

**Abstract**  
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**Incidence of energy consumption, mining sector and economic growth on CO<sub>2</sub> emission levels, evidence from Peru**

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Environmental pollution and its harmful effects have become a growing topic of study in recent years because the exploitation of resources, rationalized by the prevailing desire for economic growth, is going to directly affect the sustainability of our existing ecosystem in the coming decades. This is considering that there are productive sectors that have a larger environmental footprint, such as the mining industry. This study focuses on establishing the relationship between the variables of energy consumption, GDP per capita, and mineral rents and their impact on the level of pollution by CO<sub>2</sub> emissions in the period 1971–2019, using the Environmental Kuznets Curve (EKC) theory. To this end, we used statistical and econometric tools based on the ARDL dynamic model through a time series analysis. We concluded that the variables Electricity Consumption per capita, PBI per capita, and Mineral Rents present positive effect, increasing the level of environmental pollution by CO<sub>2</sub> emissions.

**Keywords:** Environmental Kuznets Curve, Gross Domestic Product, Dynamic Model, ARDL.

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