

**B-54 Special Collaborative Studies for Applying the Asian Pacific Integrated Model (AIM) to Assess Global Warming Abatement Policies with Developing Countries (Final Report)**

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The Asian-Pacific Integrated Model (or AIM for short), is a large-scale computer simulation model for assessing policy options to stabilize the global climate, particularly in the Asia-Pacific region, from the two perspectives of reducing greenhouse gas emissions and avoiding the impacts of climate change. During the last six years, most of the AIM prototype modules have been developed. This project intends to apply and improve the AIM model to policy design and international policy assessment process in conjunction with foreign research institutes, especially in developing countries.

This project is made up of three sub-projects. The first aims to assess greenhouse gas emission scenarios and climatic impacts scenarios based on the AIM model, and to reflect them to the actual research needs including policy design. The second will develop and improve the previous AIM model in order to support the above. The third has the objective of comparing the AIM model and its simulation results with other integrated models, and of transferring the AIM model to Asian developing countries.

The outcomes of these studies are shown in the below Table in relation to the major research needs from international organizations and national governments:

Sub-projects research needs	Scenario analysis Policy assessment	Model development and revisions	International comparisons and training
<b>Response to IPCC</b> • New emission scenarios • Post-SRES scenario • Consequences of Kyoto	Long-term emission scenarios Mitigation scenario analysis Economic impacts on OPEC and Developing countries	Integrated energy-land use emission model development Revision of a world general equilibrium model Simplified climate model dev.	IPCC mitigation scenario Comparison program EMF, OECD comparison program
<b>Response to other inter- national organizations</b> • IIASA • UNEP (GEO) • IEA  • EcoAsia • WWF, etc.	Impact analysis on agriculture Impact estimation on natural vegetation/ water resources Effect of carbon sequestration Assessment of co-policy linkages	Development of vegetation/ water gap models Development of an economic impact model Development of additional country models in Asia	Development of an agricultural impact model
<b>Response to Japan's Gov.</b> • GHG reductions • Local applications • Flexible mechanism	CO2 reduction simulations Local tool development Emission trading/CDM effect	Technology model dev. Development of Mini-AIM World economic model dev.	IEA comparison project EMF comparison project
<b>Response to Asian LDC</b> • China • India • Korea • Regional policy design	China mitigation scenario India mitigation scenario Korea mitigation scenario Asian international studies of policy design	Revision of China model Revision of India model Revision of Korea model	Training workshop in China and India  AIM international workshop