

**CENTRE OF STUDIES FOR QUANTITY
SURVEYING
DEPARTMENT OF BUILT ENVIRONMENT STUDIES
&
TECHNOLOGY UNIVERSITI TEKNOLOGI MARA
SERI ISKANDAR**

**THE TREND OF SMALL SCALED SOLAR
APPLIANCES IN RESIDENTIAL BUILDING IN
SERI ISKANDAR**

Dissertation submitted in partial fulfilment
of the requirement for the award of
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**PREPARED BY: AMINUDDIN BIN MAT JUSOH @
YUSOFF**

(2021110307)

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ABSTRACT

Malaysia is a country that is gifted with the diversity of energy resources including fossil fuel as well as various renewable energy sources. This has led to the increase of energy consumption that forces them to seek for alternative energy other than depleting fossil fuel such renewable energy namely solar. Malaysia has the advantageous values in developing its solar energy due to its location in the equatorial zone. Thus, it is important for people to have knowledge of the best way to manage the electricity bills in order to reduce the electric use in home. Practicing a right way to using the small scaled solar appliances will help in controlling and managing the electricity bill at home. This research aims to identify best practices of small scaled solar appliances in residential building in Seri Iskandar, Perak. The objectives of the research to determine the motivation of using small scaled solar appliances amongst residential users, to identify the issue in utility small scaled solar appliances for different residential users and to propose the improvement that can be made to promote the usage of small scaled solar appliances in residential building in Seri Iskandar. For the research methodology, the research will be using census method, and quantitative method with questionnaire survey. The use of census, and questionnaire survey were conducted to fulfill the objective 1 of the research. Furthermore, the use of questionnaire survey was also conducted to fulfill the objective 2 and 3 of the research. As for the respondents of the questionnaire survey, the respondents consist of residential user which have the small scaled solar appliances in their building at Seri Iskandar. The data collection from questionnaire survey were analysed with the use of Statistical Package for Social Sciences (SPSS) version 27. A total of 160 respondents from Seri Iskandar's residential user have been indicate in the process after the sampling method. Solar appliances are less costly and more useful to the community as a whole. If money is a concern, the best option is to install an off-grid system for their own family, making them self-sufficient for all of their electrical needs.

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TABLE OF CONTENTS

	Page
CHAPTER 1: INTRODUCTION	
1.1 Introduction	1
1.2 Problem Statement	3
1.3 Research Aim	5
1.4 Research Questions	5
1.5 Research Objectives	5
1.6 Scope of Research	6
1.7 Research Methodology	6
1.8 Significance of Research	8
1.9 Chapter Outline	8
CHAPTER 2: LITERATURE REVIEW	
2.1 Introduction	10
2.2 Current Scenario in Residential Building	10
2.3 Motivation of Using Small Scaled Solar Appliances amongst Residential User	11
2.4 The Issue of Utility Small Scaled Solar Appliances for Different Residential User	16
2.5 Improvement that can made to Promote the Usage of Small Scaled Solar Appliances	20

CHAPTER 1

INTRODUCTION

1.1 INTRODUCTION / BACKGROUND OF RESEARCH

The solar sector has grown rapidly in recent years and will continue to grow. The influence of solar energy on the energy market has revolutionised residential buildings, resulting in the expansion of solar power and residential structures. Construction companies have teamed together with alternative energy sources to develop large-scale solar installations. The need for residential building develops in tandem with the demand for solar energy. To fulfil the demand for solar energy, construction businesses must modernise their processes to be as lean and efficient as possible.



Figure 1.1: Types of houses in Seri Iskandar