

**DEPARTMENT OF QUANTITY SURVEYING
FACULTY OF ARCHITECTURE PLANNING AND SURVEYING
UNIVERSITI TEKNOLOGI MARA,
SERI ISKANDAR, PERAK**

**BARRIERS OF APPLYING GREEN BUILDING IN
CONSTRUCTION INDUSTRY**

Final Project submitted in partial fulfilment of the requirement for the award
of Bachelor of Quantity Surveying (Honours)

**PREPARED BY : ATHIRAH AMANI BINTI AB HALIM (2014401278)
SEMESTER : MARCH 2016 – JULY 2016**

ABSTRACT

Green Building is a concept that used to ensure the sustainability of both building and environment. Presently, the issue on climate changes and emission of greenhouse gas (GHG) has arisen and countries all over the world are starting to controlling and reducing the impacts of their activities towards the environment. It is identified that one of the contributors towards these issues is construction industry. In order to curb this problem, the government of Malaysia has introduced Green Building Index (GBI). A lot of researches and studies has been made on Green Building topic to continuously increase the quality and to increase the awareness of construction parties and public on Green Building. Apparently, the green technology also have become advanced from day to days. However, the implementation of Green Building in Malaysia is still low. Hence, this research is aimed to determine the implementation of Green Building and to identify the barriers in applying Green Building. The objectives of this research are to identify the awareness of Green Building among the construction parties, to determine the implementation of Green Building in the construction industry and to identify the barriers in applying Green Building. The research is conducted using questionnaire survey and were distributed to construction parties that has been involved in Green Building project. The finding shows that most of construction parties are aware about the Green Building although they have different opinion on the benefit of Green Building compared to previous research. The result of the top three barriers in applying green building in this research are lacking of awareness on the benefit of green building, higher capital and material cost, and lack of specialist. The future study on this topic should broaden the scope of population and doing semi interview to add up the existing information.

ACKNOWLEDGEMENT

In the name of Allah S.W.T.

I would like to say thank you and round of applause are given to my supervisor Puan Nurul Huda bt Muhammad, parents, my family and friends that always support and guide me in finishing the dissertation. All your kindness only can be rewarded by Him.

Special thanks also are addressed to all the respondents that were participated in this research. Without them, the objectives of this research cannot be achieved. Your cooperation are greatly appreciated.

Thank you.

TABLE OF CONTENTS

ABSTRACT	i
ACKNOWLEDGEMENT	ii
TABLE OF CONTENTS	iii
LIST OF FIGURES	vi
LIST OF TABLES	vii
LIST OF ABBREVIATIONS	viii
CHAPTER 1	1
INTRODUCTION	1
1.1 INTRODUCTION	1
1.2 PROBLEM STATEMENTS	2
1.3 AIM	3
1.4 RESEARCH OBJECTIVES	3
1.5 RESEARCH QUESTIONS	3
1.6 SCOPE OF RESEARCH	4
1.7 METHODOLOGY	4
1.7.1 Preliminary Stage	4
1.7.2 Method of Data Collection	5
1.7.3 Method of Data Analysis	5
1.7.4 Finding	5
1.8 CHAPTER OUTLINE	7
CHAPTER 2	9
LITERATURE REVIEW	9
2.1 INTRODUCTION	9
2.2 DEFINITION CONSTRUCTION	9
2.3 DEFINITION GB	11
2.3.1 Objectives Green Building	12
2.3.2 Application of Green Building Index	13
2.3.3 Basis of Green Building Index Point	14
2.3.4 Level of Application of Green Building	16
2.3.5 Awarded Building	16
2.3.6 Other Green Building Certifier	17
2.4 AWARENESS	17
2.5 IMPACT NOT APPLY GREEN BUILDING	18

CHAPTER 1

INTRODUCTION

1.1 INTRODUCTION

Statistic taken from green building website shows that urban population is expected to grow at 80% by the year 2030 (Mgbc.org.my, 2016). Unfortunately, this positive development does have some side effects towards the environment such as increasing of energy. The increases mean higher wastage will be produced (Isa *et al.*, 2013)

The handout given by Malaysia Green Building Confederation stated that 25% of overall energy is consumed by the household. Although the percentage seems small, the effect for the long term may include a huge amount of energy. The usage of energy will be increased drastically especially when the booming of economy and technology.

In general, the construction industry is one of the country's backbone and it is the benchmark for measuring the level of development. Sustainability gives a crucial attribution towards economic activities and is increasing from time to time in term of methods of production, qualities of consumption and attribution towards capital investment (Eichholtz and Kok, 2012).

According to Vision 2020, construction industry can lead towards a better level of life. Hence, the government has established National Green Council and organized an organisation that supervises and prepares the assessment for green building in the construction industry. It is also highlights the international involvements of Malaysia in Montreal Protocol and Kyoto Protocol towards the reduction of greenhouse gas emissions and carbon emissions (Oh and Chua, 2010).