## UNIVERSITI TEKNOLOGI MARA PERAK BRANCH

# INTEGRATED SOLAR PANEL WITH AUTOMATIC COOLING SYSTEM

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Innovation project report submitted in partial fulfilment of the requirement for the degree of

**Bachelor of Science (Hons.) Construction Technology** 

Faculty Of Architecture, Planning and Surveying

**AUGUST 2022** 

**AUTHOR'S DECLARATION** 

I declare that the work in this innovation project report was carried out in accordance

with the regulations of Universiti Teknologi MARA. It is original and is the results of

my own work, unless otherwise indicated or acknowledged as referenced work. This

topic has not been submitted to any other academic institution or non-academic

institution for any degree or qualification.

In the event that my innovation project report, be found to violate the conditions

mentioned above, I voluntarily waive the right of conferment of my degree and agree

be subjected to the disciplinary rules and regulations of Universiti Teknologi MARA.

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#### **ABSTRACT**

Sun's nuclear fusion process creates solar energy. Malaysia, a tropical country, has sun radiation and natural light that may illuminate building interiors year-round. New technology can make advantage of these bountiful resources. "Green" technology doesn't emit greenhouse gases. Solar energy has been used to create electricity and heat for ages. Solar energy may cut greenhouse gas emissions, the research found. Greenhouse gas emissions harm our environment by trapping heat and accelerating climate change. Integrated solar panels, solar panel roof tiles, solar control glass, and rooftop solar trackers may be utilised to reduce this effect. During this research, a number of hurdles and problems have emerged that must be solved to increase solar panels' power-producing potential. This concept for an innovation idea has multiple purposes, the first of which is to identify the current solar technology that is being utilised in developed nations. The second goal is to suggest the enhanced solar technology that would replace the present solar technology, and ultimately, to evaluate the commercial viability of the solar technology that is being suggested. The approach for the creation of the connected subject about the innovation concept of solar panel from the literature review and simulation that will be done using Sketch Up, Key Animation, and Cap Cut to accomplish the goals of the research study. According to the results of the research, the innovative concept offers a more effective way to produce power with the current cooling system, and it also has the potential to be more aesthetically pleasing. As findings, it is thought that this innovation concept would be able to have a beneficial influence, and it may have potential in terms of its marketability as one of the construction parts that is a window in Malaysia.

#### **ACKNOWLEDGMENT**

Alhamdulillah, praise to Allah, the Most Merciful and the Most Graceful. It is my pleasure to acknowledge the roles of several individuals who were instrumental for the completion of my degree research.

First and foremost, I want to thank my family especially to my lovely parents that always support me and give me motivation to finish what I start. I am so proud to have my parents behind me who encouraged me to finish my final year report.

On the other hand, I would like to express my gratitude to my supervisor, Jannatun Naemah binti Ismam who encouraged me to pursue this project and taught me throughout the production process of this report. I truly enjoyed working in research environment that stimulates original thinking and initiative, which she created. His skilful guidance, innovative ideas and stoic patience are greatly appreciated.

Last but not least, I would like to acknowledge the valuable input of Dr. Asmat Binti Ismail, who contributed to many discussions and lectures that helped to shape this project from the beginning of brainstorming ideas to the structural writing of this report. In addition, I would also like to thank my family for supporting me financially and always give me moral support to finish this final report.

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