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# **The Impact of Climate Change on Financial Efficiency and The Financing Choices of Electricity Industrial Companies: Evidence from Vietnam**

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## ABSTRACT

**Purpose:** This study investigated the impact of climate change on the performance and financing choices of Vietnamese industrial electricity companies.

**Design/Methodology/Approach:** The sample included panel data on 40 listed power companies in Vietnam between 2003 and 2022. The fixed-effect two-ways regression model is used to estimate the effect of intrinsic characteristics of individuals in a panel data.

**Findings:** The study found that the energy industry, increasing temperature, rainfall, and the frequency of natural disasters reduced financial efficiency, decreased working capital, reduced the use of long-term debt, increased short-term debt, and increased cash holdings. Notwithstanding, we find that an increase in greenhouse gas emissions appears to be associated with outcomes in a somewhat opposite direction for these industries: an increase in financial efficiency, an increase in the use of long-term debt, a reduction in short-term debt, an increase in working capital, and a reduction in cash holdings.

**Research limitations/implications:** This study has certain limitations that need to be recognised and addressed, such as allowing for a more realistic assessment of the direct and indirect investment capital in the energy sector. Financial institutions should also be added to the sample so as to provide additional input to the evaluation of the financial performance and funding policies of the energy enterprises.

**Practical implications:** Reducing greenhouse gas emissions is an important responsibility of companies with high greenhouse gas emissions, such as the energy and electricity industries. Therefore, companies in these industries are called on to increase their investment in environmentally friendly power generation technologies, such as biomass, wind, and solar power, or improve the wastewater treatment technology of thermal power plants. Our natural forest area has been reduced due to the construction of hydroelectric dams.

**Originality/value:** Our findings provide empirical evidence of the impact of climate change on the financial performance and choice of industrial electricity companies listed on the Vietnamese stock market.

**Keywords:** Corporate Finance, financing choice, climate change, Energy, Environmental Impact, Vietnam

**JEL Classification:** G32, Q40, Q54

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