ABSTRACT

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THE IMPACT OF GROSS DOMESTIC PRODUCT GROWTH AND ENERGY CONSUMPTION TO CO2 EMISSION IN INDONESIA

(xxii + 35 pages; 6 tables; bibliography; appendix)

Ever since the first universal call for action from United Nations with introduction of 17 Sustainable Development Goals (SDGs) in 2015, all countries have begun their journey to achieve the goals set by 2030. Developed countries such as US, EU are market leaders and setting a high bar in progressing along the way, in contrary to developing countries. The maturity gap could be easily spotted from as simple as the regulation and framework between the countries. Lagging in the sustainable agenda implementation in developing countries deriving from combination of capabilities building, low awareness, and availability of solid framework. In this article, the focus is a call for Climate Action with reference to UN 17 SDGs number 13, Paris Agreement, and further into Carbon market opportunity under Kyoto Protocol, as one of the catalysts to decarbonize in the Indonesia economy context. The objective of this research is to address question on why Climate risk matters by investigate the relationship between the GDP, energy consumption and CO2 emissions both in short-term causality relationship and long-term cointegration. The research use panel unit root analysis, Johansen's co-integration analysis and Granger causality test based on error correction model for the dataset 1971 to 2014. The result indicates that in the short run, there is one-way causality from energy consumption to CO2 emission. While in the long run the result supports the presence of cointegration relationships between variables.

Keywords: CO2 emission; Energy Consumption, GDP; UN 17 SDGs