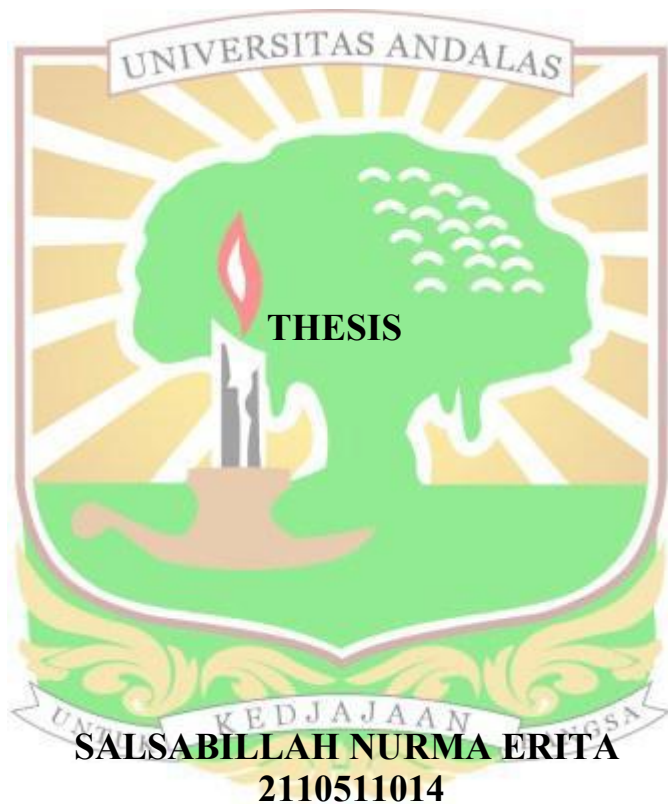




**UNIVERSITAS ANDALAS**

**Evaluating ETS Implementation to Mitigate CO<sub>2</sub> Emission**



**Thesis Advisor:**  
**Dr. Betty Uspri, S.E., M.si**

**FACULTY OF ECONOMICS AND BUSINESS**  
**DEPARTMENT OF ECONOMICS**  
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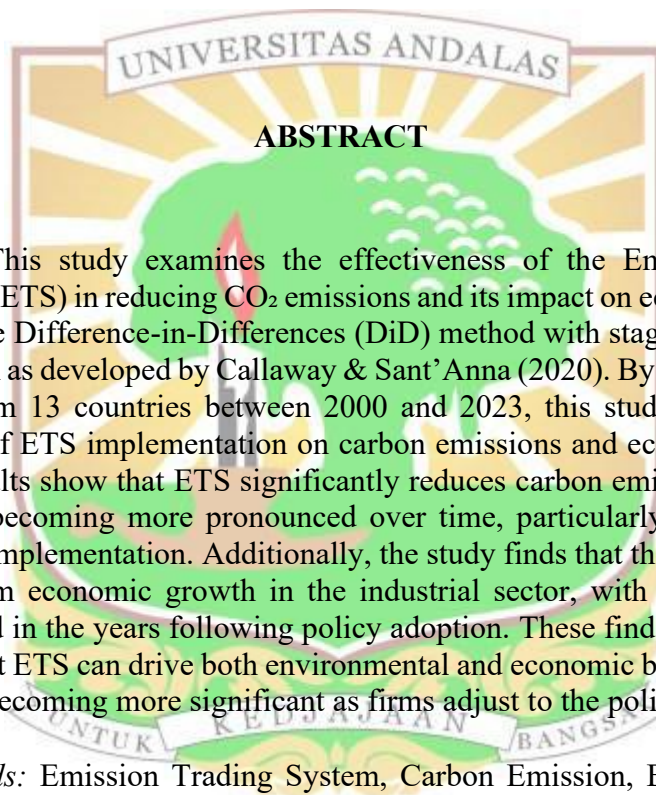
# Evaluating ETS Implementation to Mitigate CO<sub>2</sub> Emission

By

Salsabillah Nurma Erita

2110511014

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## ABSTRACT

This study examines the effectiveness of the Emission Trading System (ETS) in reducing CO<sub>2</sub> emissions and its impact on economic growth using the Difference-in-Differences (DiD) method with staggered treatment adoption as developed by Callaway & Sant'Anna (2020). By analyzing panel data from 13 countries between 2000 and 2023, this study compares the effects of ETS implementation on carbon emissions and economic growth. The results show that ETS significantly reduces carbon emissions, with the impact becoming more pronounced over time, particularly after the third year of implementation. Additionally, the study finds that the ETS promotes long-term economic growth in the industrial sector, with positive effects observed in the years following policy adoption. These findings support the view that ETS can drive both environmental and economic benefits, with the effects becoming more significant as firms adjust to the policy over time.

*Keywords:* Emission Trading System, Carbon Emission, Economic

Growth

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