Session Title: Grid Integration of Renewables  
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Abstract Title: “Technological development for the large-scale deployment of variable renewable energy and the evaluation method for the global warming gas emission reduction technology”

NEDO has carried out simulations in preparation for the large-scale deployment of variable renewable energy (VRE) across Japan. It has estimated that if the amount of VRE introduced exceeds two times of the amount assumed in the 2030 energy mix, about 15% of the output from VRE may not be effectively utilized due to curtailment. Furthermore, the concept of evaluating the technology development on global warming gas emission reduction in terms of CO2 reduction costs has been proposed. This will include not only VRE but also various new technologies such as biofuels and geothermal power generation.