

# COLLEGE OF BUILT ENVIRONMENT UNIVERSITI TEKNOLOGI MARA

## FACTORS INFLUENCING A GREEN OFFICE BUILDING MAINTENANCE WORK

Academic Project Submitted in Partial Fulfilment of the Requirements

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### **ABSTRACT**

Green building construction has increased in popularity in recent years to improve community health, environmental sustainability, and overall building costs. However, many have stated that the advantages acquired from the creation of green buildings are typically outweighed by the complexity presented by green buildings throughout the maintenance phase. Researchers and professionals in the building industry have identified several variables that contribute to the difficulty of managing and sustaining green buildings. The goal of this research is to determine what factors of maintaining a green office building are most important. The causes of upkeep for environmentally friendly buildings are investigated in this research. To get insight into this matter, a qualitative approach was used, focusing on the field of property management. Bonanza Venture Holding, a green office building, was interviewed online to better understand the concept of green building practise in maintenance and to identify the factors that influence green building maintenance. NVIVO was used to carry out an analysis of the elements that impact the maintenance of green office buildings and the idea of green buildings. According to the findings, the factors that contribute the most to green office building maintenance work for Menara Jland are safety and health, while for Bonanza Venture Holding Sdn Bhd is the building design and construction is the factor that influence maintenance work. Meanwhile for the concept applied in Menara Jland is the energy efficiency, and for BVH Sdn Bhd are water efficiency, indoor environmental quality and energy efficiency applied.

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## **CHAPTER 1**

## RESEARCH BACKGROUND

### 1.1 Introduction

Investment in environmentally friendly office buildings opens fresh opportunities in the real estate market. Green office buildings, also called sustainable buildings, are those that meet certain criteria and have been certified as such by a credible green Eco-labelling agency in the real estate industry. (Isa et al., 2013a)According to Agadoni. (n.d), a "green office" is a building that minimizes its impact on the natural environment and maximizes its use of available resources. Environment-friendly workplaces minimize energy use and make extensive use of recyclable materials. The result should be less pollution, less energy use, and a healthier ecosystem.

In the 1960s, green office buildings emerged as a popular notion in the following of theenvironmental movement. The increasing cost of crude in the 1970s prompted a. Besides, a construction that is ecologically responsible and resource efficient over the whole of its lifespanis referred to as a "green building." Green Building Index (GBI) is a green grading instrumentfor buildings that is recognize by the industry in Malaysia. The goal of this tool is to promote sustainability in the built environment and create awareness among construction workers on environmental concerns. Widespread interest in environmentally friendly workplaces. The construction of greener, more efficient workplaces officially began. (Zaini, Tun Hussein Onn Malaysia, et al., 2017)