UNIVERSITI TEKNOLOGI MARA
FAKULTI SAINS PENTADBIRAN DAN PENGAJIAN
POLISI

BUILDING-INTERGRATED PHOTOVOLTAICS: TO REDUCE ENERGY CONSUMPTION (HOW TO REDUCE ELECTRICITY USAGE BY USING RENEWABLE ENERGY ESPECIALLY SOLAR POWER) FOR UiTM ALOR GAJAH, MALACCA ACADEMIC BUILDING (A, B, C)

FADZILAH ANUM BT MOHD. RAZUAN
2005752158
MOHD. ZULFITRI B. MOHD. BASIR
2005757181

NOVEMBER 2007

LETTER OF TRANSMITTAL

Fadzilah Anum bt Mohd Razuan
Bachelor of Administrative Science (Hons.)
Faculty of Administrative Science and Policy Studies
Universiti Teknologi Mara
Melaka Campus

Mohd Zulfitri b Mohd Basir
Bachelor of Administrative Science (Hons.)
Universiti Teknologi Mara
Melaka Campus

Tn Hj Abdul Hameed Mydin b M. Mydin
Advisor Lecturer of Applied Research
Faculty of Administrative Science and Policy Studies
Universiti Teknologi Mara
Melaka Campus

Dear Sir,
Submission of Research Report

Regarding to the above subject matter, we hereby submit our research report entitled " Building Integrated Photovoltaics: To reduce energy consumption (How to reduce electricity usage by using renewable energy especially solar power) for UiTM Alor Gajah, Malacca Academic building (A,B,C) as requirement for the completion of Applied Research Project (ADS 554) subject for your kind perusal and retention.

Thank you.

Yours sincerely,

Fadzilah Anum bt Mohd Razuan
2005752158
Bachelor of Administrative Science (Hons.)

Mohd Zulfitri b Mohd Basir
2005757181
Bachelor of Administrative Science (Hons.)

ACKNOWLEDGEMENT

First and foremost, Alhamdulillah and syukur to Allah because give us a chance to finish our assignment on time. We also would like to render our outmost gratitude to Advisor of our Research, Tn Hj Hameed Mydin b M. Mydin for his guidelines and efforts in assisting us whenever we seek for his opinion and advices. She has given us the best input in order to make us understand everything about our assignment.

We also would like to express our most appreciation to UiTM Campus Alor Gajah, Lendu, Melaka for their full support for us to gather the data regarding our study.

We were grateful to those who have helped us in finishing our assignment as well as to our group members for the cooperation and commitment given to our assignment.

Lastly, we would like to thanks our friends and our family for their support and forbearance.

Fadzilah Anum bt Mohd Razuan
Mohd Zulfitri b Mohd Basir
Bachelor of Administrative Science (Honours)
Faculty of Administrative Science and Policy Studies
Universiti Terknologi Mara (UiTM) Kampus Bandaraya Melaka

ABSTRACT

Solar energy plays an important role towards achieving long lasting, sustainable, environment friendly renewable energy resources to fulfill the energy needs for mankind. A type of PV application is the building integrated PV-system (BIPV) producing clean solar power for the electricity grid. Such systems are grid-connected and it is expected that in this century BIPV will contribute substantially to the main-stream power production. To reduce the electricity usage, environmental friendly instrument play an important roles. Building integrated photovoltaic system will not only produce electricity, but also be an integral part of the building envelope, with a specific function such as window shading device, roof, decorative building façade. It improves the aesthetic exterior appearance of the building. The main benefits of building integrated photovoltaic especially in urban areas, it will be the opportunity to utilize PV technology without the need of land use. As the cost of land is significant in urban area, BIPV will allow the utilization of PV technology to generate electricity without incurring the additional cost of the land use. This research done to study whether the existence of solar power reduce electricity usage. Not only that, it also study the effectiveness of solar power rather than electricity usage. Solar system purpose to make it related to the environmental friendly. It will lead to the reduction cost of electricity usage.

CONTENTS