

Japanese Policies Related to New and Renewable Energy & Grid Integration
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Starting with the “Sunshine Project” in 1974, Japan’s Ministry of Economy, Trade and Industry (METI) has been promoting a renewable energy RD&D policy. One component of this policy was providing subsidies for residential PV systems from 1993 to 2005, allowing the creation of a PV market, and thereby facilitating a decrease in system costs. Last year, Japan’s cabinet set an “Action Plan for Achieving a Low-Carbon Society” that calls for a ten-fold increase in PV capacity by 2020, and a 40-fold increase by 2030. The past experience, current situation and the future forecasts laid out in Japan’s policy for promoting the use of renewable energy sources will be introduced in this presentation.

This rapid or widespread installation of renewable energy systems promoted by Japan may, however, have a negative impact on electricity grids, including the destabilization of voltages and/or frequencies. Because Japanese grid capacity is rather small compared with Europe or the US, measures to stabilize the grids and address the cost burden are under consideration in Japan. In this presentation, the state of Japan’s electric grid system and some analysis of options for grid stabilization measures will be addressed from the technological and policy perspectives.