# REGIONAL ECONOMIC MODELLING FOR INDONESIA: IMPLEMENTATION OF IRSA-INDONESIA5[*]

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## ABSTRACT

*Ten years after Indonesia implemented a major decentralisation policy, regional income per capita disparity and excessive rate of natural resource extraction continue to be pressing issues. There are great interests in identifying macro policies that would reduce regional income disparity and better control the rate of natural extraction, while maintaining reasonable national economic growth. This paper utilises an inter-regional computable general equilibrium model, IRSA-INDONESIA5, to discuss the economy-wide impacts of various policies dealing with the development gap among regions in the country, achieving low carbon growth, and reducing deforestation. The results of simulations conducted reveal that, primarily, the best way to reduce the development gap among regions is by creating effective programs to accelerate the growth of human capital in the less developed regions. Secondly, in the short-term, the elimination of energy subsidies and/or implementation of a carbon tax is effective in reducing $CO_2$ emission and producing higher economic growth, while in the long-run, however, technological improvement, particularly toward a more energy efficient technology, is needed to maintain a relatively low level of emission with continued high growth. Thirdly, if reducing deforestation means reducing the amount of timber harvested, it negatively affects the economy. To eliminate this negative impact, deforestation compensation is needed.*

*Keywords: computable general equilibrium, development planning and policy, environmental economics*

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