

Session IX Low Carbon Society toward 2050 Project

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Overall of Low Carbon Society toward 2050 Project

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Japanese climate policy scenarios toward 2050

Background:

- UK, Germany, France, Sweden,,,,: Long term climate strategies, reducing GHGs drastically toward 2050. Are those the paths we should follow?
- In UNFCCC and Japan: Beyond Kyoto Issue started. Quantitative base required.

Goal:

- To explore the possible paths to low carbon society in Japan toward 2050.
- Major output: GHG emission scenarios
- Various related research works.
 - How should we set policy target? (stabilization target, international burden sharing, sustainable development,,)
 - What technological and societal changes need to be introduced and how? (Options, Policy and Measures)
 - What implications these scenarios pose to future Japanese economy and society? (Evaluation of policies)

Japanese climate policy scenarios toward 2050

Study Japanese options toward climate sustainability





Change rates of energy/carbon intensity



Change in carbon intensity excluding carbon capture and storage (CCS)

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Change in carbon intensity with CCS

Historical change rates for the past 40 years, and projections, are connected with change rates in the 1990s. Dashed lines, having a lope of -1, represent positions in which a 50-90% reduction is achieved over 50 years with 1% GDP growth.

(Source: Kawase et al. 2005)

Path toward Low Carbon Society Masui:AIM20005



Energy Saving devices Energy Supply change Urban System Change Industry Structure Change Information Technology Renewable energy Consumption Behavior