

# **A Critical Evaluation of Climate-Related Risks Associated with Oil and Gas Industry in Libya**

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## **Abstract**

Risk is something found almost everywhere, and not managing risks can be extremely costly. This study focuses on climate-based risks associated with the oil and gas industry in Libya. The primary data was acquired through a survey study, where a total of 150 questionnaires were distributed to a targeted population. 71 of the questionnaires returned indicating 47.3% involvement of the survey population. The water related issues are common climate risks, and most of the companies spread climate risks among insurance companies, while others retain and manage these risks. Based on the ranked results, this study illustrates various critical climate risk factors. The top ten of these factors are extremely critical. These include temperatures, lack of water availability and droughts, loss of access to water, loss of peak cooling capacity, air pollution, gas leaks or pipeline explosions, burning of fossil fuels early season delays, damage to coastal facilities, and changes in land use. However, the majority of firms adopt a risk transfer strategy followed by risk response and risk acceptance strategies for treating climate risks. Therefore, there is an urgent need to adopt possible ways to avoid the harmful impacts of climate risks for the improvement of the efficiency of projects.

## **Keywords**

Climate Risks, Oil and Gas Management, Risk Management, Risk-Avoidance Strategies, risk mitigation strategies

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## Biography

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