



**COLLEGE OF BUILT ENVIRONMENT
UNIVERSITI TEKNOLOGI MARA**

**THE CHALLENGES AND BEST PRACTICES FOR
GREEN OFFICE BUILDING IN PUTRAJAYA:
THE PROPERTY MANAGERS' PERSPECTIVE**

**Academic Project Submitted in Partial Fulfillment of the Requirements
for the award of the Degree
Bachelor of Estate Management (Hons)**

**NUR AQILAH BINTI JOHARI
2021492124
SEMESTER MARCH 2023 – AUGUST 2023**

ABSTRACT

This research study investigates the challenges of green office building maintenance from the perspective of property managers in Putrajaya. Green office buildings are designed to minimize their environmental impact and enhance sustainability. However, despite their promising features, these buildings often encounter maintenance challenges that hinder their optimal performance and long-term viability. To address this issue, this research aims to explore and understand the specific challenges faced by property managers responsible for maintaining green office buildings in Putrajaya. From literature, several challenges of green office building operations and maintenance can be categorized into five aspects namely technical defects, financial problems, environmental and biological effects; social and cultural problems and political and legal factors. This study took place in Putrajaya as several initiatives have been introduced and policies developed to make in Putrajaya, the administrative city of Malaysia, as a model township for Sustainability and Green Technology. Through qualitative research methods, including interviews with Green Office Building in Putrajaya, this study identifies key challenges that property managers encounter. The findings underscore two prominent challenges: cost constraints and technical issues. Furthermore, the research reveals two significant best practices employed by property managers to address these challenges effectively which were monitor progress closely and implement preventive maintenance plans to ensure the long-term efficiency and sustainability of green office buildings.

ACKNOWLEDGEMENT

Alhamdulillah, first of all I would like to thank Allah SWT for giving me the strength, patience and knowledge to understand the final project and successfully completed it within the time given.

Also, no words can describe how much gratitude and appreciation that I owe to my beloved supervisor, Dr Lizawati Binti Abdullah and not to forget the Academic Project Coordinator and Panel, Dr Nor Nazihah Binti Chuweni and Dr. Asmma' Binti Che Kasim for their valuable guidance and support throughout the completion of this research project.

The insightful feedback and constructive criticism have greatly contributed to my learning and growth. Thank you for helping me navigate this challenging process and for the opportunity to showcase my knowledge.

Last but not least, a full appreciation to each of my parents and all party involved directly or indirectly in support and cooperation throughout the preparation of the research to be completed on time.

TABLE OF CONTENT

CHAPTER	ITEM	PAGE
	Title page	i
	Student's Declaration	ii
	Supervisor's Declaration	iii
	Acknowledgement	iv
	Abstract	v
	Table of Content	vi
	List of Tables	viii
	List of Figures	ix
	List of Symbols/ Abbreviations	x
	List of Appendices	xi
CHAPTER 1	RESEARCH BACKGROUND	
	1.1 Introduction	1
	1.2 Problem Statement	3
	1.3 Research Objectives	4
	1.4 Research Questions	4
	1.5 Scope or Limitation	5
	1.6 Importance of Research	6
	1.7 Research Methodology	7
	1.8 Summary of chapter	9
CHAPTER 2	LITERATURE REVIEW	
	2.1 Introduction	10
	2.2 Definition of terms	10
	2.3 Green Building development in Malaysia	14
	2.3.1 Green Building in Putrajaya	15
	2.4 Challenges Factor in Maintaining Green Office Building	15
	2.5 Green Office Building Maintenance	22
	2.6 Best Practices to Overcome the Challenges of Green Office Building Maintenance	24
	2.7 Summary of chapter	27

CHAPTER 1

RESEARCH BACKGROUND

1.1 Introduction

Construction, operation, and destruction of buildings are known as the main aspects that will affect the environment and city development. Environmental pollution is predicted to expand with population growth, demographic changes as well as economic development. According to the Green Economy Tracker (2021) over 90% of Malaysia's electricity comes from polluting fossil fuels. Thus, a green buildings development was introduced back then in the effort to lower the impact of the development that will bring towards the natural environment destruction. "Environmentally sensitive building is not a particularly recent phenomenon, but the modern practice of green building began emerging in the 1990s" (Fischer, 2010). Green buildings play a powerful part in implementing the work towards sustainable development which is through preserving the environment.

According to the World Green Building Council (n.d), a 'green' building is a building that, in its design, construction or operation, reduces or eliminates negative impacts, and can create positive impacts, on our climate and natural environment. Not only that, green buildings also look after valuable natural surroundings and enhance the standard of our humanity. At a recent time, the development of green buildings has become a trend in the construction industry particularly among those who are aware of the benefits that include not only noble environmental concerns but also profits that can be gained through higher rental rates and incentives from the government such as tax and stamp duty exemption.