Georgia bets on water and wind to become regional power exporter

Georgia might be hydrocarbon-poor, but the Caucasian country has its eyes set on becoming an important power exporter to its much larger neighbours Iran, Russia and Turkey. Endowed with a sizeable hydroelectric power potential and untapped wind and solar capacity, Tbilisi is pursuing the development of renewable energy as a way not just to reduce greenhouse gases, but also to increase generation capacity for energy security and eventually exports.

Energy security has always been a touchy subject in Georgia, where suspicion of Russia, its traditional gas supplier, forced a change in strategy to buy gas from neighbouring Azerbaijan when the latter launched its gas production in 2007. Georgia has since built up its power generation capacity to cover most of its needs during the year, but still relies on gas imports during peak times in winter. Georgians perceive this dependence as a sign of weakness, since it has involved talking to Russia again.

Hydropower might, therefore, be the answer to Georgia's geopolitical and energy concerns. That is because the mountainous and river-crossed country is the uncontested leader in hydropower in the Caucasus, boasting a technical capacity of 80 terawatts (TW). Even though the country is building and planning 31 new hydropower plants (HPPs), in addition to the existing 66 HPPs, less than a quarter of its hydropower potential is being utilised.

Building HPPs, particularly small-scale ones, has become a government priority and is promoted through several instruments, such as public funds like the Georgian Energy Development Fund and the JSC Partnership Fund. But by far the biggest sponsor of hydropower in the country in recent years has been the EBRD, which has lent Tbilisi over $350mn for such projects to date. Over the years, the bank has financed up to ten renewable energy projects.

In November, the bank disclosed its intention to adopt a more holistic approach to its renewable energy projects in Georgia by developing a low-carbon framework through which it would co-finance up to $350mn worth of medium-sized projects ranging from 10 to 60 megawatts (MW) in installed capacity. The framework would further increase the share of privately owned generation plants in Georgia, where the government owns about 45% of the domestic capacity.

“Larger projects have an easier time attracting foreign investment, because the amount of due diligence and investment does not increase proportionally with the size of the project. Therefore, foreign investors choose to invest in larger projects, while small and medium projects are normally developed by local investors or international companies that do not necessarily have expertise in the sector,” David Managadze, principal banker at the EBRD, explains in an interview with bne IntelliNews. “By developing the low-carbon framework, the EBRD wants to send a strong signal that it is supporting the [energy] sector in Georgia.”

Georgia's hydropower development drive has not been without controversy, though. Non-governmental organisations like the Green Alternative have long protested against the impact of dams and HPPs on settlements located downstream and the lack of environmental due diligence for some of the projects, such as the Dariali HPP located on the Teriali River, close to the border with Russia. While Managadze insists the EBRD ensures all of its projects have environmental permits from the government, Green Alternative contends these permits are based on data about river flows that is more than 30 years old, and that some of the HPPs are built on the territory of national reserves, while others require communities living downstream to be relocated.

Seeking to diversify its portfolio away from hydropower – and the surrounding controversy – the EBRD has begun to invest in another resource that is abundant in Georgia, namely wind, by co-financing the first commercial wind farm in the Caucasus in Gori, eastern Georgia, in collaboration with the energy ministry and the state-owned Energy...
Development Fund. The farm is a pilot project that will “demonstrate the viability of such projects in Georgia”, says Managadze. If Gori is successful, the EBRD has the appetite for more such projects, Managadze says, particularly since it “is getting signals from investors that there is an interest in financing wind farms in Georgia”.