

08 APR, 2024

Illuminating Malaysia with cutting-edge solar solutions

The Malaysian Reserve, Malaysia



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MALAYSIA'S solar energy players such as GSPARX Sdn Bhd, Verdant Solar Sdn Bhd and Sols Energy Sdn Bhd, among others, are driving the nation's shift towards renewable sources.

These industry leaders harness cutting-edge technologies and sustainable approaches to provide a wide range of solar solutions catering to residential, commercial and industrial needs.

GSPARX

GSPARX Sdn Bhd stands at the forefront of Malaysia's solar energy industry, leveraging innovative technologies and sustainable practices to provide comprehensive solar solutions for various clients.

It secured 340MWp of rooftop solar photovoltaics (PV) systems in five years. Beyond installation, its investment model gives it a competitive edge.

GSPARX MD Elmie Fairul Mahsuri said the company specialises in custom rooftop solar solutions in commercial, industrial and residential properties, understanding local regulations and offering innovative financing like power purchase agreements (PPAs).

"Our investment commitment showcases confidence in solar energy's long-term potential, fostering partnerships with clients beyond mere vendor-client relationships," Elmie told *The Malaysian Reserve (TMR)*.

He added that the GSPARX team's expertise, rooted in its industry experience at Tenaga Nasional bhd (TNB), gives them insights into the energy sector, and with GSPARX's culture of reliability and innovation from TNB, they offer solutions that exceed the industry standard.

GSPARX focuses on innovation with Battery Energy Storage Systems (BESS) and Compressed Energy Storage Systems (CESS).

"We aim to increase solar adoption, and support net zero emissions by 2050 by merging business strategies with sustainability, offering renewable solutions, investing in rooftop solar, and promoting greener policies aligned with governmental net zero targets," he added.

Elmie said GSPARX's success with the 77MW AEON chain project showcases its excellence and innovation in solar energy, driven by technical expertise, innovative project management, strong industry partnerships, and a client-focused approach.

He remarked that this project also demonstrates GSPARX's ability to deliver value and advance renewable solutions, and that the company has successfully invested in 40MW peak (MWp) of solar PV systems in universities and educational institutions.

Verdant Solar

Verdant Solar Sdn Bhd has been recognised by the Malaysian Book of Records as the country's largest residential solar provider, doubling its previous record in 2022, by serving over 1,300 homes in 2023.

With over 2,300 landed properties under its belt, its installations surpassing 9958.9KWh have saved RM12 million in electricity bills and avoided 12,645 tonnes of CO2 in 2023 alone.

This solidifies Verdant Solar's position as one of the top providers for residential sustainable energy solutions, furthering the country's transition towards renewable energy (RE).

Its CEO Zeth Lim highlighted the importance of Verdant Solar's focus on customer experience is evident through its corporate social responsibility (CSR) initiatives and the introduction of the Verdant Home App.

This app, available on the App Store and Google Store, not only facilitates payments and earnings recording for existing customers but also serves as an educational tool on RE resources, net energy metering (NEM)



ERS has attained an installed capacity exceeding 1GWp through over 1,000 solar PV projects spanning residential, commercial and large-scale utilities across Asean

Source: ERS Energy

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policy, and solar energy.

Lim commended Malaysia's progress in aligning with global trends, particularly in battery systems and carbon trading.

"RE investors have the potential to reduce carbon emissions and participate in carbon trading platforms like the upcoming Bursa Carbon Exchange (BCX).

"However, there is a need for further advancements in Malaysia's tariff structure to remain competitive with first-world countries," he said to *TMR*.

Despite the challenges, Lim affirmed the company's dedication to doubling installation numbers this year.

Ditrolic Energy

Ditrolic Energy Sdn Bhd has established itself as a prominent player in Malaysia's solar energy landscape.

Its group CEO Tham Chee Aun said Ditrolic Energy has been serving as a leading solar engineering, procurement, construction and commissioning (EPCC) company since 2009 and pioneering the Malaysian solar leasing programmes with their SunLease initiative in 2018.

"Our expertise encompasses diverse sectors, including critical infrastructure like airports where we offer clean energy solutions to six airports across South-East Asia, operate solar systems producing 18MW for Malaysian universities, and supply solar electricity



Source: Ditrolic Energy

Tham says Ditrolic Energy has been serving as a leading solar EPCC company since 2009



Source: SOLS Energy Sdn Bhd

We believe in controlling the entire process to provide the highest quality service and experience, says Raj

to 16 hospitals, establishing Ditrolic Energy as one of the leading solar energy providers for airports, universities, and healthcare in the country," he told *TMR*.

He added that the company is a recognised regional player in RE, operating in Malaysia, Singapore, the Philippines, Indonesia, China and Bangladesh, with its diversified market approach enabling them to navigate different regulatory environments and market dynamics.

Tham highlighted that the company's flagship 360-degree energy transition solution, EnerLoop, embodies its commitment to innovation and sustainability, providing a comprehensive approach to clean energy solutions including carbon management, energy efficiency, and energy storage, while consistently integrating cutting-edge technology and innovative business strategies to deliver value to clients.

"Our success in solar energy comes from our sustainable business approach, with about half our income from energy sales," he added.

Ditrolic Energy's consistent performance has earned it prestigious awards, including three Malaysia Solar Power Company of the Year titles from Frost & Sullivan.

In 2023, it partnered with BlackRock's Climate Finance Partnership (CFP), highlight-

ing trust in its strategy and growth potential in Malaysia and beyond.

Solarvest

Solarvest Holdings Bhd's strength lies in technical proficiency, employing experienced engineers, technicians, and project managers.

Its focus on technical excellence, sustainability, and customer satisfaction positions it as a preferred choice for solar installations nationwide.

Solarvest ED and Group CEO Davis Chong highlighted Solarvest's specialisation in various clean energy solutions, emphasising its focus on large-scale ground-mounted and floating solar PV systems, as well as rooftop solar PV systems for diverse clientele.

He remarked that Solarvest has a proven track record of over 1,200MWp of solar PV projects, making it the biggest clean energy player in the nation.

Speaking on Solarvest's unique approach, Chong emphasised its commitment to innovation, that it takes a client-centric approach, prioritising a deep understanding of their specific needs and energy goals.

Additionally, this dedication fuels the development of innovative solar solutions tailored to each client's unique situation. Chong also highlighted Solarvest's differ-

entiation through their full-fledged solar PV development services, offering a vertically integrated solution covering the entire solar PV value chain.

"This one-stop-shop approach streamlines the process for clients, providing a seamless experience with a single point of contact throughout the project lifecycle," he explained.

In addition to traditional installations, Solarvest ventures into other clean energy solutions to diversify revenue streams, including green hydrogen, green battery storage, and green EV charging solutions.

"Our integration of innovative technologies such as Artificial Intelligence of Things (AIoT) optimises operational performance, ensuring maximum system output and client return on investment," he added.

To address the challenge of upfront capital expenditure, Solarvest developed Powervest, an innovative financing programme offering flexible options tailored to diverse client needs.

This programme has been introduced to Indonesia, the Philippines and Vietnam, with a presence established in Singapore and Thailand.

Also, partnerships have been formed to develop projects in Taiwan and Brunei.

Reflecting on Solarvest's notable achievements, Chong said Solarvest holds the distinction of being the first publicly listed solar company in Malaysia with the largest market capitalisation.

"In 2019, we completed Malaysia's first and largest floating solar farm in Dengkil, earning a place in the Malaysian Book of Records," he said.

Hasilwan

Hasilwan (M) Sdn Bhd has been a key player in Malaysia's solar energy sector since the inception of the RE Act in 2012.

Its CEO Yong Sien Wae said the company has evolved significantly over the years.

"We started as an energy performance contractor for high-rise buildings and progressed to rooftop solar PV projects in the commercial and industrial sectors.

"Today, we have the unique experience and capability to design, construct, develop investments, operate and maintain solar PV systems for various industries and utilities," he told *TMR*.

Established in 1989, as a family-run busi-



Hasilwan made history to power an entire highway operation under the Net Energy Metering scheme

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Source: Solarvest Holdings Bhd
Chong remarks Solarvest has a proven track record of over 1,200MWp solar PV projects

ness with roots in electrical power equipment manufacturing, Hasilwan has a rich history in the power transmission and distribution grid infrastructure.

Yong said part of its DNA in the power engineering business is to constantly seek advanced technologies to drive innovation.

With a strategy focused on capitalising its industrial experience and technical knowledge, Hasilwan aims to seize new opportunities in the low carbon energy transition.

This includes exploring battery and hydrogen energy storage systems, alongside RE systems like solar PV and micro-hydro, managed by digitalisation solutions.

Reflecting on its achievements, Yong highlighted several standout projects.

"Among all the power infrastructure projects that we have completed, our high voltage substations have driven the nation's economic growth.

"Additionally, our power Supervisory Control and Data Acquisition (SCADA) systems for utilities have ensured high power supply reliability," he said.

In the RE segment, Hasilwan made history by developing, investing in, designing, building and commissioning a privately funded 1,363kWp Solar PV System to power an entire highway operation under the Net Energy Metering scheme.

This project received nominations and awards, marking a significant milestone for the company.

SOLS Energy

SOLS Energy Sdn Bhd is a Malaysian solar energy company dedicated to provide affordable and sustainable energy solutions to communities across the country.

With a focus on social impact and environmental sustainability, SOLS Energy empowers individuals and organisations to harness the power of the sun and contribute to a cleaner, greener future.

One of SOLS Energy's core strengths lies in its community-centric approach to solar energy deployment.

Founder and CEO Raj Ridvan Singh discussed SOLS Energy's unique position as a full stack solar EPCC, specialising in residential rooftop solar solutions.

This approach involves guiding users through the solar journey, from education on its benefits to customisation, installation, and ongoing maintenance.

"We believe in controlling the entire process to provide the highest quality service and experience," he said to TMR.

SOLS Energy's expertise is evident in its



Source: GSPARX Sdn Bhd
GSPARX focuses on innovation with BESS and CESS, says Elmie

swift installation times, optimised through extensive experience and specialised training.

By recruiting solar technicians from indigenous communities and providing comprehensive training, SOLS Energy not only delivers top-notch installations but also creates opportunities for marginalised groups in the RE sector.

One of SOLS Energy's mission pillars is "Power to Empower".

For every homeowner who puts a solar PV system in their home, SOLS Energy will install a Pico Solar Lighting system in an Orang Asli or Orang Asal home.

To date over 2,000 Orang Asli homeowners have been empowered.

In response to market changes, SOLS Energy recently introduced the home solar subscription model.

"This innovative approach allows users to adopt solar without upfront costs, paying only a portion of their energy bill savings to SOLS Energy," he said, adding that this model bypasses concerns about solar commodification, ensuring quality and accountability while fostering longer customer relationships.

SOLS Energy's mission centres on a just energy transition, with a focus on diversity and inclusion.

With 40% of the team comprising indigenous people, the company exemplifies its commitment to a more inclusive RE economy.

Supported by investors like 500 Global and Petronas Twin Towers Ventures, SOLS Energy continues to innovate and expand its offerings, including partnerships with trusted brands like Aeon to make solar more accessible to consumers.

ERS

ERS (engineering, procurement and construction services) Energy provides comprehensive ERS services for solar energy projects in Malaysia.

With a proven track record of delivering high-quality, cost-effective solutions, ERS plays a vital role in advancing the country's RE infrastructure and promoting sustainable development.

Its associate director of communications and sustainability Angelina Teoh said ERS specialises in the design, construction and maintenance of solar PV installations, encompassing residential, commercial and utility-scale projects.

She noted that the group has a 15-year established history and extensive experience in providing tailored solar energy solu-

tions for diverse market sectors, supported by a seasoned development team that has successfully assisted in launching projects from scratch.

"In addition to serving as a solar PV engineering, procurement, construction and commissioning (EPCC) and co-development collaborator for numerous industry partners, ERS possesses distinctive expertise in the Asean region.

"We have successfully implemented and completed large-scale utility projects in the Philippines and Vietnam, and are expanding our footprint in Indonesia and Australia," she told TMR.

She added that ERS employs advanced solar technologies and utilises ESG-compliant top-tier equipment to ensure their projects align with the stringent expectations and requirements of stakeholders, banks, investors and engineers, while also actively advocating for sustainability and environmental stewardship in its operations.

"ERS Energy has attained an installed capacity exceeding 1GWp through over 1,000 solar PV projects spanning residential, commercial and large-scale utilities across Asean," she said.

Commenting on notable achievement by the company, she noted that ERS has recently finalised its inaugural floating solar plant in Rawang, which stands as the largest in Malaysia in which the milestones underscore the company's dedication to delivering quality projects as a comprehensive solar energy solutions provider.

Samaiden

Samaiden Group Bhd underscores the nation's resolve in combating climate change through sustainable energy initiatives.

Aligned with the National Energy Transition Roadmap (NETR), Samaiden MD Chow Pui Hee highlighted the imperative for robust implementation frameworks to realise the roadmap's ambitious goals.

"With solar anticipated to dominate Malaysia's RE capacity, Samaiden capitalises on rising demand and decreasing costs to advance its vision of becoming a comprehensive RE leader," she said.

Chow emphasised Samaiden's broader commitment to green initiatives, including the Corporate Green Power Programme (CGPP) and cross-border supply.

Samaiden boasts an impressive order book of RM488 million, leveraging its subsidiary, Samaiden Sdn Bhd, to provide RE solutions, notably in solar PV systems EPCC.

Beyond EPCC, Samaiden's commercial activities encompass selling power, environmental consulting, and operation and maintenance services.

Despite a competitive landscape, Samaiden distinguished itself through its diversified portfolio and regional expansion into key markets like Cambodia, Vietnam, Indonesia, and Singapore.

Navigating challenges posed by the global surge in solar adoption, Samaiden emphasised the need for infrastructure upgrades and policy optimisation to ensure reliable energy distribution.

With expertise honed through large-scale solar projects, Samaiden tackled intermittent power supply with innovative storage solutions, underlining its commitment to advancing the RE sector sustainably.

Plus Xnergy

Plus Xnergy, formerly known as Plus Solar, has spearheaded the installation of PV solar panels in over 700 buildings across various sectors.

With an impressive project track record exceeding 125MWp, Plus Xnergy has contributed to reducing the nation's carbon footprint by an estimated 107,570 tonnes of carbon dioxide annually.

Among its notable installations are in prominent commercial establishments such as IOI Acidchem, Asadi, Mah Sing Plastics, Spritzer factories and Toppen and IKEA Batu Kawan shopping malls.

Engie

Engie Group, a prominent *Fortune 500* entity in low-carbon energy and services, has a mission to curb energy consumption and offer eco-friendly solutions that balance economic prosperity with positive societal and environmental impacts.

With an extensive track record, it has facilitated over 130MW of large-scale solar projects in Malaysia, collaborating closely with both public and private sectors.

Engie finances, owns, constructs and operates solar assets, exemplified by its solar-as-a-service rooftop installations.

Essentially, the collective efforts of these top 10 homegrown solar companies in Malaysia represent a significant step towards building a more sustainable and resilient energy infrastructure.