Japan is the fourth largest economy in the world by Purchasing Power Parity (PPP) and world-leading in the automotive and electronics industry. However, with no significant natural resources, Japan is strongly dependent on imported energy and raw materials. This is even more of an issue since the tsunami disaster of 2011, which impacted the nation's nuclear generation fleet. In order to strengthen the economy, the government has now implemented an economic program including liberalization of the electricity and gas sectors.

Total installed hydro capacity in Japan is about 49,050 MW. Of this total, 27,470 MW is pumped storage, which puts Japan second in Asia after China. Three major pumped storage plants are also under construction and are soon to be commissioned. Japan is aiming to double generation from renewables to become more self-sufficient. Generation from solar PV has grown by a factor beyond 25 since 2011. This increases demand for energy storage requirements. Although the sites for large-scale hydropower are already utilized, some interesting opportunities for small hydropower do exist.

## ANDRITZ HYDRO IN JAPAN

The activities of ANDRITZ in Japan reach back to the beginning of the 20th century with first deliveries taking place in 1907. Since then more than 500 units with a total output of about 1,060 MW have been delivered, installed and/or rehabilitated in the country. ANDRITZ also has major activities underway with Japanese investors in markets outside of Japan.



Marie-Antoinette Sailer



Population: 126.53 million

Access to electricity: 100%

Installed hydro capacity: 21,580 MW

Share of generation from hydropower: 8.4%

Hydro generation per year: 79,100 GWh

Technically feasible annual hydropower potential

per year: 284,600 GWh

## **ANDRITZ Hydro:**

**ENERAL FACT** 

Total installed / rehabilitated capacity: 1,060 MW

Total installed / rehabilitated units: 503

Location: Tokyo

 $\hbox{E-Mail: } \textbf{contact-hydro.jp@andritz.com}$