

Assessment of INDCs using AIM/CGE [Global]

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Many countries have already submitted their INDCs (Intended Nationally Determined Contributions), and UNFCCC (United Nations Framework Convention on Climate Change) reported the synthesis report on the aggregate effect of INDCs. In addition to that, many institutes also assess the submitted INDCs. NIES has also assessed the INDCs using the AIM/CGE [Global]. In this presentation, the preliminary results of our simulation is introduced.

The AIM/CGE [Global] is the global general equilibrium model with recursive dynamics. This model covers the all GHG emissions from not only energies but also LULUCF. Based on the SSP2 (middle of the road among the five Shared Socioeconomic Pathways), the global and Asian GHG emissions in 2030 and the beyond. The following is the tentative results;

Targets proposed in INDCs are meaningful and necessary to develop low carbon society. However, achievement of the 2°C target i.e. global mean temperature increase to be below 2°C compared to the pre-industrial level will depend on the revision of INDCs and mitigation measures after 2030. The mitigation measures in Asia, where the GHG emissions are expected to increase, become more important.