

## Explore the Effect of Afforestation on Climate Change in The City - Case Study the Kingdom of Bahrain

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### Abstract

This research aims to explore the effect of afforestation on climate change in the city. It provides comprehensive overview of the Glasgow Climate Pact, a landmark outcome of COP26, marks significant progress in global climate action. Adopted in November 2021, the pact formulates a strong strategy to confront Earth's warming challenges. The pact also acknowledges the top importance of adaptation, sustainable land use, and transitioning to cleaner energy sources. Cities worldwide confront escalating climate challenges, from the increasing urban heat island effect to more frequent extreme weather events and rising sea levels. Also, underscore the critical need for adaptation and resilience strategies to protect urban areas from evolving climate dynamics. Bahrain, like many nations, contributes to climate change through fossil fuel reliance and industrial activities. Localized efforts are crucial for global climate initiatives and sustainable practices. In addition, explores Bahrain's commitment to achieve net-zero carbon emissions by 2060, emphasizing the significance of decarbonization, efficiency programs, and renewable energy integration. Post-COP26, Bahrain's National Plan for Afforestation shows ambitious targets for expanding tree coverage and mangrove areas. Moreover, discusses the afforestation strategy's potential impact on greenhouse gas mitigation, along with broader implications for soil quality and environmental changes. The path to resilient cities amid climate change necessitates embracing cutting-edge technologies, smart urban planning, circular economy principles, and international collaboration. Finally, the research offers theoretical and policy suggestions for policymakers and decision-makers to draw upon their quest to achieve a sustainable city in Bahrain.

### Keywords

Component, (afforestation, climate change, Kingdome of Bahrain, COP26.

