



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**

RE-FOCUS ON DEVELOPMENT OF ENABLING ENVIRONMENT FOR NEW GEORGIAN HPPs

In the 2nd Quarter of 2012, HIPP continued to re-focus its attention on the development of the enabling environment for new Georgian HPPs that will sell their energy into regional competitive power markets. The main activity for the Quarter was extensive capacity building for 4 energy entities in the sector (MENR, GSE, ESCO and GNERC) to introduce Government of Georgia (GoG) decision makers and energy sector service providers to the concepts of competitive electricity trading. USAID and HIPP organized an ETM Stakeholders Forum at the US Embassy on May 16. The Forum included representatives from the World Bank, IFC, KfW, ADB, EBRD, the EU Delegation, the MENR, GSE, ESCO, GNERC, Karcac, US Embassy, USAID and HIPP. HIPP, USAID and the MENR made presentations on the future development of the competitive electricity market. Speeches and presentations were made by: Stephen Haykin, USAID Mission Director; Marika Valishvili, First Deputy Minister of Energy and Natural Resources of Georgia; Jill Kelly, USAID Energy and Environment Office Director; Sukru Bogut, USAID Senior Energy Infrastructure Advisor; Jake Delphia, HIPP Chief of Party. The event, which proved an excellent forum for broad debate on issues surrounding the further development of Georgia's electricity sector, was followed by several multi-donor working group meetings to discuss a common strategy for the facilitation of hydropower exports from Georgia into regional markets. USAID's leadership in this process, and its further support to the evolving Georgian clean energy sector, remain vital to Georgia's aspirations to become a regional energy hub.



ETM Stakeholders Forum at the US Embassy

PROMOTING ADOPTION OF INTERNATIONAL EIA AND SEA STANDARDS AND INCREASING PUBLIC AWARENESS

HIPP continues to improve awareness of the potential social and environmental impact of hydro development among stakeholders through its use of the "EU Strategic Environmental Assessment Principles" in pre-feasibility (PF) studies. HIPP completed 6 PF studies for potential run-of-river hydro sites on Upper Enguri Basin rivers in the quarter, making 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.



HIPP held two public awareness (PAW) workshops in the Upper Enguri communities, Mestia and Ushguli, covering 15 newly identified HPP sites. More than 100 local community members participated in the workshops.

PUBLIC AWARENESS WORKSHOPS (PAWs)



Ushguli, the highest populated place in Europe

HIPP's Georgian Communication Specialist, Environmental Specialist and Hydropower Engineer, with support from other team members, continued to implement a program of PAWs in areas impacted by hydropower clusters. PAWs were recently held for 15 upper Enguri projects in Mestia and Ushguli (Upper Svaneti), covering 17 potentially affected villages. Mestia PAW was attended by community members from Mestia, Svipi, Tviberi, Bogreshi, Nakipari, Leli, Lahili, Jabeshi, Lakhushdi and Ushxvanari. The PAW in Ushguli was attended by members of the Ushguli and Kala communities, including Lalkhori, Chazhashi and Vichnashi.

During these outreach events, the HIPP team engaged more than 100 community members from the Mestia, Ushguli and other Upper-Svaneti communities in the earliest stages of hydro plant project planning. (75 in Mestia and 35 in Ushguli). HIPP presented technical, social, environmental and cultural details of the 15 Upper Enguri Basin HPP projects. Comments and concerns from local communities were recorded and integrated into pre-feasibility studies.



HIPP workshops in Mestia and Ushguli

PROMOTING YOUNG LEADERS IN GEORGIAN ENERGY SECTOR

In partnership with the International School of Economics at Tbilisi State University (ISET), HIPP conducted a conference, Young Leaders in the Georgian Energy Sector, for young people actively involved in developing the Georgian energy sector.

The goal of this conference was to strengthen and promote the role of young leaders' in the Georgian energy sector and to stimulate open discussion and exchange of information on recent developments in the sector so as to facilitate coordination among stakeholders. Young energy professionals made 10 presentations relating to regional power market developments, energy efficiency, renewable energy, energy policy and environmental protection. USAID's Jill Kelley, Director, Office of Energy and Environment, and several of HIPP's specialists made presentations at the conference. The event enjoyed significant media coverage and a similar conference was requested by the Georgian State University to highlight their gifted engineers working in the Georgian energy sector.

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HIPP Conference at ISET – Young Leaders Role in Georgian Energy Sector

HIPP stepped up its capacity building activities with a focus on the USAID/HIPP proposed Electricity Trading Mechanism (ETM). HIPP provided seminars, workshops and on the job training to personnel from the MENR, GSE, ESCO and GNERC. More than 50 experts attended the trainings and workshops where HIPP presented various reports and analysis related to electricity trading in competitive markets and the development of electricity market models. Specific capacity building tools and activities included:

Development of a price forecasting model for the Turkish DAM

in order to help Georgian HPPs to analyze future price developments in the Turkish DAM. By applying statistical tools, the model predicts electricity prices for the next day for 24 hours.

Presentation on Export Potential and Export Markets for Georgian Hydro Power Plants, intended to show economic viability of Georgian HPPs via analysis of Turkish and three EU countries' electricity demand growth and historical prices and volumes.

Revenue Requirements Model was created for the Georgian electricity system based on 2010 financial statements of major electricity system participants.



HIPP meeting with ESCO management

Completion of a Financial Model for HPPs. The model is an EXCEL spreadsheet based application which enables users to carry out a detailed analysis of the economic viability of their proposed hydro investments.

Daily Scheduling. HIPP provided a workshop to GNERC on daily operational scheduling and dispatch of cross border electricity sales.



HIPP meeting with GNERC management

Daily Scheduling, Dispatch, Balancing and Settlements. HIPP prepared presentations for two meetings with GSE on scheduling and imbalance settlements with respect to exports to Turkey, and toured GSE's Alpha Center. Meetings were held with Head of Electricity Contracts Registration, then with Head of Dispatch to discuss the Interconnection Operating Agreement with Turkey's TEIAS, and issues relating to scheduling, dispatch, balancing and settlements processes presently in Georgia, and the need to harmonize with Turkey.

Roundtable discussion at GNERC. Several roundtable discussions were held in Kutaisi with GNERC. HIPP made presentations relating to international practices on balancing power market functioning, market monitoring, system reliability and other issues, while GNERC shared information on how it is done currently in Georgia.

EU Power Market Legislation and Structure. HIPP presented three topics to GNERC in Kutaisi: 1) EU energy directives and how they relate to Georgia; 2) Internal Energy Market in EU and ETM; and 3) Organization of Day Ahead Power Market and structure of scheduling for one settlement period.

Imbalance Service. Met with ESCO officials to discuss energy imbalance issues in Georgia post-Black Sea Transmission Line start-up and to discuss possible solutions for imbalances in Turkey caused by overconsumption in Georgia. HIPP facilitated and attended a workshop with ESCO and GSE to obtain common understanding of imbalance challenges and develop a common approach to solving problems.

Market Regulations. Met in Kutaisi with GNERC Commissioners to discuss legal work being done by HIPP on issues related to Georgian Electricity Market Model 2015 and to discuss GNERC scope of authority.

Grid Code. Prepared presentation on "Grid code requirements and responsibility of regulators" for GNERC and GSE.

Transmission Network Tariffs. Prepared presentation on "Cost and performance-based Network Tariffs" for GNERC, MENR and GSE.

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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.

ACHIEVEMENTS AND OBJECTIVES

HIPP efforts have resulted in 300 MW of new run-of-river hydro plants under development and the leveraging of over \$6 million of HPP development costs through the use of USAID/HIPP resources. 24 HPP Pre-Feasibility Studies have now been completed, including 15 in the Upper-Enguri River Basin Cluster; a truly global marketing and outreach campaign has introduced over 500 institutions and investors to Georgian hydro run-of-river investment opportunities; multi donor/IFI support has been secured for development of an Electricity Trading Mechanism to facilitate clean energy exports to Turkey, and beyond. HIPP is now looking to support GoG entities and agencies in planning and implementing the ETM so that commercial electricity trading can commence on the Black Sea Transmission Project (BSTP), the new 400 kV connection to Turkey.

HIPP Team monitoring progress on construction of the Black Sea Regional Transmission Project



During this quarter, HIPP also monitored progress on construction of the new line, through site visits, conversations with those involved and press reports. Progress is continuing at pace within Georgia: the transmission

connection between Akhaltsikhe and Zestaponi is nearly completed and the Gardabani-Marneuli-Akhaltsikhe line construction / reconstruction, and construction of the Akhaltsikhe Substation is scheduled to be finalized by the end of August, 2012. Also, the Meskheti 400 kV line between Akhaltsikhe and the Turkish border is expected to be finished by the beginning of September, 2012. Work on the 400 kV line to Borchka, on the Turkish side of the border, is also progressing.