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Noriko Kawakami

Senior Fellow

Toshiba Mitsubishi-Electric Industrial Systems Corporation (TMEIC)

Power Electronics Systems Division

Fuchu, Tokyo, Japan

Ph.D. IEEE Fellow Professional Engineer (Electrical & Electronics Engineering) IEEJ Fellow



Abstract

Title: Power electronics technology contributing to carbon neutrality

At COP27, held in Egypt in November 2022, the agreement reached at COP26 to limit the increase in global average temperature to 1.5°C was maintained and emphasized its importance. At the G7 Environment Ministers' Meeting held in Sapporo, Japan, in April 2023, it was clearly stated that the introduction of renewable energy will increase, including an increase of 150 GW of offshore wind power and 1 TW of PV generations, and that hydrogen and ammonia will contribute to the carbon neutrality of various sectors and industries. To realize a carbon-neutral society, it is also important to reduce CO2 emissions by improving the efficiency of energy consumption. Power electronics technology is involved in all of those aspects. TMEIC continues to develop power electronics (PE) technology under the slogan "PEiE: Power Electronics in Everything" to contribute to carbon neutrality. In this presentation, I will introduce large capacity power electronics technology that contributes to carbon neutrality.