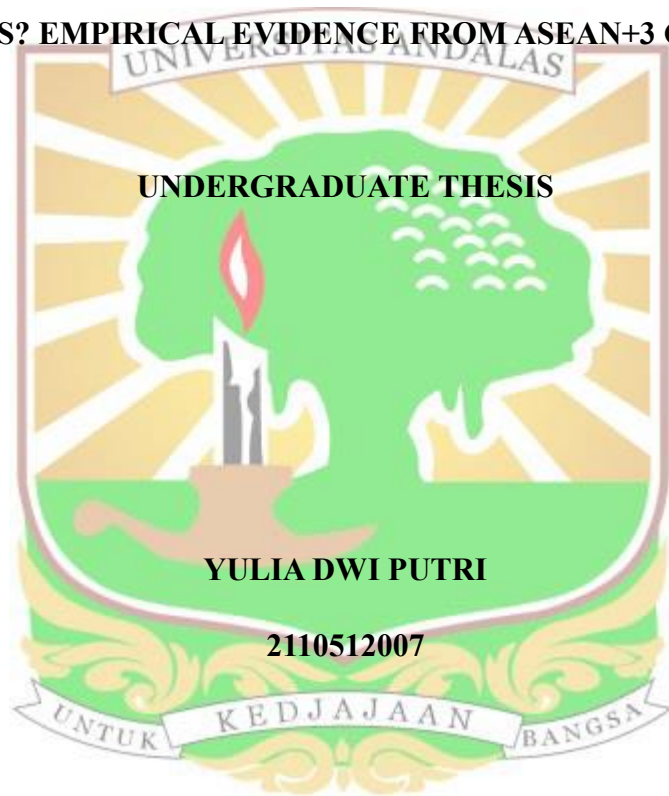




UNIVERSITAS ANDALAS

**DOES RENEWABLE ENERGY INVESTMENT REDUCE CARBON
EMISSIONS? EMPIRICAL EVIDENCE FROM ASEAN+3 COUNTRIES**



UNDERGRADUATE THESIS

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Does Renewable Energy Investment Reduce Carbon Emissions? Empirical Evidence From ASEAN+3 Countries

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This study examines the dynamic relationship between renewable energy investment and carbon dioxide (CO₂) emissions across ASEAN+3 countries from 2000 to 2020. Using the Cross-Sectionally Augmented Autoregressive Distributed Lag (CS-ARDL) model. The results reveal that renewable energy investment has not yet consistently contributed to the reduction of CO₂ emissions in the region, supporting the PHH, and there is no evidence of the EKC hypothesis based on GDP and GDP square. These findings highlight the importance of improving the quality and efficiency of renewable energy investment, promoting industrial transformation, and ensuring a balanced energy mix to achieve sustainable decarbonization across ASEAN+3 economies.

Keywords: Renewable energy investment, EKC, Carbon emissions

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