

**INVOLVEMENT AND IMPACT OF EMISSIONS CO<sub>2</sub> FOR THE SUSTAINABILITY OF GREEN  
ECONOMY IN INDONESIA: ARDL APPROACH**

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**ABSTRACT**

Indonesia is considered one of the developing countries with the highest carbon emissions in Asia. Indonesia faces significant pressure to limit its emissions. However, the Indonesian government has made major efforts to reduce emissions and set low-carbon economy goals. This research was conducted to determine the factors that influence CO<sub>2</sub> emissions and to find out how green economy financing and sustainable economic development function to measure carbon intensity. This research uses four indicators to look at factors that influence carbon emissions (Co<sub>2</sub>), namely Gross Domestic Product (GDP), Foreign Direct Investment (FDI), Gross National Expenditure (GNE), and population density. The data used in this research are all industrial sectors in Indonesia spanning the years 1990 - 2022. The analytical methods used are Autoregressive Distributed Lag (ARDL) Approach. The findings show that the DEN variable has a positive and significant influence on CO<sub>2</sub> emissions in both the long and short term. The GDP variable shows a negative and significant effect on CO<sub>2</sub> in the long term, but the FDI and GNE variables do not show a significant effect on CO<sub>2</sub> emissions in the long term.

**Keywords:** Carbon Dioxide Emissions (Co<sub>2</sub>), GDP, GNE, FDI, DEN.

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