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# Sustainable Energy

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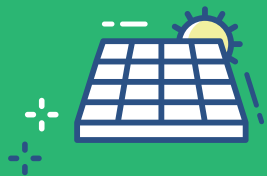
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ISSUE 11

# NEM RAKYAT

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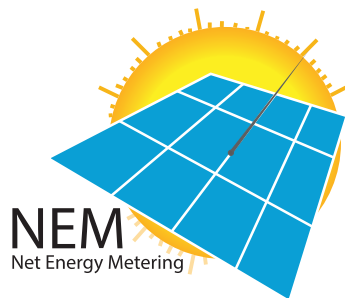


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# Chairman's



**A**s the Chairman of Sustainable Energy Development Authority (SEDA) Malaysia and one who is passionate about the sustainable and renewable energy (RE) sector, I am asked very often on my views on RE and sustainability. While I may use various examples to explain my views, the conclusion is consistent, it presents more opportunities to people and businesses, and it is a force that cannot be stopped.

This year, Malaysia's sustainable and RE industry is expected to grow, despite the challenges we are facing in terms of the coronavirus pandemic. The growth will be driven by multiple factors: rising awareness on the benefits of renewable energy, as well as policies and initiatives that the Malaysian government have in place.

For SEDA Malaysia, the year 2021 will not be a stroll in the park, it will be a year filled with many activities to get more Malaysians – may it be citizens, or large corporates -- to jump onto the sustainable and RE industry.

The Ministry of Energy and Natural Resources (KeTSA) and SEDA Malaysia as the implementing agency have put in place strategies that will help us grow the industry from both the supply and demand perspectives.

Earlier this year, we launched the Sustainability Achieved Via Energy Efficiency (SAVE) 2.0 programme to encourage consumers to buy energy efficient refrigerators and air-conditioners.

We have also opened our allocated quota on Net Energy Metering 3.0 scheme for Malaysian citizens, government agencies and businesses. From the initial response we have received, I must say, our country's RE industry shows no signs of weakening.

Besides the two programmes, the government has also announced the opening of the much-anticipated Feed-In Tariff (FiT) e-bidding quota application. This year, 187.805MW of quota has been allocated to all interested parties.

I am also pleased to see more building owners and operators taking a more serious approach towards green building initiatives. For example: Management & Science University has recently achieved Diamond Rating 2 in SEDA Malaysia Voluntary Sustainable Low Carbon Building Performance Assessment-GreenPASS and Certification. I certainly hope more universities can work towards making their campus greener.

All these development and progress proved one thing – that RE will continue to grow its momentum, and I am optimistic that Malaysia has what it takes to achieve 31% renewable energy installed power capacity by 2025.

As always, SEDA Malaysia will be actively monitoring the development and the feedback of the local RE industry, and will do its best to ensure Malaysia's sustainability and RE agenda is on track. Let's work together towards building a sustainable Malaysia.

Thank you.

**YB TUAN LUKANISMAN AWANG SAUNI**  
Chairman  
SEDA Malaysia



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- **Energy Efficiency Management for Air-Conditioning and Mechanical Ventilation (ACMV) System;**  
Eligible for 8 Hours CDP for Registered Electrical Energy Manager (REEM) by Energy Commission
- **Energy Audit in Building;**  
Eligible for 10 Hours CDP for Registered Electrical Energy Manager (REEM) by Energy Commission
- **Customise training in any combination of the above**



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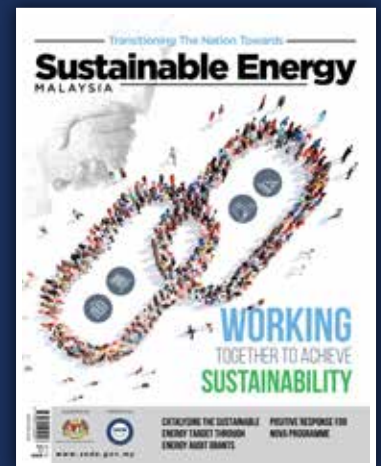
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## SUSTAINABLE ENERGY DEVELOPMENT AUTHORITY (SEDA) MALAYSIA

The Sustainable Energy Development Authority (SEDA) Malaysia is a statutory body formed under the Sustainable Energy Development Authority Act 2011 [Act 726]. The key role of SEDA is to administer and manage the implementation of the feed-in tariff mechanism which is mandated under the Renewable Energy Act 2011 [Act 725].

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#### SEDA Publication No:

SEM Volume 5 Issue 11  
Tri-annual Publications

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Conceptualised, produced  
and published for  
**Sustainable Energy  
Development Authority  
(SEDA) Malaysia**

By  
**Hijau Setiajaya Sdn Bhd**  
(1197440-P)

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Printed by:

**Mercprint Sdn Bhd**  
(1106010-H)

No.18 & 20, Jalan Pbs 14/13,  
Kawasan Perindustrian Bukit Serdang,  
43300 Seri Kembangan, Selangor.

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# KETSA COMMITTED TO GROW MALAYSIA'S RE INDUSTRY



**T**he Ministry of Energy and Natural Resources (KeTSA) reaffirmed its commitment on growing Malaysia's renewable energy (RE) industry during a recent Majlis Berbuka Puasa under the Tautan Kasih Ramadan SEDA Malaysia programme, which was one of the corporate social responsibility (CSR) activities by the Authority.

According to the Minister of Energy and Natural Resources YB Datuk Seri Dr. Shamsul Anuar Bin Hj Nasarah, stern action would be taken against any party, including state government, who did not cooperate in the implementation of the RE industry project.

He said that the stern actions include withdrawing the Feed-In-Tariff (FiT) quota that was approved previously. "The withdrawn quota will be re-offered through an online bidding process," Dr. Shamsul Anuar said during officiating the Majlis Buka Puasa.

The minister reminded that such stern actions are necessary as it will ensure that the targets, or key performance indicators (KPIs), set by KeTSA can be achieved. He added that the quota can be re-offered to those committed and viable RE project developers.







Minister of Energy and Natural Resources (KeTSA) YB Datuk Seri Dr. Shamsul Anuar Bin Hj Nasarah (second from left) hands goodie bag and duit raya to one of the children from Rumah Bakti Al-Kausar during the Majlis Berbuka Puasa with SEDA Malaysia Chairman YB Lukanisman (left), KeTSA Secretary-General YBhg Datuk Zurinah (third from left), and SEDA Malaysia CEO Dato' Hamzah (right) looks on.

The Majlis Buka Puasa was attended by KeTSA Secretary-General YBhg Datuk Zurinah Pawanteh, SEDA Malaysia Chairman YB Lukanisman Awang Sauni, SEDA Malaysia Chief Executive Officer Dato' Hamzah Hussin, SEDA Malaysia Board Members, and SEDA Malaysia staffs.

SAVE 2.0, which was launched in January this year, is an initiative to increase the awareness of sustainable energy, and to encourage Malaysians to use energy efficient appliances. The programme was first announced during the Budget 2021 speech last year and the government has allocated RM30 million for the programme.

SEDA Malaysia, which was appointed by KeTSA as the Implementing Agency for the SAVE 2.0, worked with e-commerce players Shopee, Lazada, and PG Mall, and many electrical appliances players. The programme has benefited 40,000 households so far.

The Majlis Berbuka Puasa was also attended by 30 students from Rumah Bakti Al-Kausar. The underprivileged and orphans' home in Bangi also received RM5,000 in donation from SEDA Malaysia, as well as duit raya and goodie bags.



**T**he stakes are high, and all eyes are now on Sustainable Energy Development Authority (SEDA) Malaysia's newly-appointed Chief Executive Officer Dato' Hamzah Hussin, as he now plays a key role in taking Malaysia's sustainable energy industry to the next level.

The nation has set an ambitious goal to achieve 40% renewable energy installed power capacity by 2035. While Malaysia has more than a decade to achieve the target, Hamzah said it is vital for SEDA Malaysia to help set the right foundation.

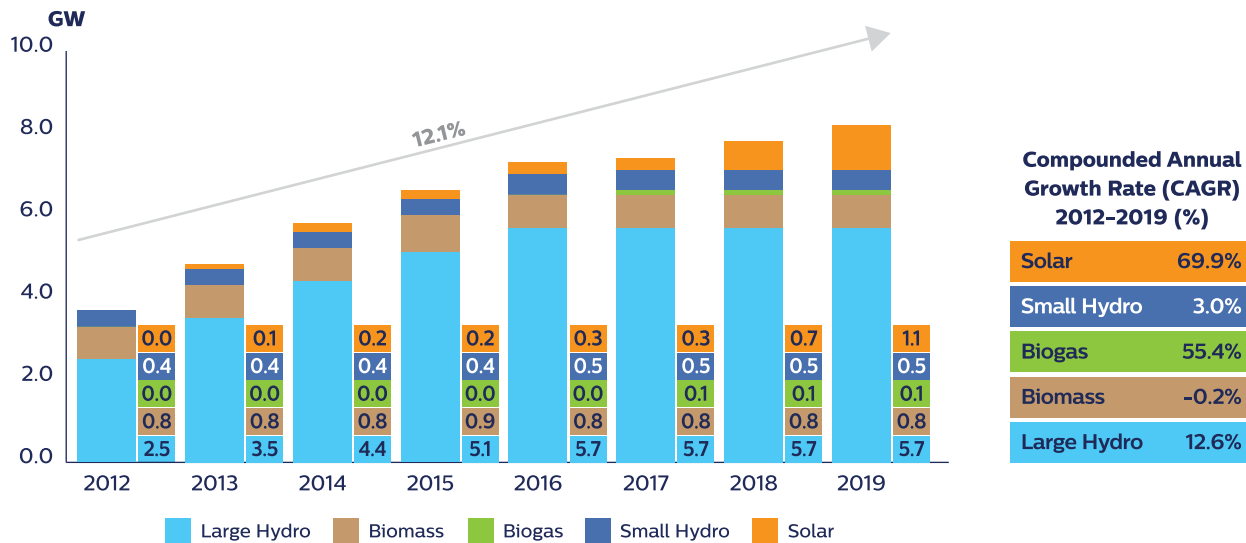
"Malaysia has great potential in sustainable energy. We need to implement appropriate initiatives made parallel with the policies, and the work needs to start now," said Hamzah, who came on board as CEO on February 22.

# Building a sustainable Malaysia one step at a time

*SEDA Malaysia CEO Dato' Hamzah Hussin shares his plans and vision for the country's sustainable energy industry*



## Overview of Malaysia's renewable energy 2012-2019



Source: SEDA Malaysia

### GOALS ALIGNED

In order to help Malaysia to realise its sustainability agenda, Hamzah agrees that transforming Malaysia into a serious player in the sustainable energy sector in Asia is not an easy task.

He understands that SEDA Malaysia, a statutory body formed under the Sustainable Energy Development Authority Act 2011 [Act 726], will need the buy-ins from all stakeholders if it wants to help Malaysia to grow the sustainable energy industry.

This is where Hamzah's past experience - with various ministries as well as state offices - will help SEDA Malaysia drive the sustainable energy industry, improving ties, cooperation and synergies between ministries, government agencies and private sectors.

Over the past decade, Hamzah held key roles in various ministries, including the Ministry of Energy and Natural Resources (KeTSA), Ministry of Entrepreneur Development and Cooperatives, Ministry of Home Affairs, Ministry of Defence, as well as two district and land offices.

In order for all stakeholders to work together as one, Hamzah said it is vital for the stakeholders to have a common goal.

"This is where having the same goal helps us to prioritise and balance the important tasks. Everyone, from the government, government agencies, and private sectors have the same goal of serving the rakyat and growing the sustainable energy industry in Malaysia. Each of the stakeholders has different roles to play but with an aligned goal, we will be able to find the balance and prioritised what needs to come first in realising our goal," he explained.





**“There’s a great potential for sustainable energy in Malaysia. What we are currently exploring is only the starting of it, it is just the tip of the iceberg.”**

**Dato' Hamzah Hussin**  
Chief Executive Officer  
SEDA Malaysia

## STIGMA AND AWARENESS

According to Hamzah, one of the biggest challenges faced by the country - in terms of growing the sustainable energy industry - is the stigma that implementation of sustainable energy initiatives is a costly affair.

“Collaborations with stakeholders and industry players are called for to publicise the benefits and right costings of implementing sustainable energy initiatives in order to disperse the stigma surrounding the sustainable energy topic,” Hamzah said.

Another challenge SEDA Malaysia is facing is the lack of awareness on sustainable energy.

“We are currently working hard to address this issue. We have several activities and promotions lined up for this year,” he said.

## LONG AND SHORT-TERM PROGRAMMES

In order to overcome the challenges, as well as to help promote the development of sustainable energy to achieve energy security and autonomy, Hamzah said Malaysia will need to execute a series of long and short-term strategies and programmes.

The SAVE 2.0 is a one year programme and will run until the end of this year, while the NEM 3.0 is a three-year programme that will end in 2023.

He said that the programmes are part of the government’s initiatives to achieve 31% renewable energy installed power capacity by 2025.

“This target will be the stepping stone for us to achieve 40% renewable energy installed power capacity by 2035,” Hamzah explained. “The plan will help Malaysia to take a further step in sustainable energy and provide us energy security.”

Understanding that the climate change issue needs to be tackled across various fronts, Hamzah said it is therefore critical to foster collaboration between the private and public sector.

“SAVE 2.0 was a result of collaboration between the government and multiple parties in the private sector,” he said.



**“The common concern among consumers is that these energy efficient electrical equipment are more expensive than the conventional equipment. This is where SAVE 2.0 can help to address this concern”**

SAVE 2.0, which was launched January this year, is an initiative to increase the awareness of sustainable energy, and to encourage Malaysians to use energy efficient appliances. The programme was first announced during the Budget 2021 speech last year, whereby the government is allocating RM30 million, and is expected to benefit over 150,000 households.

To make the initiative a success, SEDA Malaysia, which was appointed by the Ministry of Energy and Natural Resources (KeTSA) as the Implementing Agency for the initiative, worked with e-commerce players Shopee, Lazada and PG Mall, and many electrical appliances players.

Through the SAVE 2.0 programme, Malaysians are able to purchase energy efficient appliances – in particular refrigerator and air-conditioner – at a RM200 rebate.

Under the SAVE 2.0, there are four brands of air-conditioners – Acson, Daikin, Hitachi and Panasonic – with over 100 models available for consumers. There are also 17 brands of refrigerators with over 150 models available under the scheme.

Hamzah said that SEDA Malaysia hopes that SAVE 2.0 can help Malaysians to use less electricity, which is largely powered by fossil fuels. Today, most of Malaysia’s electricity consumption comes from power plants generated by gas, coal and oil.

Hamzah said there are several objectives for the SAVE 2.0 programme. These include: to increase the total number of five and four star energy efficient electrical equipment in the market as well as to increase the public awareness on the benefits of purchasing energy efficient equipment. Through this programme, he hoped that the public will be more aware of the need to utilise energy more efficiently whereby they could enjoy more savings on their bills while at the same time, contributes towards decarbonisation.

“The common concern among consumers is that these energy efficient electrical equipment are more expensive than the conventional equipment. This is where SAVE 2.0 can help to address this concern,” he said. “On top of that, we also hope to create the awareness that having energy efficient appliances can significantly reduce a household’s electricity bill. The savings can then be channeled for other purposes for the household.”

The programme has been a success so far. As of April 2021, a total of 43,486 rebates quota have been redeemed with savings enjoyed by buyers amounted to RM8.697 million.

While rebates can help spur the interest of the public, Hamzah said that it is also important to ensure that user experience is pleasant throughout the onboarding process.

“We worked with Lazada, Shopee and PG Mall, as well as the electrical appliances companies, to ensure that the registration process is simple, fast, and smooth,” he said.

## **PROMOTING RENEWABLE ENERGY WITH NEM 3.0**

While the SAVE 2.0 is aimed at raising the awareness of the importance of energy efficient electric appliances as well as changing consumers’ energy consumption habits, the NEM 3.0 is a programme that allows Malaysians to play a larger role in the area of sustainable energy.

The NEM project, which was first launched in 2016, allows Malaysians to export excess electricity produced by the solar photovoltaic (PV) systems to the national power grid. Malaysians can install these solar PV systems on the rooftop of their homes, office buildings or even factories.

Successful applicants of NEM programmes will not get cash in return for the excess electricity exported to the Distribution System. Instead, applicants will be able to enjoy lower electricity bills as the excess energy may be used to offset part of the electricity bill.

During its debut year, the NEM programme, known as NEM 1.0, had a low take-up rate, with only 27.8 MW approved. The low take-up was partly due to the high prices of PV modules and the low awareness of solar PV. However, the Government and SEDA Malaysia believed in the long-term benefits of NEM. In 2019,

the Authority reintroduced the programme as NEM 2.0 with a reviewed price mechanism. The Authority assessed the concerns raised during the launch of NEM1.0, such as the lack of leasing options and market readiness. SEDA Malaysia then addressed the issue by conducting various awareness and engagement sessions that help to increase the service providers and leasing model available in the market as more people understands better the potential in the nation's solar industry.

The result: the entire 500MW quota for NEM2.0 was well exhausted ahead of its closing date at the end of 2020.

Due to the strong response for NEM 2.0, KeTSA announced the launch of NEM 3.0 on December 29, 2020, with a fresh 500MW quota to be offered to Malaysians. The application for NEM 3.0, which began in phases on February 1, 2021 and will end on December 31, 2023.

“Based on the tremendous response we have seen in NEM 2.0, we felt that the time is right to introduce NEM 3.0 to keep the momentum strong. So far, the response for NEM 3.0 has been very positive,” Hamzah said.

Unlike the NEM 2.0, which categorised applicants into four: Residential, Commercial, Industrial and Agriculture, the NEM 3.0 is categorised into three programmes. These programmes are: NEM Rakyat, NEM Government Ministries and Entities (or GoMEn) and Net Offset Virtual Aggregation (NOVA).

The NEM Rakyat, which has been allocated a fresh 100MW quota, is open to domestic consumers occupying a private dwelling premise which is not used for business or commercial activities. Each applicant is entitled to a maximum capacity of 4kW (Single phase) and 10kW (Three phase).

The NEM GoMEn, which is allocated 100MW of quota, is open to all ministries and agencies, its department, and government statutory body – regardless the levels of the administration, such as federal, state or district. The maximum capacity of the PV installation cannot exceed 1,000kW.

Application for both NEM Rakyat and NEM GoMEn is only open to those who have not installed solar PV systems under previous programmes.

Meanwhile, 300MW of quota has been allocated for commercial and industrial applicants under the NOVA programme. The application for NOVA began on April 1.

As of May 15, 2021, 9.15MW of the 100MW quota allocated for NEM Rakyat have been applied, while 12.77MW of the 100MW quota allocated for NEM GoMEn have been applied. The NEM NOVA has seen good response with more than half of the quota allocated having been applied. *(For more insights on the response for NEM NOVA, please read our article on page 36 of the Sustainable Energy Malaysia)*

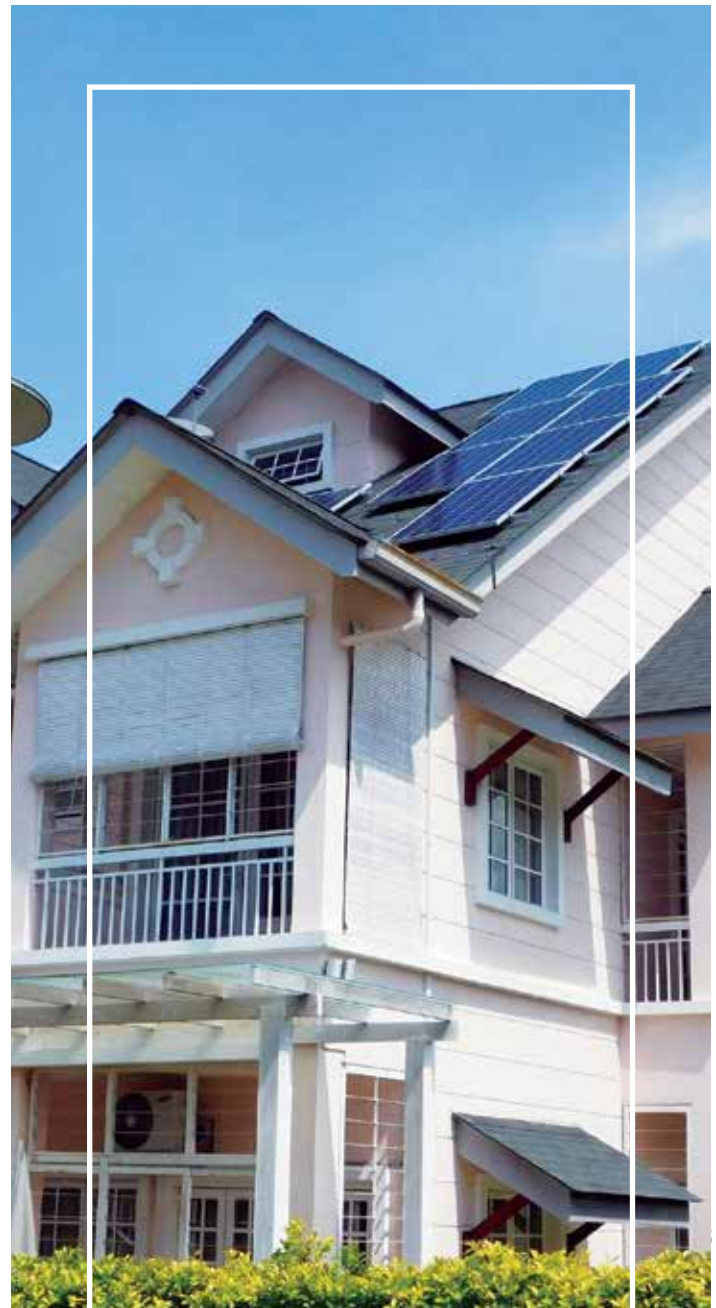
“I plan to see these two programmes – SAVE 2.0 and NEM 3.0 – being taken-up fully before the programmes end,” Hamzah said.

## OPTIMISTIC OUTLOOK

There are more programmes lined-up by the Government over the next few years to drive the sustainable energy industry.

“There’s a great potential for sustainable energy in Malaysia. What we are currently exploring is only the starting of it, it is just the tip of the iceberg,” Hamzah said.

“As the industry expands and evolves, it is my aspiration to reaffirm SEDA Malaysia’s role in the sustainable energy industry and carry the nation to the next level of success.”



Transitioning The Nation Towards

# Sustainable Energy

MALAYSIA

## ADVERTISING RATE CARD 2021

### ADVERTISING RATE

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RM  
10,000

Premium Position

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25,000

Inside Front Cover (IFC)

15,000

Outside Back Cover (OBC)

18,000

Inside Back Cover (IBC)

15,000

Facing Editor's Note (FEN)

13,000

Facing Content Page (FCP)

13,000

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13,000

1 Issue Package

- Two-page write-up

Normal rate (3 pgs X 10k)

30,000

- One-page ROP advertisement

- 1X Facebook banner posting

Package rate

25,000

3 Issues Package

- Six-page write-up

Normal rate (9 pgs X 10k)

90,000

- Three pages of ROP advertisement

- 3X Facebook banner posting

Package rate

60,000

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Material Deadline

4 weeks before the publication date

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No cancellations once booking is confirmed

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All final decisions on magazine artwork lie with SEDA Malaysia.



## WHY SUSTAINABLE ENERGY MAGAZINE?

Sustainable Energy Malaysia Magazine is the country's premier source of sustainable energy (SE) content for white collar professionals as it covers extensively on SE development, policies, and market outlooks for all SE industry players in Malaysia.

A vast majority of our magazine's audience consist of executives or managers working at the top line of various organisations in the country. It serves as a platform for investment which enables your newest innovations to reach the right target groups and support lead generation. Apart from helping to improve local customer sentiment, the magazine aims to provide a global perspective on the deployment of SE developments in tandem with the nation's efforts in advocating the global climate agenda.

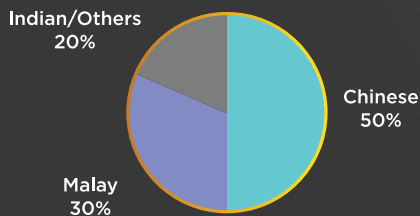
## SUSTAINABLE ENERGY MAGAZINE PUBLICATION DETAILS

Publisher	SEDA Malaysia
Category	Industry Professionals & Enterprises
Target Audience	20 years old and above
Frequency	3 times a year
Number of Pages	Min 48 pages (Including cover)
Size	29.7cm (H) x 23cm (W)
Circulation	2,000 print run
Distribution	Government bodies and Agencies Financial Institutions Industry Professionals and Investors

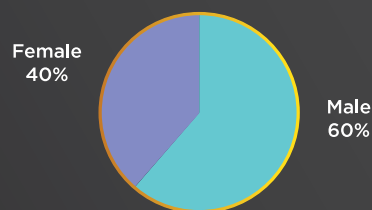


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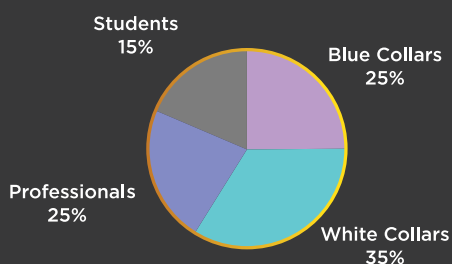
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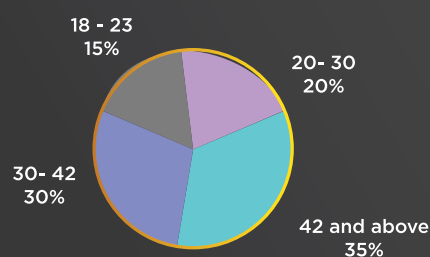
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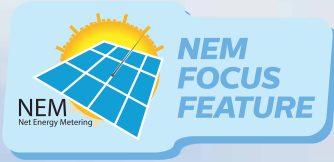


### OCCUPATION



### AGE





# THE JOURNEY TO GREEN:

## MSPI goes the distance in adopting RE technology

The signing of Paris Agreement in 2015 was a major milestone for mankind, where nearly 200 nations had come together and pledged their commitments to combat climate change and lessen its effects. Climate change, which includes both global warming driven by human-induced emissions of greenhouse gases and the resulting large-scale shifts in weather patterns, can cause devastating impacts. Global efforts to mitigate greenhouse gas emissions became the driving force in the development of renewable energy (RE), which has gained recognition as the ultimate game changer to preserve the environment for generations to come.

Malaysia has also pledged its commitment in the international treaty, and this marked the beginning of Mah Sing Plastics Industries Sdn Bhd's (MSPI) journey in adopting green energy technologies.

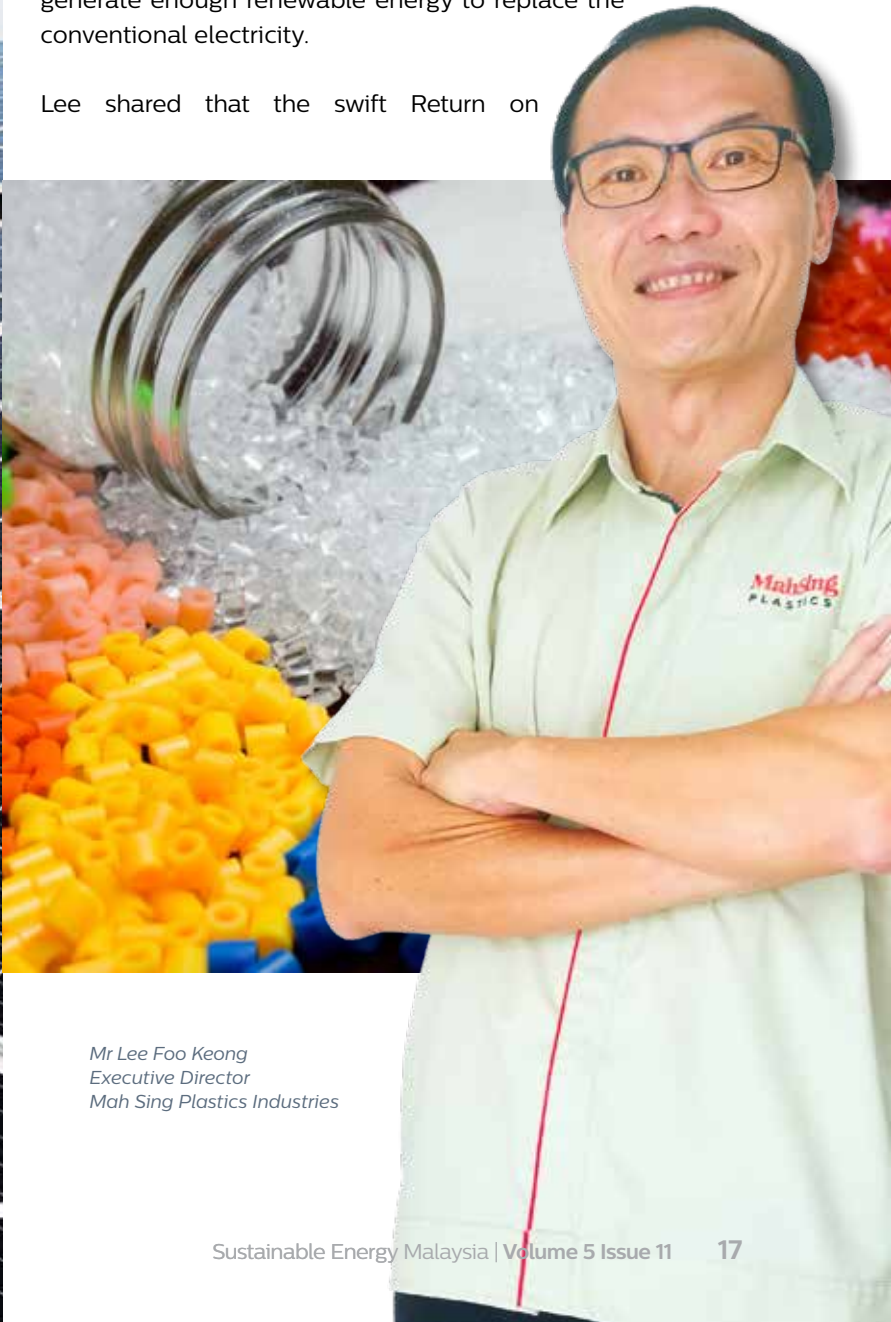
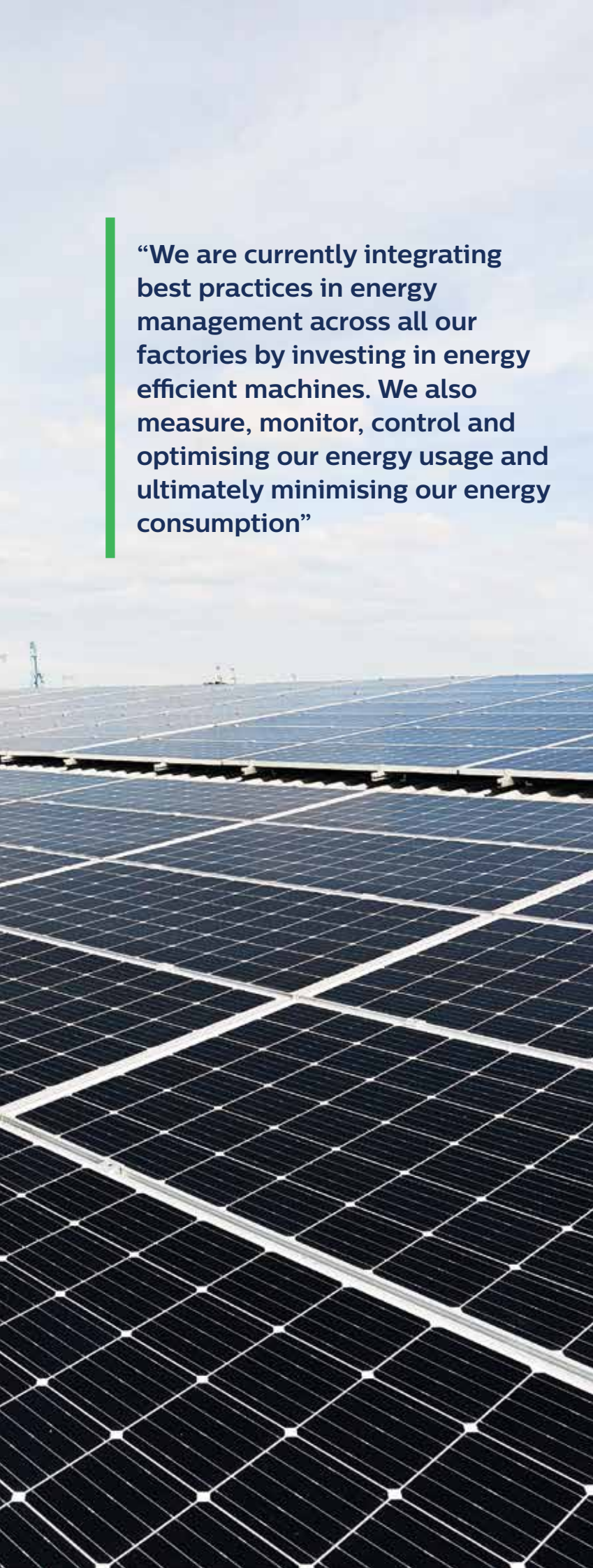
Incorporated on 15 October 1979, MSPI is a wholly-owned subsidiary of Mah Sing Group. Today, MSPI has become one of the largest high-tech plastic product manufacturers in Malaysia. It supplies plastic products such as pallets, containers, boxes, furniture and more.

**“We are currently integrating best practices in energy management across all our factories by investing in energy efficient machines. We also measure, monitor, control and optimising our energy usage and ultimately minimising our energy consumption”**

Being one of the major industry player in Malaysia, Mah Sing Plastics Industries Sdn Bhd (MSPI) has been hard at work transforming its operations by adopting various green initiatives, in line with the country’s commitment in the Paris Agreement. In a recent interview, MSPI Executive Director Mr Lee Foo Keong shared that its manufacturing plant has been fitted with RE technology under the Net Energy Metering (NEM) programme implemented by the Sustainable Energy Development Authority (SEDA) Malaysia. Under the NEM 2.0 programme, a one-on-one offset basis was introduced in which every 1kwh exported to the grid will be offset against 1kwh consumed from the grid.

In 2020, MSPI inked a RM12million deal with clean energy provider, Plus Solar Systems Sdn Bhd, to outfit its smart factory in Klang, Selangor. Lee confided that the company’s first impression of utilising solar PV wasn’t great. “It’s an expensive solution; it has high maintenance cost and the setup itself is exhaustive,” he elaborated. “However, after seeing the elaborate demonstration by Plus Solar, we were able to put all our doubts to rest. It gave us confidence that despite the price tag, the solar PV system could sufficiently generate enough renewable energy to replace the conventional electricity.

Lee shared that the swift Return on



*Mr Lee Foo Keong  
Executive Director  
Mah Sing Plastics Industries*



Investment (ROI) – within four years – was impressive, attributing this to the saving enjoyed under the Green Investment Tax Allowance (GITA) which allows 100% of the qualifying capital expenditure incurred on Green Technology project for three (3) years to be offset against 70% of MSPI's statutory income in the year of assessment.

“The issue of high maintenance cost is no longer a major concern as it is included in the contract for the first five years. Furthermore, the core parts of the solar system installed are covered by a warranty between five to twelve years. To sum it all up, this turnkey project is extremely beneficial to MSPI in terms of cost savings and completely hassle-free throughout the project period all the way to the handover stage.”

MSPI's solar PV installation project was carried out in two phases with Phase 1 completed in 2020 and Phase 2 scheduled in 2021.

“Our Phase 1 was completed in 2020 and we expect to achieve an estimate of 7% per annum savings on our electricity consumption once the second phase is completed,” he noted. “We are currently integrating best practices in energy management in all our factories by investing in energy efficient machines. We also measure, monitor, control and optimising our energy usage and ultimately minimising our energy consumption”

Lee asserted that MSPI acknowledges the importance to safeguard global warming and eco-toxicity free products, and as such, MSPI has positioned its products (plastic pallets, furniture, and boxes) with lower environmental impact associated with end-of-life disposal.

## “MSPI has been hard at work transforming its operations by adopting various green initiatives, in line with the country's commitment in the Paris Agreement”

“MSPI will also continue its buyback programme of unwanted or damaged plastics pallets, containers, chairs as an encouragement for our customers in creating more environmentally friendly operations. We also have an in-house education programme to promote Reduce, Reuse and Recycle practices, and other initiatives in place to drive towards sustainability in consumer waste such as food packaging.”

For MSPI's NEM journey, Lee stated “NEM is a well-crafted programme by SEDA Malaysia as it assist in reducing our ROI and accordingly boosts higher confidence in the country's renewable energy policy. “

Lee further explained “The inaugural NEM 1.0 was designed to enable its consumers to sell back the excess credit at a displaced cost basis. For example, a factory buys electricity at RM0.50 per unit but can sell back to the electricity distribution company at RM0.238. The NEM 1.0 programme provided a longer ROI but when it was reintroduced as NEM 2.0, businesses and factory owners are able to enjoy exporting energy at one-on-one offset basis. The ROI period is also shortened under NEM 2.0 and thus, businesses like MSPI can reap more benefits from the programme, in addition to reducing our carbon footprint. We are also able to take advantage of the Green Investment Tax Allowance (GITA) and immensely reduce our monthly electricity bills”

In his parting words, especially for companies who are still on the fence with regard to NEM as well as other EE and RE technologies, Lee urged these companies to act now, as it is a good business investment opportunity. “After all, it is part of a company's corporate social responsibility (CSR) to give back to the community and protect the environment, and this can be accomplished easily when they switch to renewable energy.” Lee also remarked that companies that have strong financial background should start investing now; alternatively, they can opt for a financial scheme.



# PVMS

PV MONITORING SYSTEM



## MALAYSIA'S LEADING PV MONITORING & PERFORMANCE DATABASE

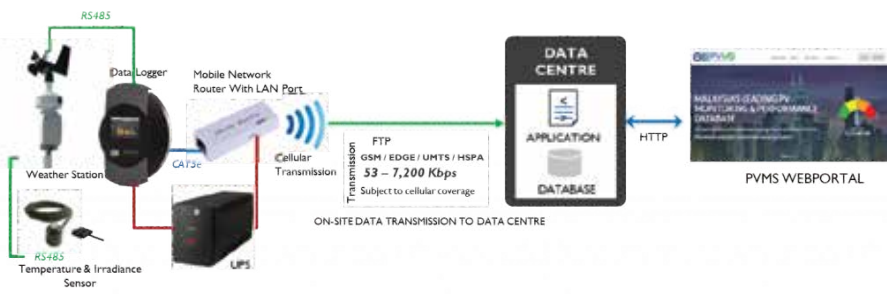
**Up-to-date information, real-time monitoring, and reports on solar photovoltaic (PV) in Malaysia. Harness and energise tomorrow's energy, today.**



The National PV Monitoring & Performance Database via the PV Monitoring System (PVMS) is an initiative to monitor selected grid-connected solar PV systems for performance and reliability. This programme is funded by Akaun Amanah Industri Bekalan Elektrik (AAIBE) and the Malaysian Electricity Supply Industries Trust Account (MESITA).

For a start, 149 grid-connected solar PV systems (up to 1MW capacity) throughout Malaysia are being monitored on a real-time basis. Both data and system performance analyses are available upon subscription. The Database will become the reference for designing national energy policies and programmes in the future.

## The PVMS system architecture



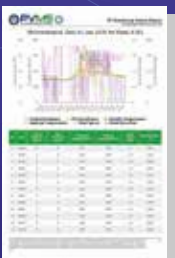
## PVMS REPORTS What's included?



**Summary**  
Energy Generation



**Plant Performance**  
Performance Ratio, Reference Yield, Specific Yield, and Final Yield



**Meteorological Data**  
Global Irradiance, Ambient Temperature, Wind Speed, Wind Direction, and PV Module Temperature



**Irradiation Data**  
Daily Irradiation

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# THE HEAT IS



# ON

**T**hermal energy in the form of heating and cooling in manufacturing processes and services industries are inseparable. For a long time, fossil fuel have been the generator of this heat. However, the adoption of solar thermal energy into the process heat applications is changing the landscape.

United Nations Industrial Development Organization (UNIDO) - Malaysia Energy Efficiency and Solar Thermal Application Project (MAEESTA) National Project Manager, Dr. Azmi Idris, said Malaysia's industrial sector, which covers 28% of total energy consumption in the country, has a big potential for solar thermal application to thrive.

The Malaysia Energy Efficiency and Solar Thermal Application Project (MAEESTA) is a national initiative supported by the Government of Malaysia and implemented by local experts together with United Nation Industrial Development Organization (UNIDO) for the development of thermal energy efficiency (EE) and application of solar thermal in Malaysian industries.

“As most of the industrial energy demand involves heating temperature below 120°C, this makes the sector ideal for commercially-available collectors. Thus, these resources have huge potential in replacing fossil fuels consumption in the industrial segment,” he told SEM in an email interview recently. He noted that at present, the major industrial users of solar thermal technology are food and beverage sectors, where they use solar thermal for applications such as hot water and commercial cooking. Solar thermal for hot water application has long been used among hospitals and hotel industry.

“Until now, the deployment of renewable energy (RE) in Malaysia has been primarily for the power generation segment. However, the awareness for utilizing RE for heating applications is increasing,” he added.

The International Energy Agency (IEA) Technology Roadmap for Solar Heating and Cooling estimates the long-term potential for solar thermal applications in industrial applications at 7.2 exajoule (EJ) a year and 1.5 EJ/year for solar cooling.



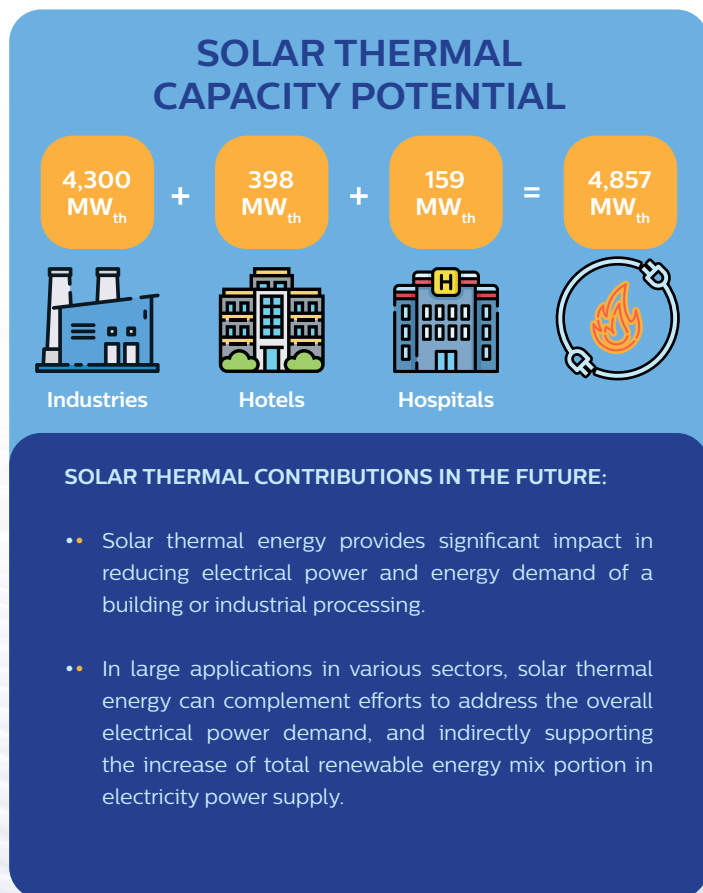
Dr. Azmi Idris  
National Project Manager  
Malaysia Energy Efficiency  
and Solar Thermal  
Application Project  
(MAEESTA)

The solar collectors for low-temperature process heat (<120°Celsius) could reach an installed capacity of 3,200GW (producing 7.2 EJ solar heat per year) by 2050, which would be the equivalent of 20% of energy use for low temperature industrial heat.

The UNIDO Industrial Energy Accelerator highlights several of these Solar Heat for Industrial Processes (SHIP) system applications, such as an oleo-chemical plant in Pasir Gudang, Johor that commissioned their SHIP in 2020 and expected to reduce their CO<sub>2</sub> emission by 80 tonnes annually.

“Further, considering the commitment of the Malaysian government to green energy and global experience, a penetration of 20% of the overall potential was also targeted for heating applications in development of MAEESTA Solar Thermal Market Analysis for Malaysian Industries till 2025. However, for the cooling applications, owing to the higher cost and complexity of technology, a penetration of 10% has been considered for cooling technologies till 2025. Besides, the Ministry of Health is supportive of solar thermal based heating and cooling systems by financing some pilot projects. In light of this, the potential penetration of the heating and cooling applications for public hospitals have been set at 40% and 20% respectively,” he said.

Azmi said the prospects of solar thermal technology is bright in Malaysia as the country’s energy consumption continues to rise while it raises the efforts to reduce its reliance on conventional resources.



He noted that there are several supporting factors for the growth of solar thermal in Malaysia. These include:

- Malaysia has numerous industries in food processing, dairy, chemical and textile requiring low and medium temperature application, which may be easily driven by solar thermal;
- There are signs of companies/industries demonstrating willingness to move from short-term energy and carbon reduction measures to long term and strategic measures, though primarily increased focus on renewable energy, which includes solar thermal component;
- The retrofit ability of solar thermal technology that can be integrated with the existing system, marks one of the major advantages of this technology for offering a cost-effective solution;
- There are already a few suppliers and installers of solar thermal systems in the existing market in Malaysia;
- The prices of natural gas are anticipated to increase with a gradual reduction in the subsidy share, thus switching to alternative and sustainable sources would be a better proposition for companies/industries; and
- Solar thermal technology offers financial benefits in the form of rebates and tax concessions in addition to huge amounts of energy savings.

According to the World Energy Outlook, Malaysia's energy demand will almost double between 2015 and 2040, with rising contributions from all energy sources. Oil demand will rise to about 1 million barrels a day by 2040, while the growth in natural gas demand slows, reaching around 55 billion cubic metres (bcm). As one of the largest producers of natural gas, Malaysia increased its natural gas and LPG exports more than five times in the last two decades. However, facing the reserve depletion, the country is unable to fulfil the domestic need for natural gas, and started importing LNG from 2013.

At the 21st COP summit in Paris, Malaysia through its Intended Nationally-Determined Contribution (INDC) has declared to reduce the country's greenhouse gas (GHG) emissions intensity of Gross Domestic Product (GDP) by 45% with 35% unconditionally, and 10% upon receipt of technology transfer and capacity building from developed countries by the year 2030, relative to its emissions intensity of GDP in 2005.

To meet the increasing demand and at the same time, reduce the carbon footprint of energy production and consumption, the Malaysian government has then moved towards harnessing renewable energy (RE) and advocating for energy efficiency (EE). The 10th and 11th Malaysian Plan have put tremendous focus on sustainable energy. Through various policy initiatives, schemes and programmes, specifically after the establishment of National Green Technology Policy in 2009, the country has made successful strides in increasing RE deployment in various sectors.

**“The prospects of solar thermal technology is bright in Malaysia as the country’s energy consumption continues to rise while it raises the efforts to reduce its reliance on conventional resources.”**

A study conducted by MAEESTA in its Solar Thermal Market Analysis for Malaysian Industries suggests that if the targeted 939 MW<sub>th</sub> of solar thermal capacity is deployed in industries, hotels and hospitals in Malaysia, the country would reduce an annual emission of 763 kilo tonnes CO<sub>2</sub> in the year 2025.

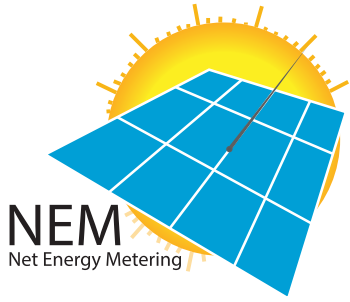
Azmi said this would contribute to 0.19% of COP21 GHG reduction target period. Further, on assuming 20 years project life, this will result in emission reductions of 13,850 kilo tonnes of CO<sub>2</sub> over the lifecycle of the projects.

He acknowledged that with the current business environment, it is quite challenging for the solar thermal industry to grow due to the cost of the system that is still high relative to the energy cost from fossil fuels.

“Furthermore, the absence of specific policy support for thermal energy in Malaysia has hampered the fast growth of solar thermal. Besides, local banks being unfamiliar with solar thermal projects creates challenges for users or suppliers to get financing. More demonstration projects are needed to showcase successful solar thermal plants and prove that this technology works efficiently and produces a good return on investment. As to how solar PV was started in Malaysia, solar thermal technology also requires support from the government for promoting the usage of the technology,” he added.

According to the the REN21's Renewables 2018 Global Status Report (GSR), globally, 35 GW<sub>th</sub> of capacity of glazed (flat plate and evacuated tube technology) and unglazed collectors were newly commissioned in 2017, bringing the total global capacity to an estimated 472 GW<sub>th</sub> by end of the year, translating into a total collector area of approximately 622 million square metres. Systems with glazed and unglazed collectors provided approximately 388 TWh of heat annually by the end of 2017, equivalent to the energy content of 228 million barrels of oil. China accounts for the maximum installations out of this, comprising 71%, followed by the USA, which accounts for another 4%.






# NEM NOVA

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MINISTRY OF ENERGY AND NATURAL RESOURCES





Bank Negara Malaysia

# Engagement with financial institutions key to renewable energy growth

**F**inancial industry plays an important role in narrating a country's renewable and sustainable energy growth, as companies involved in the renewable and sustainable energy business would require funding from financial institutions.

The more these financial institutions understand about the renewable and sustainable energy industry – its potential and its risks – the higher probability they will offer or develop more financial solutions to the industry.

Last November, Sustainable Energy Development Authority (SEDA) Malaysia was invited by Bank Negara Malaysia (BNM) to share its insights and knowledge on sustainable energy at the Value-Based Intermediation Financing and Investment Impact Assessment Framework (VBIAF) workshop.

The workshop was attended by executives from various financial institutions, international bodies, and local intermediaries, including Bank Islam Malaysia, Standard Chartered, Standard Chartered Saadiq, HSBC Amanah, The World Bank Group, World Wide Fund for Nature, Islamic Banking and Finance Institute Malaysia and Association of Islamic Banking and Financial Institutions Malaysia.

According to Ibrahim Ariffin, Director (Energy Analyst), Strategic Planning Division at SEDA Malaysia, there are several reasons why it is important for SEDA Malaysia to attend the workshop.

For a start, SEDA Malaysia is mandated under the Renewable Energy Act 2011 to provide advisory in relation to sustainable energy development, and in particular to facilitate the challenges faced by renewable energy developers.

Besides, financing has been one of the key challenges for the development of renewable energy projects. “In Malaysia, renewable energy is relatively a new area and the risks and performance of respective renewable energy plants are yet to be understood thoroughly,” Ibrahim said.

He also believed that the workshop is a good platform to engage and to explore further collaboration with financial institutions to grow the renewable energy industry.

Through the workshop, the participants now have a clearer picture on the formulation of the sectorial guides on renewable energy, in which to facilitate financial institutions to overlay its credit/ investment decisions with an environmental, social, and governance (ESG) risk score.

Besides allowing the financial institutions to have a better understanding of the renewable energy industry, the workshop also helps financial institutions in their implementation of Value-based Intermediation (VBI).

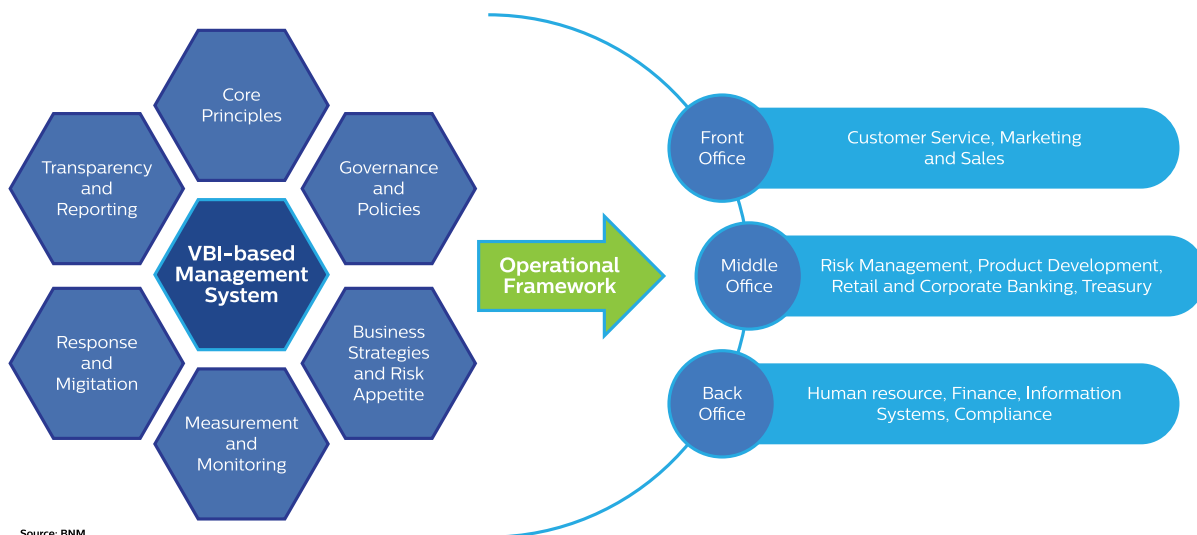
The VBI is a set of guidelines formulated by BNM to encourage banks to also consider value-based factors in their financing decisions. This means, banks need to move away from the conventional method, judging a loan application based on the borrowers’ credit score, and to also consider the environmental and social impact of the borrower’s business.

The VBI guidelines are largely based on Islamic finance principles.

“Aside from ensuring that the practices are Shariah-compliant, the framework intends to enable best practices, and offer financial services that generate positive and sustainable impact to the environment, community and economy, in line with shareholders’ sustainable returns and long-term interests,” he explained.



**VBI-based Management System is a guiding framework to Islamic Financial Institution’s operations**



Source: BNM

**“In Malaysia, renewable energy is relatively a new area and the risks and performance of respective renewable energy plants are yet to be understood thoroughly.”**

*Ibrahim Ariffin  
Director (Energy Analyst), Strategic Planning Division  
SEDA Malaysia*



He shared that financial institutions in the Netherlands have evolved and are currently providing financial services that go beyond monetary perspectives.

“Financing is offered to projects that can unlock values that are in line with ESG direction, and in one way or another, as guided by the Sustainable Development Goals,” he added.

With ongoing dialogues and engagements, the challenges faced by the renewable energy players - especially in the area of securing financing - can be overcome in the future.

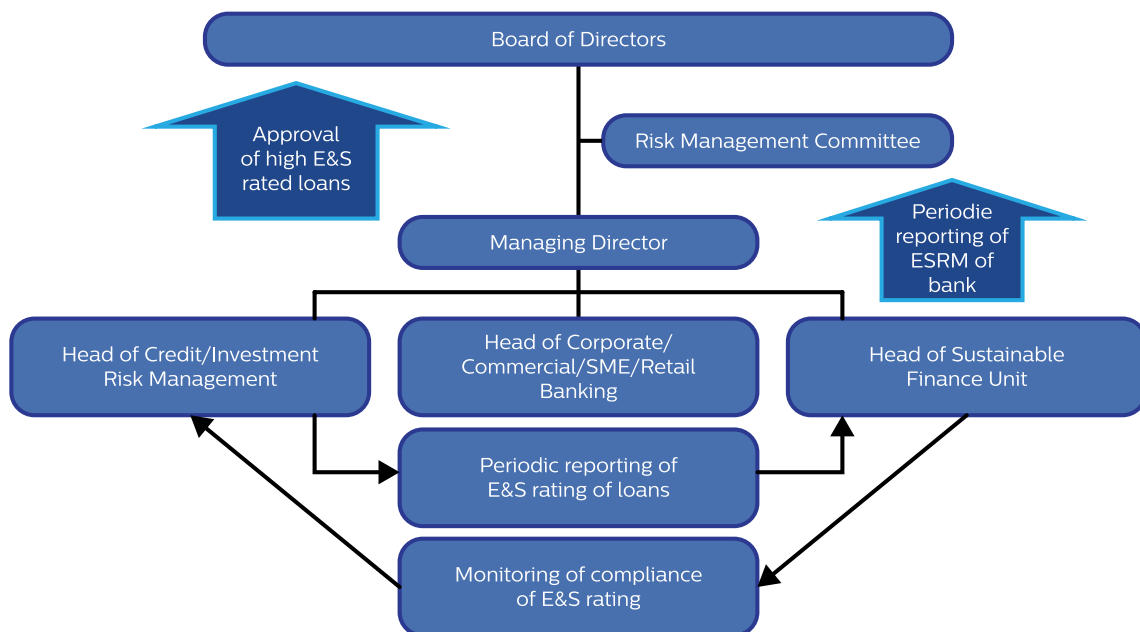
“SEDA Malaysia aspires the framework will alleviate the challenges in securing financing for renewable energy projects, and hence the renewable energy growth can be further

accelerated to achieve the national aspiration in achieving 31% of its capacity mix by year 2025,” he revealed.

The target is crucial in realising Malaysia’s commitment to the Paris Agreement towards the decarbonisation agenda.

“It is well understood that the declining price of renewable energy systems, in particular Solar PV, triggers a reservation to financial institutions in securing good investment returns. However, with a holistic and transparent framework, SEDA Malaysia hopes this will bridge the gap of current adoption and together we can grow the industry,” he said.

### VBI Financing and Investment Impact Assessment Framework



Source: Guidelines on Environmental and Social Risk Management (ESRM) for Banks and Financial Institutions in Bangladesh.

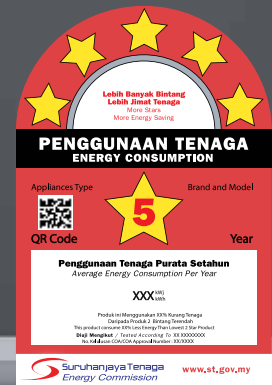
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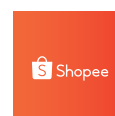


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MINISTRY OF ENERGY AND NATURAL RESOURCES





# MSU SCORES 2-DIAMOND

IN SEDA MALAYSIA VOLUNTARY  
SUSTAINABLE LOW CARBON  
BUILDING PERFORMANCE  
ASSESSMENT-GREENPASS AND  
CERTIFICATION

**M**anagement and Science University (MSU), a private university based in Shah Alam, has recorded a new milestone after it was officially awarded the Low Carbon Building (LCB) 2-Diamond rating under the Sustainable Energy Development Authority (SEDA) Malaysia Voluntary Sustainable Low Carbon Building Performance Assessment-GreenPASS and Certification.

MSU, which is one of the few private universities in Malaysia to receive the 2-Diamond rating in SEDA Malaysia Voluntary Sustainable Low Carbon Building Performance Assessment-GreenPASS and Certification, recorded 24.21% operational energy reduction in 2020 against the baseline measurements a year ago.

“The Voluntary SEDA’s Low Carbon Building Performance Assessment-GreenPASS and Certification Programme, which focuses on actual energy used and reduced in buildings thereby making an accurate reflection of the emissions and reduction contributed to the environment, represents an annual electricity savings of 5,646,661 kWh or 3,918.78 tonnes of carbon dioxide equivalent (CO<sub>2</sub>eq) in 2020. MSU is well on its way to support the government’s target of 45% GHG intensity reduction in 2030,” SEDA Malaysia Acting Chief Strategic Officer TS Steve Anthony Lojuntin said.

“The Voluntary SEDA’s Low Carbon Building Performance Assessment-GreenPASS and Certification Programme, which focuses on actual energy used and reduced in buildings thereby making an accurate reflection of the emissions and reduction contributed to the environment, represents an annual electricity savings of 5,646,661 kWh or 3,918.78 tonnes of carbon dioxide equivalent (CO2eq) in 2020”



To recognise MSU’s efforts in growing the sustainable energy initiative, SEDA Malaysia, represented by Lojuntin, presented the university with its first low carbon building certification. The certificate was received by MSU President Professor Tan Sri Dato’ Wira Dr. Mohd Shukri Ab Yajid.

MSU attributed its achievements to its ongoing leadership, its commitment, as well as its outreach to staff and students. The university said that it is important to build a culture that embraces sustainability.

During its journey to reduce its carbon footprint, the university also looked into areas like reverse contribution to global climate change, biodiversity, restoration, enhancement and protection of water resources, as well as promotion of sustainable and regenerative cycling of material resources.

Now that MSU has secured the SEDA Malaysia Voluntary Sustainable Energy Low Carbon Building Assessment – GreenPASS certification, the university can aim to achieve more in sustainable energy by applying the MS1525 – Code of Practice On Energy Efficiency and Use of Renewable Energy, and later in future will be able to upgrade to full green building certification.

This certification by SEDA Malaysia can be applied to all type of buildings including the multiple strata units, differing from some building rating systems which only certify projects based on several type of buildings, full building and some may not suitable due to nature of the said buildings. SEDA’s voluntary certification are based on the energy balance and carbon emission boundary for whole or partial building. It is also currently used to assess zero energy buildings based on the Japanese Zero Energy Building assessment methodology.



All thumbs up: (from left) SEDA Malaysia Acting Chief Strategic Officer TS Steve Anthony Lojuntin, and MSU President Professor Tan Sri Dato’ Wira Dr. Mohd Shukri Ab Yajid.

The non-discrimination and ‘affordable to all’ approach allows building owners and facilities management teams to set own building energy consumption and carbon emission benchmarks from which they can improve over time. This will enhance the Government’s capability to widespread its low carbon building implementations and eventually, mainstreaming and making carbon reduction measures more effective.

SEDA Malaysia hopes more premises, including universities, can join the sustainable energy bandwagon.

For further info, kindly visit SEDA Malaysia website on SEDA’s Voluntary Low Carbon Building Performance Assessment-GreenPASS and Certification Programme ([www.seda.gov.my/greenpass](http://www.seda.gov.my/greenpass)).

# CATALYSING THE SUSTAINABLE ENERGY TARGET THROUGH ENERGY AUDIT GRANTS



*by Mohd Shah Hambali Arifin  
Acting Deputy Director  
Technical Development and  
Facilitation (TECH) Division  
SEDA Malaysia*

In the age of focused corporate responsibility, climate change, and environmental awareness such as the rising awareness on the reduction of greenhouse gas emission, more organisation are realizing the importance of implementing the sustainable energy practices especially through energy saving measures (ESM). This not only lower operational costs by being more energy efficient, but they also reap environmental benefits for themselves and their communities.

However, the transition to this energy saving measures is insufficient without conducting a proper energy audit.

Energy audit is a process that analyses a particular facility, building or installation's energy consumption.

As part of its strategy to raise the awareness of energy management and importance of having energy audit, and hence, reduce electricity consumption, the Malaysian government has introduced the Energy Audit Conditional Grant (EACG).

The programme, initiated by the Ministry of Energy and Natural Resources (KeTSA), with SEDA Malaysia as the implementing agency, was first announced under the 11th Malaysia Plan (2016 to 2020). The Suruhanjaya Tenaga is the coordinator of the programme, while Energy Service Company (ESCO) will be tasked to conduct the energy audits.

Due to the positive response by the public, and its impact to the overall sustainable energy agenda, the programme is continued under the 12th Malaysia Plan (2021-2025). The programme was approved with a total allocation of RM86.73 million under the 12th Malaysia Plan.





## IMPORTANCE OF ENERGY AUDIT

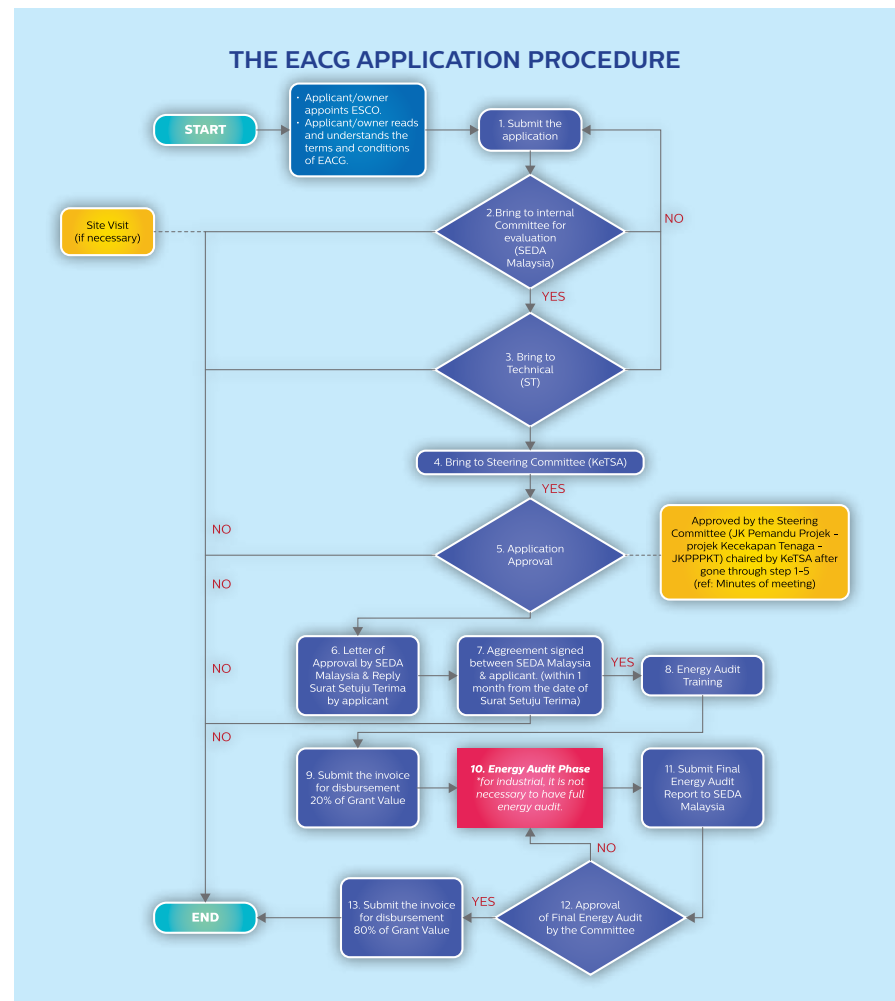
The main objective of the EACG programme is to provide financial assistance in the area of energy audit to those who are committed to reduce their energy consumption. It is also aimed at fostering awareness on the importance of energy management and energy audit among the industrial and commercial building owners in Malaysia in order to reduce the electricity consumption in strategic way.

On the national scale, the EACG programme will further strengthen Malaysia's position as a country committed to reduce carbon emission and to increase the adoption of energy management practice. Besides, it also puts Malaysia on the right track as it moves towards becoming a nation that widely exercise the practice of Energy Management in both industrial and commercial sector.

A well-performed energy audit can help a company to get a full and comprehensive report of the building or facility's overall energy consumption. Without this, it is very challenging for the owners to identify the wastage of energy and how to improve the savings in systematic way and estimated cost to implement it.

With a proper audit, businesses are able to identify which area of their operations are consuming excessive electricity, and with that information, ESCOs would then be able

to advise on the next course of action to reduce energy consumption. For example: the energy audit may discover that a particular production line is consuming more electricity than the others, even though all production lines are using the same machines - which may be solved by conducting a regular maintenance schedule.



Source: RMK-12 Energy Audit Conditional Grant (EACG) and Energy Management Project Implementation Book

“The programme is also aimed at fostering awareness on the importance of energy management among the industrial and commercial building owners in Malaysia in order to reduce the electricity consumption”





Overall, businesses will be able to enjoy significant savings on operational costs, and hence, resulting in improvements in bottom-line. On top of that, it can help a company to project a positive image – as an environmentally responsible corporate citizen – which in turn can translate into a competitive advantage.

The conditional grants can be used by the recipients to cover the cost of energy audits of their buildings provided that if the building owner agreed to implement the ESM as recommended in the energy audit report submitted by the ESCO.

However, the applicant/owner may select the most appropriate ESMs and it is not compulsory to implement all the recommended ESMs in the energy audit report as long as the total minimum energy saving is achieved and the investment is similar or higher than total amount of grant.

For those who are interested to participate in the EACG programme, please download the application form available on SEDA Malaysia's website and email the form to [hambali@seda.gov.my](mailto:hambali@seda.gov.my)/[zulkhairee@seda.gov.my](mailto:zulkhairee@seda.gov.my)

## WHO ARE ELIGIBLE TO APPLY?

Any existing installation (industrial or commercial sector)

- Installation listed under the Efficient Management of Electrical Energy Regulation 2008 (EMEER) by Energy Commission, are eligible to apply (in Peninsular, Sabah & Labuan).
  - ➔ Any installation (industrial and commercial) which receives electrical energy from a licensee or supply authority with a total electrical energy consumption equal to or exceeding 3,000,000 kWh as measured at one metering point or more over any period not exceeding six consecutive months;
  - ➔ Any installation which is used, worked or operated by a private installation licensee with a total net electrical energy generation equal to or exceeding 3,000,000 kWh over any period not exceeding six consecutive months;

- For Sarawak state, the applicants must submit the latest electricity bill (SEB) for 6 consecutive months whereby the total 6 months consumption shall be equal or higher than 3,000,000 kWh.
- Applicant shall appoint or designate an Energy Service Company (ESCO) registered by Suruhanjaya Tenaga (ST) / Electrical Inspectorate Unit (in Sarawak) to carry out the energy audit functions and duties.



**\*Applicant is installation/building/industrial owner/management**



**\*Energy auditor is a registered ESCO with ST/ EIU, to be appointed by the applicant**

[www.seda.gov.my/eagrant](http://www.seda.gov.my/eagrant)

CONTACT SEDA AT  
+6 03 8870 5814 / 8870 5850

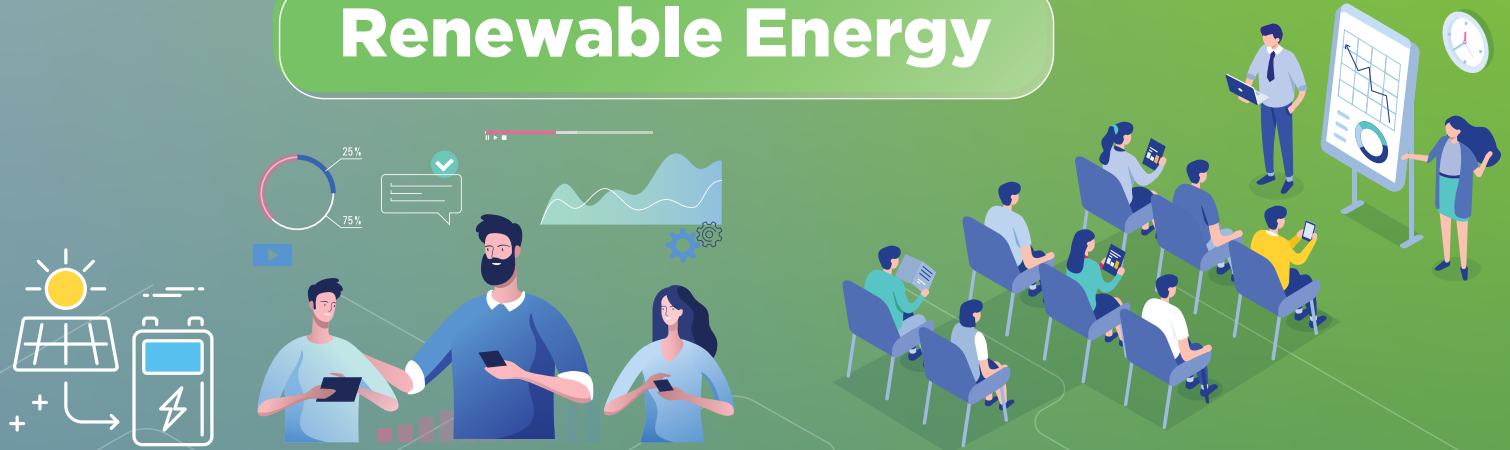




# SEDA MALAYSIA

## TRAINING PROGRAMMES

### Renewable Energy



### Trainings for Qualified Person/Technical

- Grid-Connected Photovoltaic (GCPV) System Design
- Off-Grid Photovoltaic (OGPV) System Design
- Grid-Connected Photovoltaic (GCPV) for Wireman & Chargeman
- Grid-Connected Photovoltaic (GCPV) Installation and Maintenance
- Operation and Maintenance of Biogas Power Plant
- Continuous Development Programme for Continuous Development Programme (CDP) for SEDA Malaysia Grid-Connected Solar PV Systems Design Qualified Persons (QPs)

### Awareness Trainings:

- Introductory Training on Grid-Connected Photovoltaic (GCPV) System for Non-Technical Persons

**For more information, please visit our website**

[www.seda.gov.my](http://www.seda.gov.my)



# SEDA MALAYSIA UNVEILS E-BIDDING EXERCISE DETAILS FOR 2021

**A**ccording to the Minister of Energy and Natural Resources YB Datuk Seri Dr Shamsul Anuar Bin Hj Nasarah, renewable energy installed capacity in Malaysia, including large hydropower, is at 23% of the national installed capacity mix. The minister has also set a target to achieve 31% renewable energy installed capacity by 2025.

One of the drivers that will help increase the supply of renewable energies is Malaysia's renewable energy-friendly policies and programmes, including the renowned Feed-in Tariff (FiT) mechanism.

The FiT mechanism was first outlined in the National Renewable Energy Policy and Action Plan, and it was formally established under the Renewable Energy Act in 2011. FiT is a mechanism that allows Feed-in Approval Holders to sell electricity produced from renewable resources - such as solar PV, biogas, biomass and small hydropower - to Distribution Licensees.

By facilitating access to the electricity network and setting a favourable price per unit of renewable energy, the FiT mechanism would ensure that renewable energy becomes a viable and sound long-term investment for industries and also for individuals.

When the FiT mechanism was first implemented on December 1 2011, the electricity produced from renewable sources was sold at a fixed premium price for a specific duration.

However, in 2018, SEDA Malaysia enhanced the FiT mechanism via competitive e-bidding to improve price discovery. The enhancement is aimed to ensure that Malaysia gets the most renewable energy supplies at a price deemed comfortable by bidders.

The inaugural e-bidding exercise for 30.101MW biogas quota was conducted in 2018. The e-bidding exercise saw 15 successful bidders with basic bid tariffs ranging from 22.1sen/kWh to 28.14sen/kWh.

The accomplishment of the inaugural e-bidding exercise quota for biogas in 2018 spurred the introduction of the first e-bidding exercise for small hydro quota in 2019, along with another round of e-bidding exercise for biogas quota. The 2019 e-bidding exercise saw a quota of 208.033MW - comprising 31.243MW for biogas and 176.79MW for small hydro - awarded to renewable energy producers.

The 2019 e-bidding exercise was a success, as it managed to allocate additional quota to bidders - mainly due to the price efficiency achieved during the bidding exercise.

With encouraging results shown during the past e-bidding exercises, SEDA Malaysia has kickstarted its first offering of biomass quota via e-bidding in 2021, along with the opening of e-bidding exercise for biogas and small hydro quota.

In March 2021, SEDA Malaysia briefed industry players and interested parties on the amount of FiT quota available for bids.

A total of 187.805MW of FiT quota is available. The quota is made up of 30MW of biomass, 31.805MW of biogas and 126MW of small hydro.

SEDA Malaysia urges companies and interested parties to submit their application during the respective bid submission window.



### 2021 FiT E-Bidding Exercise

Renewable Resource	Quota Offered (MW)	Expected Commercial Operation (Year)	Briefing Date	Bid Submission Window	Application Methodology
Biogas	31.805	H1 2024	1 <sup>st</sup> March 2021 (Monday)	10:00am, 1 <sup>st</sup> June 2021 to 1:00pm, 15 <sup>th</sup> June 2021	e-bidding
Small Hydro	126.0	H1 2026		10:00am, 8 <sup>th</sup> June 2021 to 1:00pm, 29 <sup>th</sup> June 2021	e-bidding
Biomass*	30.0	H1 2024		10:00am, 22 <sup>nd</sup> June 2021 to 1:00pm, 6 <sup>th</sup> July 2021	e-bidding

\*First e-bidding for biomass quota

### FiT e-bidding exercise (2018-2020)

Year	RE	Quota Awarded (MW)
2018	First e-bidding quota for Biogas	30.101
	<b>Total e-bidding quota</b>	<b>30.101</b>
2019	Biogas	31.243
	First e-bidding quota for Small Hydro	176.79
	<b>Total e-bidding quota</b>	<b>208.033</b>
2020	Biogas	28.195
	Small Hydro	247.99
	<b>Total e-bidding quota</b>	<b>276.185</b>



**T**he Net Offset Virtual Aggregation (NOVA) programme, which is one of the three programmes under the Net Energy Metering (NEM 3.0), has received strong response since its allocated quota was opened for application on April 1.

According to Sustainable Energy Development Authority (SEDA) Malaysia Chief Executive Officer Dato' Hamzah Hussin, 300MW of quota have been allocated and 222.98MW quota has been applied by the private sector as of May 15, 2021.

"The response for NOVA programme is overwhelming," Hamzah said. "I expect the quota to be fully applied soon."

NOVA is one of the three programmes under the NEM 3.0. The other two programmes are NEM Rakyat and NEM GoMEn.

NEM Rakyat, which has been allocated with a 100MW quota, is open to domestic (residential) consumers, while the NEM GoMEn, which has also been allocated with a 100MW quota, is open to all ministries and government agencies.

Under the ten-year NOVA contract period, a consumer can install solar PV systems for self-consumption in its own premises, and export the excess energy through the supply system via two categories.

In the Category A, consumers will be able to export the excess energy to the distribution licensee. (refer to Figure 1)

# POSITIVE RESPONSE

## FOR NOVA PROGRAMME

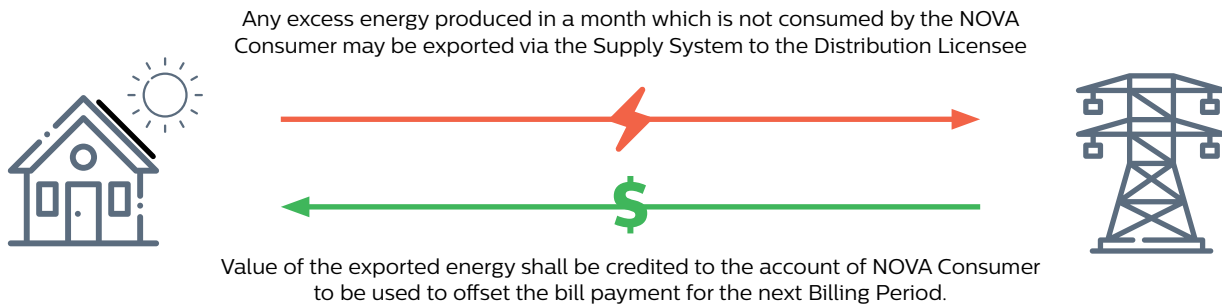


Figure 1: Category A

In Category B, consumers can export the excess energy through the supply system to up to three designated premises. This means, if the consumer has another wholly owned subsidiary company, they can export the excess energy calculated based on Average System Marginal Price (SMP) up to three companies to reduce the premises' electricity bills. (refer to Figure 2)

In order to ensure more consumers can join the renewable energy bandwagon, the NOVA programme placed a cap on the maximum capacity of the PV installation.

Hamzah said a NOVA consumer under Category A shall not install more than 1,000kW for net offset, while a NOVA consumer under Category B shall not install more than 5,000kW for net offset virtual aggregation.

He said that the NOVA programme is part of the Government's initiatives to achieve 31% renewable energy installed power by 2025.

"This target will be the stepping stone for Malaysia to achieve 40% renewable energy installed power capacity by 2035," Hamzah said.

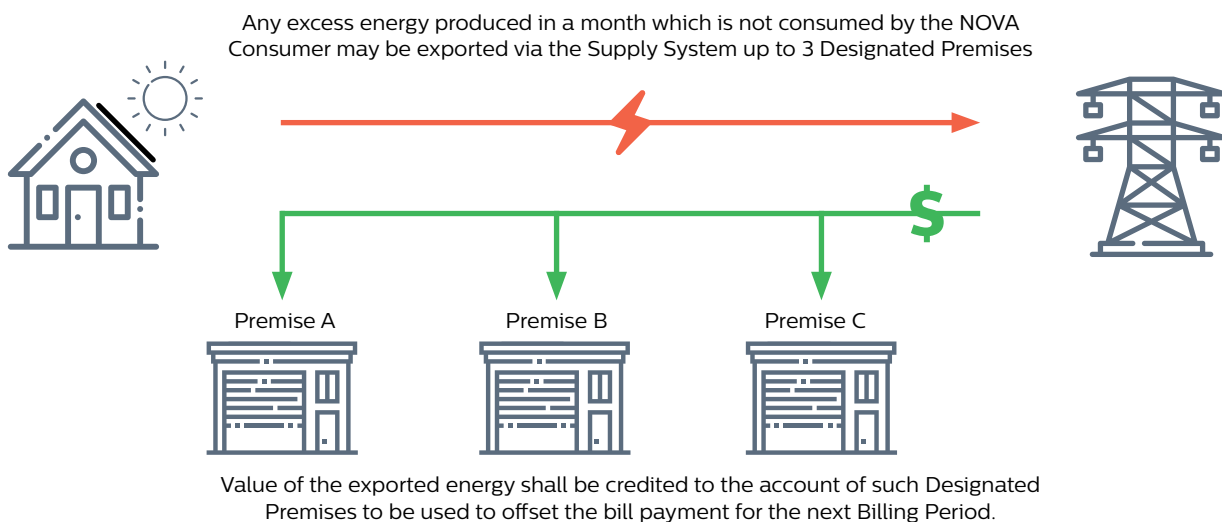



Figure 2: Category B



**T**he International Renewable Energy Agency (IRENA) gave a preview of its latest report - **World Energy Transitions Outlook - at the Berlin Energy Transition Dialogue on 16th March 2021.**

The World Energy Transitions Outlook outlines global strategies towards carbon-neutrality and leads the way to a climate-safe 1.5°C pathway by 2050.

Due to the COVID-19 pandemic, the annually-held Dialogue went virtual this year. The Federal Foreign Office in Berlin hosted the event, and a small circle of speakers and ministers did broadcast directly from Berlin – in compliance with hygiene rules.

**“The window of opportunity to achieve the 1.5°C Paris Agreement goal is closing fast. The recent trends show that the gap between where we are and where we should be is not decreasing but widening.”**

*Francesco La Camera  
Director-General  
IRENA*



# Fast-Track Energy Transitions to Win the Race to Zero



IRENA told the Dialogue participants that findings from the report indicated that proven technologies for a net-zero energy system already exist today, and renewable power, green hydrogen and modern bioenergy will dominate the world of energy in the future.

To contain the rise of temperature to 1.5°C and stop the irreversible global warming, the report proposes the adoption of energy transition solutions to capitalise on the available opportunities to achieve the objective.

It noted that 90% of all decarbonisation solutions in 2050 will involve renewable energy through direct supply of low-cost power, efficiency, renewable-powered electrification in end-use as well as green hydrogen.

IRENA said carbon capture and removal technologies in combination with bioenergy will deliver the 'last mile' CO<sub>2</sub> reductions towards a net-zero energy system.

It pointed out that the World Energy Transitions Outlook comes at a critical time as the 2030 deadline is just around the corner. IRENA said acting fast and bold on global climate pledges are crucial in the decisive year of the UN High-Level Dialogue on Energy and Glasgow Climate Conference COP26.

“The window of opportunity to achieve the 1.5°C Paris Agreement goal is closing fast. The recent trends show that the gap between where we are and where we should be is not decreasing but widening,” IRENA Director-General Francesco La Camera said.

The World Energy Transitions Outlook considers options of the narrow pathway that the world has to be in line with the 1.5°C goal.

Camera stressed that the world is in need of a drastic acceleration of energy transitions to make a meaningful turnaround. “Time will be the most important variable to measure our efforts,” he added.

Camera acknowledged that there are several favourable elements pointing to success in achieving the 1.5°C goal.

Major economies, accounting for over half of global CO<sub>2</sub> emissions, are turning carbon neutral, and the global capital is moving towards the same trend.

“We see financial markets and investors shifting capital into sustainable assets. Covid-19 has highlighted the cost of tying economies to fossil fuels and confirmed the resilience of renewable energy. As governments pump huge sums in bailouts and recovery, investment must support energy transition. It is time to act and countries can lead the way with policies for a climate-safe, prosperous and just energy system fit for the 21st century,” the Director-General pointed out.

The World Transition Energy Outlook anticipates that the global efforts to limit global warming to 1.5°C, as pledged under the Paris Agreement, will see a trebling of global power dominated by renewables in the year 2050.

Use of fossil fuel will also decline by more than 75% over the same period, with the consumption of oil and coal to shrink the fastest. Natural gas should peak around 2025, becoming the largest remaining fossil fuel by 2050.

The report reasoned that the financial markets will reflect the shift by allocating capital away from fossil fuels and into sustainable assets like renewables.

The downgrading of fossil fuels continues, with shares of the fossil fuel-heavy energy sector in S&P index falling from 13% a decade ago to below 3% at present. In contrast, investors are flooding money into renewable energy stock with S&P clean energy up by 138% in 2020.

The World Transition Energy Outlook also indicates that significant investments have to be redirected towards green interests.

It explains that there exists a major imbalance in the areas of global investments, where major economies, which have announced their economic stimulus packages, will be pumping approximately USD 4.6 trillion directly into carbon-relevant sectors such as agriculture, industry, waste, energy and transport. However, less than USD 1.8 trillion is in green-related sectors.

To achieve the 1.5°C pathway, energy transition investment will have to increase by 30% over planned investment to a total of USD 131 trillion between now and 2050, corresponding to USD 4.4 trillion on average every year.

It noted that investing in transition will create close to three times more jobs than fossil fuels, for each million dollars of spending. To address concerns about a fair and just transition, the World Energy Transition Outlook calls for a holistic and consistent overall policy framework.

IRENA’s “1.5°C pathway” sees electricity becoming the main energy carrier in 2050 with renewable power capacity expanding more than ten-fold over the same period. Transport will see the highest growth of electrification with a 30-fold increase. Almost 70% of carbon emission reductions in transport will come from direct and indirect electrification.

Green hydrogen will emerge as one of the major demand for electricity, representing 30% of total consumption in 2050. Bioenergy combined with carbon removal technologies (BECCS) will increasingly be important for industry to bring “negative emissions” in face of a limited carbon budget for 1.5°C. — **Source: IRENA**

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Greenplus, Malaysia's Premier Eco-friendly, Sustainable Lifestyle and Green Business Magazine, is published to meet the specific needs of professionals at the forefront of green sustainability in the country.

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IEA-COP26 SUMMIT:

# PUTTING NET-ZERO EMISSIONS TARGETS INTO ACTION

21 December 2015 is a date to remember when nearly 200 countries reached a landmark agreement to undertake ambitious efforts to combat climate change and adapt its negative impacts. This became known as the Paris Agreement, in full Paris Agreement under the United Nations Framework Convention on Climate Change, also called Paris Climate Agreement or COP21, which came into force on 4 November 2016.

The Paris Agreement is considered the first-ever, legally binding international treaty that sets out a universal framework to fight the climate crisis with the central objective to limit global warming to well below 2 degrees Celsius compound to pre-industrial levels by the year 2100, and make further efforts to keep the temperature rises to below 1.5 degrees Celsius.





The world leaders have convened once again on 31 March 2021 for IEA-COP26 Summit to formulate the best collaborative approach to reach net zero emissions, and to accomplish the goals of the Paris Agreement.

The IEA-COP26 Summit was jointly hosted by International Energy Agency (IEA) Executive Director Dr. Fatih Birol, and COP26 President-Designate Mr Alok Sharma. The virtual roundtable was attended by prominent energy and climate leaders from the United Kingdom, the European Union, South Africa, Japan, South Africa and many more, as well as representatives from international organisations, government institutions, civil society and the private sector – representing more than 80% of the global economy, population and emissions.

During the opening discussion ‘A Grand Coalition to Achieve Net Zero’, COP26 President-Designate Alok Sharma noted that while countries committed to the Paris Agreement have established their actions plans or nationally determined contributions (NDCs) to reduce their greenhouse gas emissions to zero within the second half of the 21st century, international collaboration is crucial in order to meet the long-term temperature goal of the international treaty.

“Presently, we are heading for global temperature rises of over three degrees Celsius, which will cause devastation in each and every country that is represented here today. In many cases, it’ll be the catalyst for an apocalyptic future,” said Sharma. “We must do much more now to turn remote targets into immediate action. We simply cannot afford another decade of deliberation, we need this to be a decade of delivery.”

Sharma also mentioned that enhancing international collaboration is a key goal of the UK's COP26 Presidency. "This is not a matter of shouldering a burden, but of sharing an opportunity. By working together we can create strong incentives for investment, innovate faster, achieve economies of scale and protect our planet for future generations."

The IEA-COP26 Summit is a crucial milestone leading up to the 26th United Nations Climate Change Conference (COP26) in Glasgow in November. It brought together high-level decision-makers from over 40 countries to focus on critical need for international collaboration and policy implementation to accelerate clean energy transition.

IEA Executive Director Dr Fatih Birol presented the Summit's 7 Key Principles for Implementing Net Zero to provide an effective framework for countries to work together and translate their ambitious targets into real emissions reductions. The principles cover various areas, such as:

- The need for sustainable recoveries from the COVID-19 pandemic, which can subsequently provide a once-in-a-generation opportunity for countries to jumpstart progress towards net zero emissions;
- The critical importance for governments to set out clear, ambitious and implementable net-zero-aligned roadmaps to 2030 and beyond;
- Sharing best practices, technology collaboration, and providing targeted advice to drive the pace of transition across the global energy system;
- The development of stronger, consolidated public-private mechanisms for international coordination to accelerate innovation and deployment of climate-neutral energy technologies in each major emitting sector of the global economy;
- Mobilising, tracking and benchmarking public and private investment to put the world on track for net zero;
- Safeguarding people-centred transitions; and,
- Ensuring a diverse, sustainable and socially acceptable clean energy and technology mix; making best use of existing infrastructure; and, addressing challenges such as climate resilience, cyber risks, the availability and security of critical minerals.

Birol also announced that IEA will publish "**NET ZERO BY 2050: A ROADMAP FOR THE GLOBAL ENERGY SECTOR**" on 18 May 2021. It is a comprehensive report that will boost an orderly transition and identify milestones for governments, industries and citizens, which will lead to a clean, prosperous and resilient global economy in 2050 – all of which will subsequently help the countries to achieve the climate goals of the Paris Agreement.

The IEA-COP26 Summit also featured several high-level discussions and five ministerial panels, which were livestreamed across IEA digital platforms.

#### PANEL 1: ENSURING PEOPLE-CENTRED TRANSITIONS

The session examines how to put people at the centre of clean energy transitions, to which Minister Dan Jørgensen (Denmark) underlined three areas of concern:

1. Availability of jobs when putting people at the forefront of the transitions;
2. The transitions would affect all people and therefore, they must be given a voice;
3. Everyone including women, youth and marginalised groups must be involved in the dialogue.

#### PANEL 2: CATALYSING NEAR-TERM IMPLEMENTATION

The session assesses methods to improve the implementation of clean energy transitions across IEA family. Minister Arifin Tasrif (Indonesia) highlighted all parties must be more catalyst to the energy as international collaborations will be the catalyst the energy transition required. He also urged that all clean technologies should be aligned with the energy goals in the next decade.



### PANEL 3: ACCELERATING TECHNOLOGY AND INNOVATION IN KEY SECTORS

The session explores what fora and institutions are needed to enhance the international collaboration within each energy use sector. Minister Anne-Marie Trevelyan (UK) reiterated the importance of enhanced international collaboration across all sectors to rapidly reduce CO2 emissions in order to achieve the 1.5 degrees Celsius temperature goal, especially within sectors like shipping, aviation, iron and steel. She also remarked that ministers across governments must play their respective roles to accomplish the task at hand.

### PANEL 4: MOBILISING CLEAN ENERGY INVESTMENT

The session studies effective methods to ensure investment flows are aligned with clean energy goals, during which Minister Seamus O'Regan (Canada) stated that mobilising finance is crucial component for clean energy transitions. The private sector needs the governments to establish goals as massive investment is involved in order to achieve the net zero emissions target.

**“This is not a matter of shouldering a burden, but of sharing an opportunity. By working together we can create strong incentives for investment, innovate faster, achieve economies of scale and protect our planet for future generations.”**

### PANEL 5: BUILDING CONFIDENCE THAT COMMITMENTS WILL BE REALISED

During the session, Minister Teresa Ribera (Spain) called for setting up short-term goals, with issues and challenges faced by all parties taken into consideration. She also stated that transparency and policy consistency will greatly reduce risk and enhance action, and financial institutions should play an important role in the matter. Timeframes must be agreed and respected by all parties, with investment decisions made must be consistent with climate goals.

Christiana Figueres, who previously served as Executive Secretary of the UNFCCC during COP21 when the Paris Agreement was signed, highlighted once again the importance of collaboration in all countries and across sectors, and that there should be a common ground in the collaboration. While finance is crucial, she believed the IEA's new global roadmap may very well lead the countries to net zero emissions by 2050.

Minister Juan Carlos Jobet (Chile) also commented that ambition would be key for progress in the upcoming COP26, with national initiatives, positive growth and job availabilities to be highlighted during the conference. He also pointed that realising the Paris Agreement would mean relying on technologies that are not yet available and therefore, innovation is fundamental to developing new clean energy technologies needed to achieve the temperature goals.



# The European Union Leads In Renewable Energy

“The EU has aspirations to double their REs in all sectors and the ambition is to see 65% of electricity consumed coming from renewables by the year 2030”

High growth figures of member states on track to achieve EU Climate Target Plan. A collaboration with Malaysia is in the works as well

**T**he biggest challenge faced by governments to tackle climate change is getting people and corporations to embrace renewable energy sources (RES).

In the European Union, the long-term concerted effort by the relevant parties in the member states has seen positive signs of growth.

Online figures showed that the share of energy from renewable sources in gross final consumption of energy was 18% in 2018 – up from 8.5% in 2004.

His Excellency Michalis Rokas, Ambassador of the European Union Delegation to Malaysia gave an insight to the EU's success story in a recent interview.

“The latest available data on renewable energy shares concerns the year 2019 and was published on 18 December 2020. It shows that in 2019 the EU was at 19.7%, an increase of 0.8% since 2018. There are 14 Member States who have gone beyond their 2020 target level, while another 13 Member States require further action to reach their target levels and seven of them are still quite far from the target,” Rokas explained.

H.E. Michalis Rokas  
Ambassador of the European  
Union Delegation to Malaysia



“In increasing the consumption of renewable energy, member states are strongly encouraged to explore all possible options to use cooperation mechanisms, including statistical transfers, to meet their legally binding targets for the share of renewable energy in 2020.”

Rokas added that the EU are on track to reach their 20% RES target with 38% of the electricity used in the EU in 2020 coming from renewable sources, of which 20% is from wind and photovoltaic (PV).

This increase has boosted employment rates in member states and energy supply.

“In terms of employment, there are more than 1.5 million people currently working in the sector in the EU and generating an estimated annual turnover of €160 billion (RM790 billion),” he said. “In 2010, records indicate that our solar and wind cumulative capacity was 110 GW but since then we have made a spectacular progress. Today, the electricity capacity is expanded to more than 130GW for solar and more than 200GW for wind.”

While the growth is encouraging, many challenges lie ahead for the EU players to achieve set targets and objectives in the battle against climate change.

“To be on track for our 2050 climate neutrality objective, we need to accelerate renewable energy development. With the EU Climate Target Plan, we set ourselves an increased 55% emission reduction target for 2030,” said Rokas. “This translates into 38% - 40% RES by 2030, which is significantly higher than our current 32% target. Meanwhile, our energy efficiency ambition needs to be increased from 32.5% to 36-37% for final and 39-41% for primary energy consumption.”

The EU has aspirations to double their RES in all sectors and the ambition is to see 65% of electricity consumed coming from renewables by the year 2030.

Rokas said, “Throughout the whole of EU, wind needs to grow from 210 GW today to about 430GW in 2030 and up to 1200GW in 2050. PV will need to grow from 131 GW today to 320 GW in 2030 and up to 1,000 GW by 2050. It is also crucial to accelerate where progress has been too slow and is evident in the share of renewables in the heating and cooling sector where it should increase close to 40% by 2030.

“RES in transport also needs to increase to about 25%. It is important to address challenges related to a RES-based power system which are storage and flexibility, and end-uses that cannot easily be decarbonized such as some industrial processes. This means pushing for faster uptake of clean energy, but also, first and foremost, to save energy everywhere we can. This is true for all sectors where we apply an “energy efficiency first” principle in our assessments, decisions and proposals.”

Promoting and encouraging businesses to consume and embrace renewable energy is a constant work-in-progress for the EU. And, there are mechanisms in place to continue this shift in consumer behaviour.

“Energy systems of tomorrow will be much more decentralised, with energy flows going in two directions: consumers will become prosumers (producer-consumer). We are promoting new models with our legislation. By opening energy markets to competition, the EU offered all consumers the right to choose their supplier of energy where they can now choose a local supplier,” said Rokas.



“With renewable energy certificates, it is possible to see what type of energy you consume. This allows consumers to easily identify the cleanest suppliers. The EU also promotes IT solutions that can help track in real-time the share of RES in electricity and adjust consumption patterns such as smart meters or smart appliances.”

According to Rokas, beginning from 2021 all EU countries will have to support “self-consumption”: to remove barriers and encourage consumers to produce, store and sell their own renewable energy. The new EU law also establishes an EU-wide definition of renewable energy community, where citizens, a neighbourhood or a city can come together to produce, share or sell their energy – sharing the costs and the benefits.

He adds: “We also promote the concept of corporate power purchase agreements, which are direct contracts established between RE producers and businesses, which allow them to negotiate directly and often lead to more competitive prices.”

While not all member states have the mechanisms in place for renewable energy generation, the administration of the EU does provide assistance to spur growth.

“For regions that have a lot of industry using carbon, the move to a climate neutral economy has posed to be a colossal feat. We address this imbalance through a threefold approach; finance, legislation and cooperation between member states. Financially, the Next Generation EU – a recovery fund of €750 billion to support member states hit by the COVID-19 pandemic – would also accommodate support for them to shift to renewable energy systems,” Rokas said.

“Apart from that, countries that were historically heavily dependent on coal can use the ‘Just Transition Fund’ to support the transition of their coal regions, which are often poorer than the average EU. Resources from the fund will be concentrated on regions facing the biggest challenges: regions with high carbon intensity and are heavily using fossil fuels.

Next to the targets set, our legislation offers many instruments and guidance to member states to exploit their potential.”

Over the years, member states have worked together and exchanged ideas and experiences in their quest to facilitate this energy shift. This collaboration between countries has seen a drastic reduction in wind and PV costs, with most barriers to RES development in electricity arising from administrative procedures.

“Cooperation between the member states is also important in inching closer to the target. We help achieve the collective EU target by acknowledging that not everyone can do the same and outlined a few RES cooperation mechanisms. Countries that overachieve their target can “sell” statistics to underachievers to help them match their own target. This way, EU target remains unchanged,” said Rokas.



“Besides that, the EU established last year a cooperation mechanism, which pools money to fund projects based on EU-wide tenders: EU countries with more limited potential (example: lack of space, like Malta, Luxembourg or Netherlands) can instead contribute to this instrument. The money will finance projects in other countries interested in hosting the project; for example, Romania or Sweden, then the paying country will get the corresponding RES credits. This allows us to deploy RES in the most cost-effective way throughout the EU.”

The Covid-19 pandemic caused severe disruptions globally and impacted industries in the production of renewable energy in the EU.

“The crisis brought about by the Covid-19 pandemic has affected the RE industry significantly. The short term impacts of the pandemic are reduced electricity demand and low wholesale prices affected the balance sheets of utilities and energy companies; delayed upcoming renewables project pipeline in the EU; European solar and wind markets down by 20% and 33% in 2020 due to supply chain disruptions, project delays and stricter financing conditions; small-scale rooftop market had the highest negative impacts; most utility-scale wind and solar projects went ahead, with delays but sometimes spectacular: for example, Spain doubled its solar PV capacity between Q3 2019 and Q3 2020; carbon prices rose to more than €40/tCO<sub>2</sub> in March 2021, signalling a change in market expectations regarding the future tempo of decarbonisation: rising CO<sub>2</sub> prices put coal and lignite



**"Improvement of the RE in Malaysia is also feasible with an ambitious Free Trade Agreement covering energy, goods and services that can support both sides' decarbonisation plans in the most cost-effective way and create economic opportunities and jobs"**

power plants at a greater disadvantage against their less polluting gas-fired competitors; governments delayed auctions or extend deadlines; industry faces market uncertainties and liquidity concerns; record low electricity prices also impacted corporate PPAs and renewable electricity projects based on wholesale markets prices," Rokas explained.

Rokas added that with low prices, the record year for RES demonstrated that running power systems with very high shares of RES was already possible. Figures showed Germany produced 46% RES electricity in 2020, while Spain was at 45%.

It was evident that the EU system demonstrated resilience, but more early coal retirements were announced as the outlook for emission-intensive technologies worsens.

"Hungary has brought forward its coal exit date by five years to 2025 and Greece aims to put all existing lignite capacities out of operation by 2023. The €750 billion Next Generation EU fund, of which 30% is to go to fighting climate change; package to not only stimulate the EU economy away from recession, but to steer it onto the path of sustainability and carbon neutrality; coal and lignite generation fell by 22% year on-year (-87 TWh) and nuclear output dropped by 11% (-79 TWh) in 2020 due to rising renewable generation and the covid-related demand shock; and finally, both short term emergency measures (liquidity, reallocation of EU Funds) and recovery plans will be tools for supporting the energy transition," said Rokas

While the EU continues its march towards its target, the administration is also looking to collaborate with ASEAN and Malaysia in the energy industry.

"The EU has experience with energy market organisation, RES policy, regulatory aspects and technologies. We expect that an ASEAN-EU Clean Energy Dialogue will start later this year pending approval by ASEAN and the support and participation of Malaysia will be crucial, Rokas said. "This dialogue will allow both sides to exchange experience and drive their respective clean energy transition by looking jointly at all aspects holistically."

He adds: "The private sector will play a key role, including in a regional (ASEAN) perspective. It could be supported by Malaysia joining the International Platform on Sustainable Finance which can help develop sustainable finance in Malaysia and direct investment towards RES. Improvement of the RE in Malaysia is also feasible with an ambitious Free Trade Agreement covering energy, goods and services that can support both sides' decarbonisation plans in the most cost-effective way and create economic opportunities and jobs."

# Calendar

of Events

One of SEDA Malaysia's roles is to implement measures to promote public participation and to improve public awareness on matters relating to sustainable energy [Section 15(i) of SEDA Act 2011]. In this regard, SEDA Malaysia endeavours to develop and implement strategic communication programmes to reach our stakeholders.

The primary objective of such programmes is to raise greater acceptance and participation by the general public as well as the private sector in the sustainable energy initiatives administered by SEDA Malaysia.

In addition to the awareness programmes, the initiatives include stakeholders' engagements via seminars/workshops, open days, exhibitions, and collaboration with NGO partners as well as international liaisons.

## 7 JANUARY 2021 Launching of SAVE 2.0

YB Datuk Seri Dr Shamsul Anuar Bin Hj Nasarah, Minister of Energy and Natural Resources (KeTSA), officiated the launch of the Sustainability Achieved Via Energy Efficiency (SAVE) 2.0 programme. Under this programme, eligible participants will be receiving an e-rebate of RM200 to purchase a four or five-star efficiency-label refrigerator or air-conditioner which approved by Energy Commission (EC).



## 8 JANUARY 2021 Dr. Sanjayan's Farewell

With a heavy heart, SEDA Malaysia bids farewell to Ir. Dr. Sanjayan Velautham in 8 January 2021. Joined the company in January 2019 as Chief Executive Officer, Dr. Sanjayan has steered SEDA Malaysia's operation to a greater height and driving the company achieve an array of goals.

## 3 FEBRUARY 2021 SAVE2.0 special briefing to electrical appliances sellers and retailers

The registered electrical appliances sellers and retailers attended the SAVE 2.0 special briefing organised by SEDA Malaysia.

**Taklimat Program**  
**Sustainability Achieved via Energy Efficiency (SAVE) 2.0**  
kepada Pekedai dan Peruncit (Retailers)



4 Februari 2021 (Khamis)  
2:30 - 4:00 Petang  
Platform : Go To Webinar



pendaftaran dibuka seperti pautan berikut :  
<https://attendee.gotowebinar.com/register/4274712505547710735>

Maklumat lanjut di  
[www.saveenergy.gov.my](http://www.saveenergy.gov.my)



**2 MARCH 2021**

**Solar PV installation site visit by YB Datuk Seri Dr Shamsul Anuar Bin Hj Nasarah, Minister of Energy and Natural Resources (KeTSA) to Majuperak Energy Resources Sdn Bhd, Ipoh, Perak**



**23 FEBRUARY 2021**

**The announcement for the opening of the Feed-In Tariff (FiT) e-bidding quota application**

A total of 187.805MW quota will be offered for the FIT e-bidding exercise in June 2021. 30MW will be opened for biomass, 31.805MW for biogas, and 126MW for small hydro.



**9 MARCH 2021**

**SEDA Malaysia welcomes the new CEO Dato' Hamzah Hussin through a special audience**

**11 FEBRUARY 2021**

**Online Training on Net Energy Metering (NEM) Mechanism and Grid-Connected Photovoltaic Systems**

The Technical and Development Facilitation (TDF) division of SEDA Malaysia has conducted an Online Training on Net Energy Metering (NEM) Mechanism and Grid-Connected Photovoltaic Systems from the 8th of February 2021 to the 10th of February 2021 via Microsoft Teams with the Ministry of Energy, Brunei.

The speaker for this online training is Ir. Mohd Zamri bin Laton, the Deputy Director of Marketing Operations, and Mr. Ibrahim Ariffin, the Director of Strategic Planning. They were joined by honorary professor Dr. Ahmad Maliki Bin Omar.

The training was attended by members of the Ministry of Energy, Brunei, which includes the Sustainable Energy Division and the Department of Electrical Services. They were joined by a representative from Autoriti Elektrik Negara Brunei Darussalam.



**5 APRIL 2021**

**Majlis Daerah Kampar (MDKpr) work visit to SEDA Malaysia's building**

Yang Dipertua Majlis Daerah Kampar (MDKpr) Tuan Abdul Halim Bin Saad and four of his officers visited SEDA Malaysia's building in Galeria PJH. They were greeted by SEDA Malaysia's CEO Dato' Hamzah Hussin. During the session, they exchanged latest updates and news on Sustainable Energy agenda.





**5 APRIL 2021**  
**National Energy Awards (NEA) 2020**  
**Appreciation Ceremony Hi-Tea, at The**  
**Majestic Hotel Kuala Lumpur**

SEDA Malaysia has been appointed as the secretariat and judges for the National Energy Awards (NEA) 2020 Appreciation Ceremony Hi-Tea, which was held at The Majestic Hotel Kuala Lumpur.

During the session, SEDA Malaysia's representatives have shared the information on Renewable Energy (RE) programmes, particularly on SAVE 2.0 Programme and Net Energy Metering (NEM) 3.0 Programme.

**6 APRIL 2021**  
**Voluntary Sustainable Low Carbon Energy**  
**Efficient Building GreenPASS certificate**  
**handover to Management & Science**  
**University (MSU)**

Management & Science University (MSU) has successfully achieved Diamond Rating 2 in its emission reduction. The university was certified for SEDA Malaysia Voluntary Sustainable Low Carbon Building Performance Assessment-GreenPASS and Certification.

Ts Steve Anthony Lojuntin, Acting Chief Strategic Officer attended the event to award the certificate to MSU.



**14 APRIL 2021**  
**Malakoff Corporation Berhad visit to**  
**SEDA Malaysia**

Malakoff Corporation Berhad CEO Anwar Syahrin Bin Abdul Ajib has visited SEDA Malaysia's office in Putrajaya. Malakoff's team were greeted by SEDA Malaysia's team led by CEO Dato' Hamzah Bin Hussin. Both parties have discussed future potential collaborations in driving the Sustainable Energy industry.



**13 APRIL 2021**  
**Program SEDA Malaysia Bertadarus**

SEDA Malaysia celebrated the start of Ramadan through the launch of Program SEDA Bertadarus. The event, which was officiated by SEDA Malaysia's CEO Dato' Hamzah Bin Hussin, was the first of its kind since SEDA Malaysia's establishment. Each staff was given an Al-Quran by the CEO to kick-start the tadarus programme on their own or via online gathering.



**16 APRIL 2021**

**Kurma Handout to SEDA Malaysia's Staff**

SEDA Malaysia team was practising the giving spirit of Ramadan by sharing kurma with their staffs. SEDA Malaysia Chief Executive Officer (CEO) YBhg. Dato' Hamzah bin Hussin personally went around the office to give every staff a box of kurma.



**24 APRIL 2021**

**Bubur Lambuk handout by SEDA Malaysia's Authority Member Puan SJ Usha Nandhini**

SEDA Malaysia's Authority Member Puan SJ Usha Nandhini gave out bubur lambuk to the neighbourhood of Taman Subang Baru, Sungai Buloh, as part of the Tautan Kasih Ramadan SEDA Malaysia CSR programme.



**27-28 APRIL 2021**

**Energy Audit Conditional Grant (EACG) RMK-12 For Industrial and Commercial Sector Seminar**

A seminar on Energy Audit Conditional Grant (EACG) RMK-12 For Industrial and Commercial Sector was conducted by SEDA Malaysia in collaboration with Ministry of Energy and Natural Resources (KeTSA) and Energy Commission (EC) on 27-28th April 2021 at Everly Hotel, Putrajaya. The RMK12-EACG is aimed to provide financial assistance to commercial and industrial sectors that are interested to conduct energy audit through conditional grant throughout the 5 years of project implementation (2021-2025).

The module of the seminar includes the latest information regarding the country's electricity supply industry as well as the registration, procedures, and ESCO's role in the EACG.



**27 APRIL 2021**

**MHI TV3 interview with Minister of Energy and Natural Resources (KeTSA)**

Malaysia Hari Ini (MHI) TV3 interviewed YB. Datuk Seri Dr Shamsul Anuar Bin Hj Nasarah, Minister of Energy and Natural Resources (KeTSA) where the Minister discussed on several topics including the ministry's progress and initiatives in stimulating the development of sustainable energy in particular, NEM3.0 and SAVE2.0 programmes that was implemented by SEDA Malaysia.



**28 APRIL 2021**  
**Site Visit to Small Hydropower Stations in Perak**

SEDA Malaysia Chief Executive Officer (CEO) Dato' Hamzah Hussin today has made a work visit to Kerian Energy hydropower station and Selama Hidro hydropower station construction site, both located in Perak.

Kerian Energy small hydro station (14MW) has been operating since 2019 under the Feed-in Tariff mechanism whereas Selama Hidro station (9MW) which is still under construction is expected to be completed in September 2021 and start commissioning in December 2021.

With expected annual generation of 128,611MWh, the two stations will support the national renewable energy agenda of reaching 31% installed capacity by 2025.



**30 APRIL 2021**  
**Tazkirah Ramadan SEDA Malaysia**

SEDA Malaysia invited Ustaz Muhamad Bin Abdullah for the first Tazkirah session for the year where he gave a talk titled "Membongkar Ilmu, Keajaiban dan Keberkatan Bulan Ramadan" to SEDA Staff via hybrid meet.



**1 MAY 2021**  
**Shopping Raya Anak-anak Rumah Bakti Al-Kausar**

SEDA Malaysia was all-set for Raya with 30 children from Rumah Bakti Al-Kausar at Jakel Mall, Kuala Lumpur.

SEDA Malaysia Chief Executive Officer (CEO) Dato' Hamzah Bin Hussin and Datin Rozita Aminuddin joined the fun occasion, attending to the kids in excitement for the upcoming Aidilfitri celebration. Jakel Group Managing Director Datuk Seri Mohamed Faroz was also there at the event, showing his support.



**1 MAY 2021**  
**#ShareOurLove Donation Drive in collaboration with Malakoff Corporation Berhad and Kelab ALAM KeTSA**

SEDA Malaysia and Kelab ALAM KeTSA collaborated with Malakoff Corporation Berhad to share our love with Rumah Amal Limpahan Kasih, Puchong, during a Majlis Berbuka Puasa.

The donation was presented by Kelab ALAM President Datuk Mohd Haniff Bin Hassan, Malakoff Corporation Berhad Senior Manager in Corporate Affairs & Stakeholder Management Yuha Ismail, and SEDA Malaysia Senior Assistant Director Syeikh Mohd Iqbal during the event.





**2 & 3 MAY 2021**  
**Kurma and Bubur Lambuk handout in Perak**

YBhg. Datuk Hang Tuah Bin Din @ Mohamed Din, an Authority Member of the SEDA Malaysia, gave out kurma and bubur lambuk to representatives of 70 mosques and surau, as well as local leaders in Perak.

The handout was part of SEDA Malaysia's CSR initiative. On April 21, visitors at Bazar Ramadan Medan Gopeng in Ipoh also received bubur lambuk from Datuk Hang Tuah under the programme.



**3 MAY 2021**  
**Bubur Lambuk handout to SEDA Malaysia Staff**

During the last 10 days of Ramadan, SEDA Malaysia continued its giving spirit through the distribution of bubur lambuk to the staff.



**3 MAY 2021**  
**Kurma delivery by SEDA Malaysia Chairman YB Lukanisman Awang Sauni**

Tautan Kasih Ramadan SEDA Malaysia has reached Sarawak through SEDA Malaysia Chairman YB Lukanisman Awang Sauni whom had delivered kurma to Surau Darul Taqwa, Kampung Jambu, Bekenu, Miri and Surau Kampung Tengah, Bungai, Sibuti



# PRACTICE THE 3Ws!

## Break the Covid-19 chain



### Wash

Wash your hands with soap and water frequently



### Wear

Wear a face mask, and make sure it covers the nose and mouth



### Warn



Avoid close contact



Practice proper cough etiquette



Frequent disinfection



Stay home



Seek medical help if symptomatic

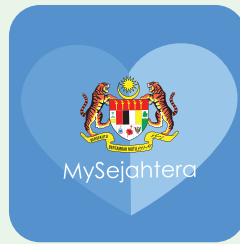
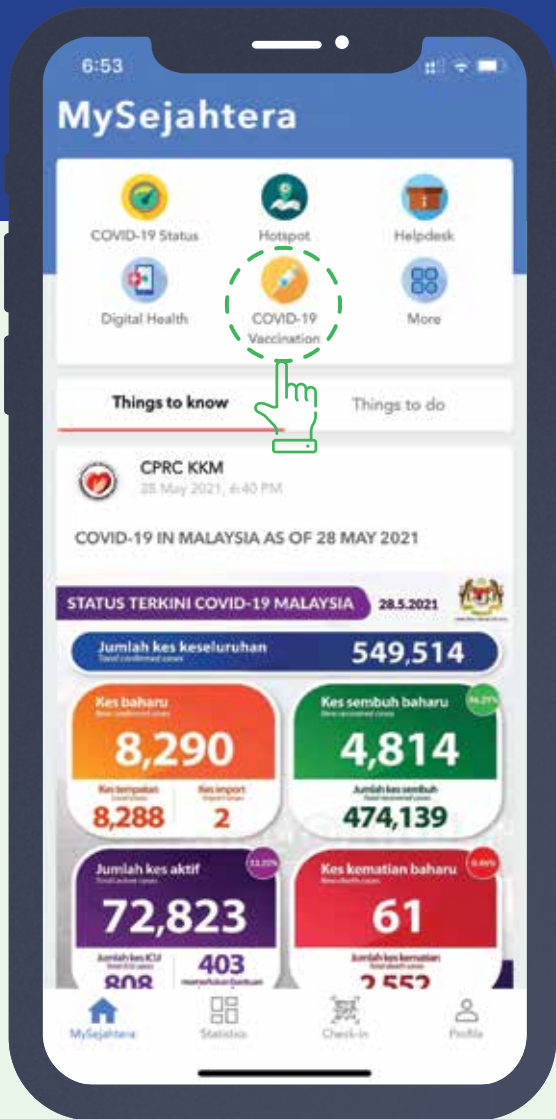


#kitamestimenang

#stayhomestaysafe

#sedamalaysia

# REGISTER FOR VACCINATION



Download the  
**MySejahtera**  
app

Click the **COVID-19 vaccination** button and follow the steps.

For more info, visit  
[www.vaksinCovid.gov.my](http://www.vaksinCovid.gov.my)

Hotline  
**1 800 888 828**

**Lindung Diri,  
Lindung Semua.**

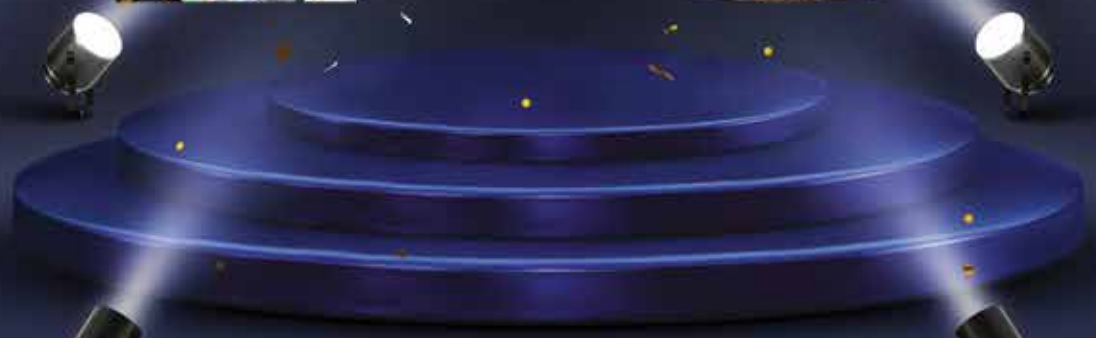



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Anniversary



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