# The Long-Term Impact of Renewable Electricity Production on Financial Development: Evidence from a Global Panel

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### **Abstract:**

Energy production and the use of energy from renewable sources are one of the most critical issues of today. The increasing population and consequently the increase in the energy need of industrial facilities, and the recent Russia–Ukraine war also emphasize the importance of energy security and energy today and in the future. Therefore, energy demand will increase in the future and it will become a necessity to meet this demand safely. The production of energy has become one of the most important indicators of financial index and financial development. This thesis investigates whether is there a significant long-term relationship between electricity output and the financial index and financial development for a panel of 144 countries spanning the period 1991–2020. To explore these linkage, Pedroni and Kao cointegration tests are employed, followed by FMOLS and DOLS analyses. These methods help identify the strength and direction of the long-term associations among the variables and provide more accurate estimates of the relationships. In the findings of the research, it was observed that electricity produced from renewable energy sources has a long-term positive impact on financial development and financial index.

# **Keywords:**

Green Energy, Financial Development, Renewable Energy, Green Finance.