

# BETWEEN ORIENT AND OCCIDENT

Located in the Caucasus region between the Black and Caspian Seas, both geographically and culturally Georgia is part of Europe. The economy traditionally revolves around tourism and agriculture. There is also a relatively small industrial sector. Though economic growth has still not recovered fully, it is in an upswing – driven by markets characterized by low-regulation, low-tax, and free market policies, as well as social spending.

The country produces most of its energy needs through hydropower, which is the only significant energy resource in Georgia. Natural gas and oil products have to be imported. A total installed hydropower capacity of about 3,164 MW produces some 9,210 GWh annually, covering 80% of national electricity supply. Nonetheless, with several hundred rivers Georgia still has an impressive technically feasible hydropower potential of about 80,000 GWh/year.

To boost economic growth, reduce dependency on imported fossil fuels and strengthen and stabilize the national grid, Georgia has signed memoranda of understanding with the EU and China. These deals are designed to enable the financing of new hydropower projects and the rehabilitation of existing hydropower plants. By the end of 2017, Georgia had signed agreements with developers for 124 hydropower projects, representing a total capacity of some 3,747 MW and a combined output of almost 15,000 GWh annually.

As a result, numerous hydropower projects are currently under construction or in the development and planning phase as Georgia intends to at least double the national power output. Georgia wants both domestic and foreign investments to not only harness the national hydropower potential, but also to take advantage of a newly-commissioned Black Sea transmission line for power exports to Turkey.

### ANDRITZ HYDRO IN GEORGIA

Since the 1950s, ANDRITZ Hydro and its predecessor companies have been executing hydropower projects in Georgia. In total, we have delivered 28 units with a total capacity of 362 MW across 14 hydropower plants. With the

interesting investment potential in Georgia ANDRITZ Hydro decided to open a representative office in the capital city of Tbilisi. This office supports local activities and allows the company to closely follow the hydropower project landscape. Currently, four hydropower plants with eight units and a total capacity of 352 MW are under construction in Georgia. Major projects such as Avani, Dashbashi, Orozmani, Khadori, and Zhoti have to be mentioned in the context of modern Georgian hydropower development and ANDRITZ Hydro.

## **DARIALI, TERGI RIVER**

For the Dariali hydropower plant the scope of the supply for ANDRITZ Hydro comprised the entire electro-mechanical equipment including three 37 MW Pelton turbines and generators, GIS switchgear and the generator step-up transformers. At the time the contract was signed, Dariali was the largest privately owned hydropower plant in Georgia. Since commissioning, the plant has been providing renewable and sustainable electricity to the Georgian national grid.

#### **GENERAL FACTS**

Population: 3,717 Mio.

Access to electricity: 100%

Installed hydro capacity: **3,164 MW** 

Hydro capacity under contruction: 1,505 MW

Share of generation from hydropower: 80%

Hydro generation per year: 9,210 GWh

Technically feasible hydro generation potential: 80,000 GWh

#### ANDRITZ HYDRO IN THE COUNTRY

Installed and/or rehabilitated capacity: 362 MW

Installed and/or rehabilitated units: 28

Locations: Tbilisi

TO KNOW