

# Evaluation of Various International Schemes for Climate Change Mitigation after Kyoto Protocol

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For constructing the concrete scheme for climate change mitigation after Kyoto protocol, it is important to estimate the regional costs, to assess technological options for various targets and to evaluate them from the equity viewpoint. Several schemes for burden sharing of CO<sub>2</sub> reduction, e.g. the scheme achieving the convergence of the regional CO<sub>2</sub> emissions per capita, were evaluated by using a new developed world energy systems model having 77 regions. The obtained regional costs, CO<sub>2</sub> reductions, etc. were integrated into some conceptual indices such as burden equity by using a covariance structure analysis. Each scheme was evaluated through those indices.

**Keywords:**

Energy systems model, Climate policy, Kyoto protocol, Post-Kyoto regimes, Burden sharing