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ONE SOLAR PANEL AT A TIME

The Edge, Malaysia



MAKING THE WORLD GREENER,
ONE SOLAR PANEL AT A TIME

When thinking of green solutions, the food and beverage (F&B) sector is not the first that comes to mind, but it indeed has a role to play in the country's sustainability journey, especially its aspiration of achieving net zero by 2050.

McDonald's Malaysia is among the earliest F&B brands that have made a serious commitment to implement green solutions in their business operations. It launched its first full-fledged sustainable drive-through restaurant, with a rooftop solar photovoltaic (PV) installed, in Setia Alam.

GSPARX Sdn Bhd, a wholly owned subsidiary of Tenaga Nasional Berhad (TNB), saw the opportunity to engage and collaborate with McDonald's to implement rooftop solar solutions on a larger scale. Under the partnership, GSPARX will provide rooftop solar solutions for 100 stand-alone McDonald's drive-through restaurants under its Zero CAPEX (capital expenditure) model using a supply agreement with renewable energy (SARE). From this business model, McDonald's is set to enjoy immediate savings while reducing its carbon footprint.

"We are delighted to partner with McDonald's Malaysia to extend our expertise in renewable energy. This deal demonstrates TNB's efforts in helping major companies like McDonald's to take a hands-on approach in decarbonising their operations. We believe this collaboration will bring positive business growth to both entities as we accelerate our efforts towards energy transition," says Datuk Indera ir Baharin Din, president and CEO of TNB.

The challenges have been minimal, says Datuk Azmir Jaafar, managing director and local operating partner for McDonald's Malaysia, given the company's global push towards sustainable endeavours.

Even before its collaboration with TNB, McDonald's had integrated solar energy into its infrastructure. "To date, we have equipped 12 of our restaurants with solar panels independently. However, we faced challenges in efficiently servicing and maintaining our solar PV system, as our restaurants are spread out geographically. When seeking potential partnerships with service providers, ensuring they can attend to a location within a specified timeframe was one of the key factors we looked at," says Azmir.

"TNB's GSPARX holds a pivotal position in this context. We recognise that TNB's responsiveness to breakdowns and servicing meets our time requirements, given its widespread presence. Furthermore, this collaboration promises enhanced data and insights, given TNB's standing as a leading energy entity in Malaysia."

GSPARX'S CONTRIBUTION TO MCDONALD'S SUSTAINABILITY EFFORTS
In June last year, McDonald's kick-started the initial phase of sustainability initiatives with TNB. All solar PV facilities will be installed by December 2024.

In the first phase, GSPARX installed rooftop solar systems at 39 McDonald's restaurants across the country, with a total capacity of 126.18kWp. GSPARX's managing director Elmie Fairul Mashuri explains that this capacity for 39 McDonald's outlets is equivalent to 1,500 tonnes of CO₂ sequestered per year. This translates into over 24,800 tree seedlings grown for 10 years.

"Once all 100 outlets are installed with rooftop solar solutions, the solar energy generated can help sequester 3,800 tonnes of CO₂ per year — equivalent to more than 62,830 tree seedlings grown for 10 years," he says.

With the implementation of this solar project, McDonald's Malaysia is expected



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to reduce its electricity costs by RM7 million across the restaurants. The company is dedicated to reducing carbon emissions and recognises the importance of collaborating with other stakeholders. Since 2016, Azmir says, McDonald's Malaysia has invested significantly towards energy efficiency, energy management and renewable energy for its new and existing restaurants. The savings derived from these measures not only enhance operational expenditure but also elevates the quality of products and services. "We will continue to put in the necessary investment to further integrate energy efficiency and renewable energy solutions into our restaurant infrastructure."

"While savings from renewable energy with our partner is significant, our primary focus will be on energy management and efficient implementation. With that in mind, we will reinvest the savings into these energy initiatives that align with our business requirements."

SUPPORTING COMPANIES' ESG COMMITMENTS

As the national utility company, TNB is committed to helping its customers — including micro, small and medium enterprises (MSMEs) — achieve their environmental, social and governance

(ESG) commitments. TNB continues to expand its clean energy portfolio so its customers in all business sectors can be assured that their businesses would be powered by cleaner energy sources over time.

TNB aspires to achieve net zero carbon emissions by 2050 with a commitment to meet the ESG criteria while providing smart green solutions to our customers as a means to make it easier for them to achieve their own ESG goals. TNB's smart green solutions can be packaged to help MSMEs address Scope 1, 2 and 3 emissions, which can be a challenge for them to overcome without external intervention.

Through TNB's smart green solutions, the companies can address Scope 1 through the electrification of their fleets with TNB Electron EV charging solutions.

Rooftop solar PV solutions through GSPARX's Zero CAPEX via the SARE business model also makes it more convenient for SMEs to adopt green energy and address Scope 2 emissions. "With the installation and maintenance costs borne by GSPARX, the participating companies only need to pay for the solar energy generated to GSPARX, which acts as an investor, at a lower solar tariff compared to the regulated electricity tariff," Elmie explains.

"This translates into energy savings through the reduction of their electricity costs that can range from hundreds of thousands to millions [of ringgit], depending on the annual consumption of the companies."

For MSMEs with limited rooftop real estate on their premises, or those that are leasing their operation locations, they can still offset their carbon footprint by subscribing to a government subscription programme called Green Electricity Tariff (GET). This addresses Scope 2 emissions.

GET caters for eco-friendly consumers and organisations with ESG goals to power their homes and businesses with green electrons from renewable energy sources. The premium subscription of 21.8 sen/kWh is charged for the total green electricity consumed on top of the standard electricity tariff rates as per the tariff schedule.

"GET subscribers for non-residential customers like MSMEs can buy in blocks of 1,000 kWh and enjoy Imbalance Cost Pass-Through (ICPT) exemption for the GET blocks subscribed," Elmie explains.

"They will also receive the internationally-recognised Malaysia Renewable Energy Certificate (mREC) to certify the total green electricity consumed throughout the subscription period. This is useful for MSMEs whose overseas clients look for green-conscious vendors as part of their supply value chain."

Malaysia is currently in a position of strength as it ranks 35th globally in the Energy Transition Index that incorporates the balancing of the energy trilemma — security, sustainability and equity. The recent announcement of the National Energy Transition Roadmap (NETR) indicates the government's strong will to transition the country's energy system to one that is based on cleaner energy sources.

In the NETR, 10 catalyst flagship projects were unveiled with the aim to optimise energy usage, shift the energy system to renewables and abate carbon emission. It also outlines 50 initiatives under six energy transition levers and five enablers. The successful implementation of NETR is expected to uplift gross domestic product value from RM25 billion in 2023 to RM220 billion and generate 310,000 jobs in 2050.

According to TNB, consumer's consumption behaviour is foreseen to undergo changes when there are fluctuations in the energy charges. Aside from the catalyst projects, the upcoming Parliament tabling of the Energy Efficiency & Conservation Act is foreseen to shift consumption patterns towards efficient use of electricity.



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— Datuk Azmir Jaafar
Managing director and local operating partner for McDonald's Malaysia



"The solar energy generated from the installed solar solutions at 100 McDonald's outlets can help sequester 3,800 tonnes of CO₂ per year."

— Elmie Fairul Mashuri
GSPARX managing director