

Analyses on the Achievements of Low Energy Demand Society Induced by Digital Transformation DX and Green Transformation GX

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The trends of global emissions are still increasing while the emissions in major developed countries are decreasing. The world should face the fact of difficulties in achieving carbon neutrality, and seek alternative approaches to meet the early achievement of carbon neutrality. This presentation will provide several cost-efficient scenarios for carbon neutrality and the transition considering several types of uncertainties by using a global energy and climate change mitigation model, DNE21+. The scenarios include the emissions reduction measures by sector for the world and Japan. In addition, the presentation also conveys the consistent and quantitative scenarios on the opportunities of low energy demand societies induced by digital transformation (DX) considering whole energy systems. Based on the analyses, the achievement of green transformation (GX) will be discussed.