

State-of-the-art technology for fish-friendly design and Mini-Grid solutions



Dear Business Friends,

With some 22% of the world's demand for electricity currently generated from renewable resources, the 74% of that total coming from hydropower already makes it by far the largest clean power contributor. Many developing countries have now also started to realize the low and very low head hydropower potential of their rivers. For all modern hydropower applications optimization across a range of economic parameters and environmentally-friendly solutions are crucial. Fish migration has become a highly significant issue, for instance. ANDRITZ HYDRO is fully committed to the continuous development of fish-friendly solutions for hydropower turbines and structures, and has been for decades. The cover story in this edition of HydroNews provides an overview of the ANDRITZ HYDRO design strategy to ensure high survival rates where fish populations encounter hydropower developments.

In a generally very challenging energy market, global investment in hydropower plants has remained buoyant and project activities have reflected this stability in recent years. ANDRITZ HYDRO continues to make its contribution with unique projects all over the world. Recent examples include contracts for the three-nation Rusumo Falls project in Rwanda, the fish-friendly solution at Rock Island in the USA, Nam Na 1 in Vietnam and Dnipro 1 in the Ukraine. Originally built in 1932, Dnipro is still the largest hydropower plant in the country and is now being refurbished and the existing generating equipment replaced.

Around the globe, the market for small and mini hydropower is steadily growing. Besides numerous new projects, older and less efficient sites are being modernized and refitted. An example is the historically significant Chaudière Falls site – in the heart of the city of Ottawa, Canada, the country's oldest operational hydropower plant, where the most powerful ECOBulb* turbines to date have been installed by ANDRITZ HYDRO.

Rural Electrification is also becoming a very important element of the hydropower market. To meet this demand ANDRITZ HYDRO has developed special Mini-Grid solutions for off- and micro-grid applications to bring electricity to remote areas and support economic development.

The experienced ANDRITZ HYDRO employees remain very active in project execution worldwide – as the current engagements in Angola, Brazil, Lao PDR and Switzerland demonstrate. With evolving requirements for environmentally-friendly and economic hydropower solutions, new possibilities for small and mini-hydro, as well as refurbishment and rehabilitation opportunities, ANDRITZ HYDRO is confidently looking forward to the future hydropower market.

With kind regards
and sincere thanks for your continued trust,


Wolfgang Semper


Harald Heber