ABSTRACT

The energy sector is one of the important sector in the greenhouse gas emission reduction target, because this sector dominates aggregate emissions in the long term. In addition, emissions in this sector are also expected to continue to increase without intervention efforts. In 2019, the energy sector became the second highest sector contributing to total greenhouse gas (GHG) emissions in Indonesia. Indonesian government will gradually implement a carbon tax with a rate of IDR 30,000/ton CO_2e, which is imposed on the amount of emissions exceeding the set cap. This study aims to analyze the impact of the implementation of a carbon tax on the economy by simulating several possible carbon tax rates, estimating the optimal revenue recycling scheme to mitigate the negative impact of the carbon tax, and determining the contribution of the carbon tax in reducing national CO_2 emissions. Simulation of the impact of carbon tax imposition in Indonesia performed in four scenarios, each using three possible rates with a Computable General Equilibrium approach.

Keywords*: carbon tax, general equilibrium, CGE*