

1 Page Summary for 2012 AIM International Workshop

Title: How to Develop National Low-Carbon Scenarios with AIM/CGE Basic Country Model

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1. Background

In order to achieve global Greenhouse Gas (GHG) emission reduction targets, individual targets and actions toward low carbon society for each country and region are required. Qualifying the targets and actions, which are so called low carbon scenarios, is urgent task especially for Asian region including rapid developing countries. To clarify future vision from the aspect of low carbon society, and develop the steps to the vision is the most crucial task for developing countries in the phase of constructing fundamental social structure.

When considering low carbon scenarios, cooperation among domestic and international researchers is important because interactive scenario development makes it possible to generate realistic scenarios based on actual nation's situation and vision. In addition, taking account of economic effects from low carbon actions is necessary to consider low carbon scenarios comprehensively.

Based on above points, it is suggested to apply AIM/CGE Basic country model, which is an economic computable general equilibrium model, to Asian regions in order to develop national low carbon scenarios. Future socioeconomic assumptions are set based on national and international reports, and interactive discussions about the scenarios among national and international researchers support to form national low carbon scenarios reflecting actual national situation and vision.

2. Outline

The target of this study is to develop national level low carbon scenarios with AIM/CGE Basic country model reflecting each target country's situation. The target countries and regions are China, India, Indonesia, Japan, Korea, Malaysia, Taiwan, Thailand, Vietnam, Singapore, Philippines, other east Asia, other south Asia, other south east Asia, and Oceania. The target year of this study is 2050, and in 2050, it is assumed to achieve 50% reduction of GHG from 1990 levels globally. The burden sharing of GHG reduction among countries and regions is mainly based on the idea that emission per capita is equal all over the world. Future socioeconomic assumptions are set based on national and international reports, and interactive discussions among national and international researchers.

3. Progress

Applying AIM/CGE Basic country model to China and India has already launched. A bunch of reports related to country level future scenarios has collected and analyzed, and specific reports are chosen as main national references for this study; reports from Energy Research Institute for China, and references from Indian Institute of Management, Ahmedabad for India. Results from AIM/CGE Basic model with information from these references are shown in the presentation. The results are still in progress, and comments and discussion about the results are requested.