Roundup: Hydropower: A potential growth booster in Georgia
Thursday, February 10, 2011 2:35 AM

TBILISI, Feb. 10, 2011 (Xinhua News Agency) -- Georgia has turned from an electricity importer to an electricity exporter in only five years.

The abundant hydropower resources in the South Caucasus country has not only made the change possible, but created potential for increasing the exports due to an overlap between Georgia's peak generating capacity and its neighbours' peak demand period in summer.

In 2005, Georgia imported 1.3 billion kilowatt/hours of electricity to tide the country over during rehabilitation of its Enguri hydropower plant. In 2010, however, the country exported 1.3 billion kilowatt/hours of electricity to Armenia, Azerbaijan, Russia and Turkey.

Georgia generated a total of 10 billion kilowatt/hours in 2010 using only 15 to 18 percent of its potential hydropower resources of 2.7 gigawatts.

The country ranks atop the world in per-capita hydropower resources, thanks to its 60,000 km of river flows with a combined fresh-water supply of 96.5 cubic km.

The government has therefore planned to attract 1.7 billion U.S. dollars in the next four years to help further develop the country's hydropower generating capacity by adding another 1,000-megawatts in electricity generation.

Georgia's major competitive edge for exporting electricity is its low production cost. One kilowatt/hour of electricity produced in Georgia costs five to six U.S. cents, whereas the same unit in neighboring Turkey, for example, sells for at least 10 cents.

The government signed a 1-billion-U.S.-dollar deal with a South Korean-Turkish consortium last year to build three hydropower plants and has plans ultimately for 16 such plants. Two are currently under construction with a designed generating capacity of 121 megawatts.
To cash in on the country's hydro electricity export potential, Georgia is adding two 500-kilowatt high-voltage transmission lines which, once connected, will enable Georgian electricity to be exported as far afield as Syria and Iraq.

Construction on one of the lines started in 2009, with 294 million U.S. dollars worth of preferential credits from the European Bank for Reconstruction and Development (EBRD), the European Investment Bank and the German Banking Group KFW.

Though Georgia's Deputy Energy Minister Mariam Valishvili has said her country will become a leading regional hydropower generator in 10 years' time by exporting at least 10 billion kilowatt/hours a year, the country's ambition and strategy have their Achilles' heel.

First and foremost, the South Caucasus country needs funds and investment to materialize its hydropower expansion strategy; and last but not least, it is facing protests from environment and non-government organizations (NGOs) over the impact of dams and plants.

The total funds needed to fully implement Georgia's hydropower strategy is estimated to be about 6 billion U.S.