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SOLAR ENERGY AT HOME

Worth it or Not?

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In today's world, when green energy is becoming increasingly important, numerous residences are considering installing solar energy systems. Monthly power bill payments are lowered by over 90% following installation (Tarmizi, 2024). According to research by Lam et al. (2025), demographic factors such as age, gender, income level, education, monthly power cost, and household size impact the inclination to adopt rooftop solar PV systems. The survey discovered that younger people and those with greater incomes are more likely to utilize solar PV systems. However, while solar energy offers cost savings and environmental sustainability, the major concern is if it is truly worth it. This article will look at the benefits, installation costs, upkeep, government incentives, and if it is a good investment in the long term.

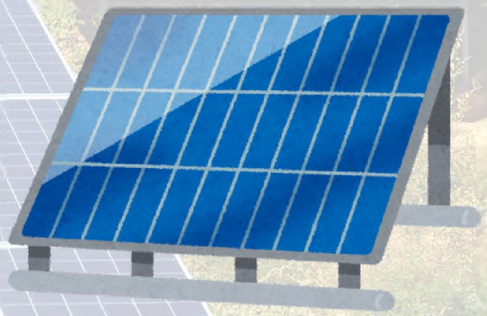
The Government Offer

The Malaysian government vigorously supports the use of green energy and provides numerous incentives to residences that install solar panels. The government launched the Solar for Rakyat Incentive Scheme (SolaRIS) on March 27, 2024, as part of the Net Energy Metering (NEM) initiative, to stimulate the installation of photovoltaic PV) solar systems in residential premises. This project allows residents to get cash refunds of up to RM4,000 based on the registered installation capacity.

For example, every 1kWac of installation is eligible for a RM1,000 reimbursement, with a maximum of RM4,000 (Tenaga Nasional Berhad (TNB), 2024). Individuals and businesses who invest in green energy are also eligible for various tax benefits. With these incentives, high installation costs may be minimized, making solar energy affordable (SEDA, 2021).

Installation Costs: Investment or Burden?

The cost of installing solar panels is determined by the system capacity and energy requirements of the residence. A household system installation in Malaysia typically costs between RM16,000 and RM46,000 (Carolyn, 2024). However, with large savings on power costs, a return on investment is possible within 5 to 7 years. For example, if your monthly power bill is around RM300, adding a solar system can cut the price to RM90 or less. In five years, you may save more than RM12,000. This investment is a great long-term option.



Maintenance: Simple or Complex?

Solar panel maintenance is one of the most common worries among homeowners. However, solar systems have a lifespan of 20 to 25 years with relatively little maintenance (Energy Commission Malaysia, 2024). Cleaning the panels is only required 5 every six months to keep dust and debris from lowering energy efficiency. The inverter may need to be changed after 10 to 15 years, and routine electrical system checks guarantee that all connections are in excellent working order. This maintenance cost is negligible in comparison to the savings you would receive during the system's lifetime (Arif, 2025). However, in some cases as stated below, solar energy may not be worth it.

1. If you intend to relocate in a few years.
2. If your home is frequently shaded from the sun by big buildings or trees.
3. If you reside in a region with extremely low electricity rates.

Installation Challenges and Solutions

While solar energy provides numerous benefits, there are certain problems that must be solved before installing it:

1. Roof Structure - Not every home's roof is appropriate for solar panel installation. Homes with roofs shadowed by large trees or other structures may not receive adequate sunshine.
   Solution: A solar professional may do a shadow analysis to evaluate whether your property is appropriate for a solar system.
2. High Initial Costs - Some homeowners may find the initial cost prohibitive.
   Solution: A green finance plan or payment program from a solar supplier might help decrease the initial cost load.
3. System Capacity and Energy Requirements - Installing a system that is too small may not result in significant savings, whereas installing a system that is too large may be inefficient.
   Solution: Before installing the system, conduct an energy assessment to establish the right size.
4. Documentation - The application procedure for incentives and installation might take some time.
   Solution: Collaborate with a solar panel vendor who understands documents and local legislation.

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Conclusion

The decision to install solar energy is based on your demands and financial capability. If you want to stay for a long term and have the necessary funds, solar energy may be a good investment with large savings. Technological advancements and incentives have made solar installation more affordable and economical. However, it is critical to obtain information from registered providers and compare options before making a decision. With proper preparation, you may not only save money on your power cost but also help to protect the environment.

References

Arif, Z. (2025, August). Kos Pemasangan Solar Terkini di Malaysia 2025 Faktor yang Mempengaruhi Kos Pemasangan Solar. August 2024, 1–11. https://www.biiayas.com/kos-pemasangan-solar/

Carolyn, K. (2024, October). Tenaga solar semakin mendapat tempat di Malaysia. 2013. https://www.freemalaysiatoday.com/category/bahasa/tempatan/2024/10/02/tenaga-solar-semakin-mendapat-tempat-di-malaysia/

Lam, S. T., Yap, K. M., & Yeoh, K. H. (2025). Driving sustainable energy transition: Understanding residential rooftop solar photovoltaic adoption in Malaysia through a behavioural analysis. Renewable and Sustainable Energy Transition, 7(December 2024), 100103. https://doi.org/10.1016/j.rset.2025.100103

SEDA. (2021). Pemeteran Tenaga Bersih (Net Energy Metering , Nem) 3.0. Sustainable Energy Development Authority (SEDA) Malaysia, 2019–2020. http://www.seda.gov.my/reportal/ms/nem/

Sustainable Energy Development Authority Malaysia (SEDA). (2024). Net Energy Metering (NEM) Malaysia. Retrieved from https://www.seda.gov.my

Tarmizi, A. F. (2024). Solar potensi trend 2024. Mampu kurangkan bil elektrik hingga 90 peratus. https://www.tnb.com.my/assets/newsclip/01012024a.pdf

Tenaga Nasional Berhad (TNB). (2024). Renewable Energy & Solar Programs. Retrieved from https://www.tnb.com.my

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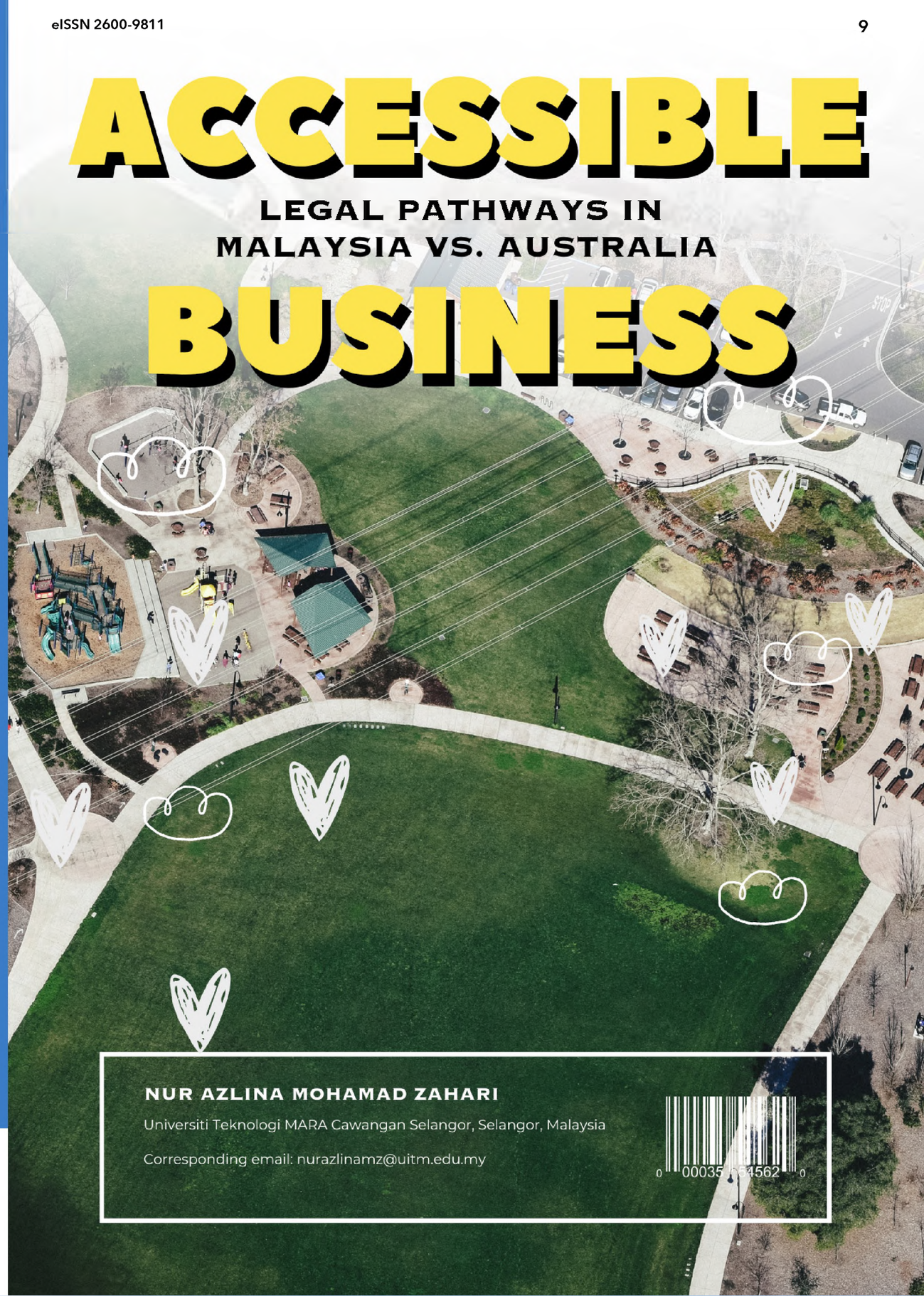

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