hydro sites globally, HIPP's Investment Promotion Plan for 2012 focuses on helping to improve the enabling environment in the Georgian energy sector by promoting the establishment of the Electricity Trading Mechanism described elsewhere in this newsletter.

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U.S. – GEORGIA
CELEBRATING TWENTY YEARS

Starting in March, 2010, USAID’s three year Hydropower Investment Promotion Project (HIPP) implemented by Deloitte Consulting Overseas Projects supports market-based initiatives to stimulate and secure international investments into Georgia’s small and medium-sized hydroelectric power market.

HIPP’s objective is to facilitate private-sector development of a minimum of 400 MW in new, run-of-river hydropower stations. This will be achieved through a comprehensive approach including promotional services, studies, workshops, and technical assistance provided to a variety of stakeholders in the energy sector.

REACHING OUT TO INVESTORS

HIPP has now reached out to more than 500 investors and institutions over its lifetime, and continues to add new contacts to the investor database daily. Most investors wish to take advantage of the high capacity factors Georgian plants offer as a means to securing relatively low cost energy supplies to meet their long term goals. Many potential investors contact HIPP directly with inquiries about hydropower projects. The IPT always strives to provide the most current and accurate information available.

The following pie chart depicts the geographical distribution of investor database, which currently lists 506 potential investors from 47 countries:

Geographical Distribution of Entities

