

**PHOTOVOLTAIC MONITORING CENTRE (PVMC)-PROTOTYPE
FOR DETAIL (ANALYTICAL) MONITORING SYSTEM ON
SELECTED PLANTS**

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ABSTRACT

PHOTOVOLTAIC MONITORING CENTRE (PVMC)-PROTOTYPE FOR DETAIL (ANALYTICAL) MONITORING SYSTEM ON SELECTED PLANTS

The daily basis of PV Monitoring Centre data on Monash site and PTM ZEO site is shown in website designed that as one of the result of this project. The main purpose of this project is designing websites which is divided into two stages. Firstly, website designed by basic method using HTML. Then, website is created by installation of web page creator that can be installed from internet or CD installer. Besides that, this project was conducted to analyze the detail (analytical) monitoring data. It was also to encourage public to contribute on the benefits of renewable energy and energy efficiency of photovoltaic. Several steps is taken to achieve these objectives which is installation of IIS (Internet Information Services) into personal computer program, designing website using the basic way which is manually using HTML and major website designed that displayed the detail monitoring data. Then, the data displayed on website is analyzed. From the results, it encountered that there are many ways to display the analysis data attractively and efficient. The both sites PV system performances and how an energy collected is calculate, well understand.

CHAPTER 1

INTRODUCTION

1.1 Photovoltaic

Photovoltaic (PV) is a solar power technology that uses solar photovoltaic array to convert light from the sun directly into electricity. It is also referred as a study relating to this technology and there are many research institutes devoted to work on photovoltaic. The manufacture of photovoltaic cells has expanded dramatically in recent years. The Photovoltaic effect was first discovered in 1839 by Edmund Becquerel, a French physicist, while experimenting with an electrolytic cell. It is emerging as a major power source due to its numerous environmental and economics benefits and proven reliability. Enough free sunlight falls on earth to supply our energy needs for years to come. As PV generates electricity from light, PV produces no air pollution and hazardous waste. It does not required liquid or gaseous fuel to be transported or combusted. Sunlight is free and abundant. PV systems allowed to generate electricity and store it for use when needed. Photovoltaic contributes to our energy security. This energy is free, and highly reliable. PV systems are long-lasting and required little maintenance.