

ICSMARTGRID 2023

11th International Conference on Smart Grid

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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. In order to achieve this goal, Japan's current target of carbon neutrality by 2050 is essential. To realize a carbon-neutral society, it is necessary to use renewable energy sources, improve the efficiency of energy consumption, and reduce CO₂ emissions by promoting electrification and hydrogenation in the industrial field. 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 power electronics technology that contributes to carbon neutrality.