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Off the grid

The Malaysian Reserve, Malaysia



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Given our all-year sunny climate, Malaysia could massively benefit from an alternate source of energy: Solar

by IFAST RESEARCH TEAM

FOR the past two decades, environmental responsibility has increasingly come into focus for many countries and corporations. With initiatives like environmental, social and corporate governance (ESG) and accords like the Paris Climate Agreement, it is safe for us to assume that the future of energy is going to look very green. Given our all-year sunny and warm climate, Malaysia looks to be a country that could massively benefit from an alternate source of energy: Solar. Ranging from small residential installations to large commercial operations, this form of energy generation offers a wide range of solutions that all aim to lower the end user's power bill.

Super Charging Your Roof

So how does installing solar panels save you money? Two ways. First, it allows the user to generate electricity for their own consumption, thereby reducing the amount of energy required from the grid. Second, users can export excess energy back to power distributors. The user is then compensated based on a tariff defined by the distributor. For example, if your consumption is between 201kWh and 300kWh, you are compensated at 0.33 cents per kWh. Hence, users with a higher consumption will have the largest potential for savings. There is, however, a limit to how much users can export back into the grid in order to limit power fluctuations.

There are two main types of installations: Commercial and residential. For the former, these are installations with a large system size usually installed on sites such

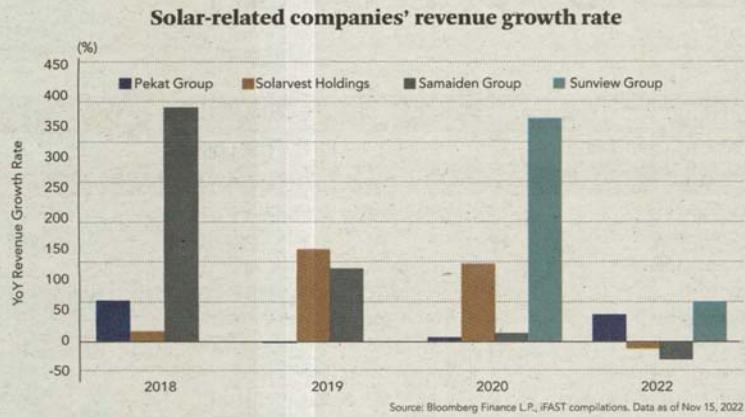
as warehouse and shop lots. The limit for this category of installation is 75% of the site's peak power load. Commercial users will be able to take advantage of the capital allowance, as well as a green capital tax allowance that brings down the cost of a system. This translates to an average return on investment of roughly four years. Residential users entail smaller systems, installed on the roofs of houses. The limit being 10kWac for a three-phase capable home. Due to the smaller scale and higher cost of the system relative to amount saved, the average return on investment (ROI) of these systems range from five to six years.

Given the attractiveness of solar, we expect companies within this segment to greatly benefit from the industry's growth. Currently, the vast majority of solar panels are manufactured in China. The main reason being better research and development breakthroughs that result in lower cost and higher efficiency in addition to the country's proximity to the global supply chain.

A Rising Tide

Fortunately, a few Malaysian companies are currently part of that supply chain. They include component manufacturers, one of which being Masterpack Group Bhd, a company that produces packing materials essential for the transport of solar panels. And is ACE-market listed Sunview Group Bhd, a producer of photovoltaic cells, a crucial component for solar panels. Beyond that, solar installation companies will directly benefit from growth. These are companies that buy up solar panels and other components to build a system that they then sell to the end user. These range from large companies such as Samaiden Group Bhd, Solarvest Holdings Bhd and Pekat Group Bhd to relatively smaller unlisted operations such as AQ Energy Services Sdn Bhd.

Taking a look at revenues of solar-related corporations with a



public listing, it looks as if there is evidence of growth. On the top, we see steady and sometimes exponential growth, pointing to a rapid expansion of demand for this category of product.

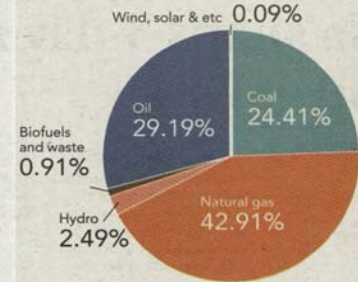
We suspect that this trend is partially due to the current low adoption of renewables for energy generation in Malaysia. As seen in the graph below, wind and solar barely even registers on the amount of energy supplied, meaning that there remains a lot of room for expansion.

In addition, we also suspect that the recent push for ESG compliance has also led a lot of companies to adopt solar as a quick and relatively low effort way of adhering to the environment pillar. Not only is it a way to up their rating, it also saves them electricity costs over time. This is in addition to more companies being set up to provide solar installation services such as Gsparx Sdn Bhd (a subsidiary of Tenaga Nasional Bhd [TNB]).

A Few Speedbumps

However, there remains significant barriers for the mainstream adoption of solar, first of which being cost. If you were to go with a company such as Solarvest, a 6kW system would cost you RM30,380 with an estimated monthly savings of RM330, leading to an ROI of 6.75 years. Going with a smaller solar installer such as AQ Energy for a comparable system, it would

Energy Generation by Source in Malaysia (2019)



still cost you RM26,400. Fortunately, this would also lead to a monthly savings of RM350, due to the difference in system design, resulting in an ROI of 6.3 years. In fairness, if you were to go with the largest system available to residential buyers from AQ energy, it would bring the ROI down to 5.09 years.

Additionally, the government has also imposed an export limit on both residential and commercial users. Currently, they've gotten rid of feed in tariffs which allowed users to export the energy back to TNB at much higher prices. Residential users are also forced to sign an agreement with TNB that limits the system instal size to 10kW.

A Greener Future

Moving forward, there may be a few factors that affect the growth of this industry, the first being energy prices. If the government were to reduce subsidies, we would likely see an increase in prices which will drive down the ROI of these solar systems, assuming their

prices remain equal. Second, in the scenario of a recession, sales of solar systems may go either way. On the one hand, consumers will look to reduce spending by any means possible, further deterring them from buying systems. On the other hand, solar is a cost saving investment. Meaning that so long as monthly savings outstrip monthly payments, people may be more likely to install solar.

Given the current state of solar companies, we believe that there may be a lot of room for expansion. As people get more comfortable with the idea of investing in solar as a cost savings measure, we will likely see adoption rates steadily increase. As such, analysts are expecting double-digit EPS growth in the coming years for certain solar companies in Malaysia as seen in the table below.

The views expressed are of the research team and do not necessarily reflect the stand of TMR.

	Market Cap (RM)	EPS Growth (%)			PE		
		2022	2023	2024	2022	2023	2024
Solarvest Holdings	460,612,210.32	48	44	N/A	28.12	18.30	17.53
Samaiden Group	281,054,866.91	135	47	12	17.21	12.65	10.32

Source: Bloomberg, IFAST compilations as of Nov 15, 2022