## ASSESSING THE EFFECTIVENESS OF THE EU ETS THROUGH THE OIL AND GAS SECTOR

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## **ABSTRACT**

Following the initiation of the European Union Emissions Trading Scheme (EU ETS) in 2005 the scheme has received significant criticism pertaining to a lack of transparency in its operational mechanics and an inability to present conclusive evidence that it has encouraged a reduction in monitored emissions. This study utilizes an adaptation of the event study methodology proposed by Ball and Brown (1968) and Fama et al. (1969) in order to assess the impact of the EU ETS upon emissions in the European oil and gas sector as a sample reflective of the scheme on the whole. In doing so, this study compares the annual emissions of carbon dioxide, nitrous oxide and methane for dual listed, single listing and cross listed oil and gas companies on the New York Stock Exchange and the London Stock Exchange and how these emissions change over the period 2000-2017; from prior to the EU ETS until the period of most recent data availability. Analysis conducted on the data gathered infers that, while the EU ETS may have exerted some influence on operators' behavior, the scheme has generally been ineffective in achieving its goal of lowering emissions and encouraging economic growth.

This study also explores the limitations of the EU ETS and potential drivers of emissions changes for operators within the scheme. Through such discussion the intention is to better understand the tradeoff between the advantages of cap and trade, a quantity mechanism, and emissions taxation, a pricing mechanism. These mechanisms comprise the majority of the presently adopted emissions policies globally, including the EU ETS, and China's and Canada's emissions trading schemes. Therefore in better understanding the implications and effects of these mechanisms the intention is to contribute to the future adoption and implementation of global emissions policies.

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