

# TRADITION MEETS FUTURE

With an economy based mainly on services and industry, the Czech Republic or Czechia is a prosperous market economy with one of the highest GDP growth rates in the EU (4.5%). Exports account for more than 80% of GDP with the automotive industry particularly significant – one of Central Europe's largest automobile companies calls Czechia home, for example.

Czechia has some 2.2 GW of installed hydropower capacity and a yearly production of about 2,000 GWh, making the Czech hydropower market relatively small. Hydroelectric energy covers only 2% of national production but the country's three pump-storage plants - with an installed capacity of 1.2 GW - produce some 1,200 GWh of flexible energy annually, which is highly regarded for balancing during peak-load and low-consumption periods.

The technically feasible hydropower potential is only about 3,380 GWh/year, of which some 60% has already been developed. Hence, major upgrades and modernization of the existing hydropower plant capacity is the current industry focus for the Czech Republic.

## ANDRITZ HYDRO IN CZECHIA

The history of ANDRITZ Hydro in the Czech Republic started in 1991, when a subsidiary of SAT-Automation was

Ceské Budejovice, South Bohemia



established in Prague and started to develop control systems for the energy transmission and distribution sector. All significant Czech hydropower plants have been modernized during the subsequent years with a control system supplied by ANDRITZ Hydro. Prague-based engineers have since expanded their activities into international projects. Indeed, as our engineers share their experience with international commissioning teams worldwide, Czech footprints are found in hydropower plants around the globe.

### **CESKE BUDEJOVICE, SOUTH BOHEMIA**

After 80 years of operation, the old units at this plant reached the end of their lifetime and had to be replaced. We received a contract for three double-regulated vertical Kaplan turbines, including oil supply units, supervision of installation, commissioning and training. Design adaptions and modifications were necessary to enable delivery via ship navigation on the Vltava River and to increase the output of the plant. Ceské Budejovice was successfully recommissioned in 2012.

#### **GENERAL FACTS**

Population: 10,6 Mio. Access to electricity: 100%

Installed hydro capacity: 2,264 MW

Share of generation from hydropower: 2.2% Hydro generation per year: 1,870 GWh

Technically feasible hydro generation potential: 3,380 GWh

### ANDRITZ HYDRO IN THE COUNTRY

Installed and/or rehabilitated capacity: 2,150 MW

Installed and/or rehabilitated units (incl. control systems): 38

Locations: Prague, Ceske Budejovice