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Prospective on Policies and Measures for Realizing a Secure, Economical and Low-Carbon Energy System—Taking the Effects of the Great East Japan Earthquake into Consideration

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ABSTRACT

The Great East Japan Earthquake devastated the eastern regions of Japan on this March. Due to the nuclear accident caused by the earthquake, Japan's Cabinet stated to revise energy policies. This article aims at investigating whether we could establish a secure, economical and low-carbon energy system taking account of the serious situation after the Earthquake. For this purpose, we first evaluated possible technology options along with economic options. Then we integrated these options in a computable general equilibrium model for Japan so as to evaluate the impacts to national economy. As results, we quantified the relationships between energy security, quality of life and CO₂ emissions.

KEYWORDS

The Great East Japan Earthquake, Energy Policies, Computable General Equilibrium Model, Technology Options, Quality of Life, CO₂ Emissions.

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