GREEN ECONOMY & INDUSTRY 4.0:

Achieving Sustainable Development Goals









• risen evenesis













National Energy Awards (NEA) 2018

The inaugural National Energy Awards (NEA) 2018 Dinner was held today. NEA aims to recognise the effort rendered in promoting the use of holistic and encompassing sustainability measures that are applicable at every step of an organisation's operations, from initial concept to maintenance, as well as creating greater public awareness. The NEA awards are divided into three categories: energy efficiency, renewable energy and special award for Government and ministry complex.

CATEGORY 1: ENERGY EFFICIENCY

ENERGY MANAGEMENT IN BUILDING (SMALL)

- Cofreth (M) Sdn Bhd (Winner)
- KPJ Kluang Utama Specialist Hospital (Runner-Up)

ENERGY MANAGEMENT IN BUILDING (LARGE)

- Ibu Pejabat JKR Malaysia (Winner)
- Kota Kinabalu International Airport (Runner-Up)

GREEN BUILDING

- PKNS Hq Shah Alam (Winner)
- Amanjaya Specialist Centre Sg. Petani (Runner Up)

RETROFITTED BUILDING

- Bangunan Perdana Putra (Winner)
- Putra Specialist Hospital Melaka (Runner Up)

ENERGY MANAGEMENT IN INDUSTRY (SMALL)

- Dutch Lady Milk Industries Sdn Bhd (Winner)
- Top Glove Sdn Bhd (Runner Up)

ENERGY MANAGEMENT IN INDUSTRY (LARGE)

- IOI Edible Oils Sdn Bhd (Winner)
- BP Petronas Acetyls Sdn Bhd (Runner Up)

ENERGY EFFICIENT DESIGN

• PKNS HQ Shah Alam (Winner)

CATEGORY 2: RENEWABLE ENERGY

NATIONAL GRID

- Betatechnic Sdn. Bhd. (Winner)
- Gading Kencana Sdn Bhd (Runner-Up)

OFF-GRID (SOLAR)

• Solarge Sdn Bhd (Winner)

OFF-GRID (THERMAL)

• SIRIM Bhd (Winner)

BIOFUEL

- Felda Palm Industries Sdn Bhd (Winner)
- Bright Integrity Sdn Bhd (Runner-Up)

SPECIAL SUBMISSION TO ASEAN ENERGY AWARDS

ABB Sdn Bhd

SPECIAL CATEGORY - MINISTRY & GOVERNMENT BUILDING

- Ministry of Economic Affairs (Block B6)
- Prime Minister's Office, Bangunan Perdana Putra

MCY 2018 Awards Winners Reap RM1 million Cash Prizes

Winners of the MCY 2018 Award received cash prizes totalling RM 1 million from MESTECC Minister, YB Yeo Bee Yin, at the MCY@IGEM2018 presentation ceremony on Thursday evening.

There were five categories and the main winners each received RM130,000 including a trophy and certificate.

And the five main winners were:

- Commercial Deal Award Biopro Cosmeceutical Sdn. Bhd (from Technology Park Malaysia) for its DERMAGS Skin Care products;
- II. Researcher Entrepreneur Award Universiti Putra Malaysia for its product Versatile Graphene;
- III. Social Entrepreneur Award Universiti Malaysia Sarawak for its Crab Housing Innovation for local community in Sarawak;
- IV. Emerging Innovator Award Anderes Fourdry Sdn Bhd (Technology Park Malaysia) for its Emergency Evacuation System; and
- V. Research Business & Partnership Award –
 Universiti Petronas Malaysia via its product
 Rescue-i Monitoring System.

MCY 2018 Awards winners posing with minister.

In addition, consolation prizes of RM50,000, trophy and certificate were also awarded to consolation winners for each of the five categories.

Throughout 2018, the Ministry of Energy, Science, Technology, Environment and Climate Change (MESTECC) has paved ways in propelling R&D products/technologies to commercialisation by evaluating the commercial readiness of the R&D

products/technology and offering them out into the marketplace. The aim is to help R&D products/technologies in carving a niche market for themselves in their respective sectors.

The Malaysia Commercialisation Year was first initiated in 2016. To date, it has resulted in 303 products been successfully commercialized with sales turnover of RM290.88 million.





DAY 4

SHOW DAILY
20 OCTOBER 2018

10.00am - 5.00pm

www.igem.my

What's on Day 4 of IGEM 2018

20 OCTOBER 2018 (SATURDAY)		
TIME	PROGRAM	VENUE
10.00 AM - 5.00 PM	IGEM EXHIBITION	HALL 1-3 KLCC
10.00 AM - 6.00 PM	MIDA BUSINESS CONSULTATION	MIDA BOOTH NO 1267
8.30 AM - 12.30 PM	ENERGY EFFICIENCY TOWNHALL + BUILDING ENERGY INTENSITY (BEI) LAUNCHING	STAGE 1, HALL 4 KLCC
9.00 AM - 1.00 PM	COMMERCIALISATION PROGRAM FOR YOUNG INNOVATORS	STAGE 2, HALL 4 KLCC
9.30 AM - 12.30 PM	GREEN MIND CHALLENGE FINALS	POCKET TALK HALL 2
10.00 AM - 1.00 PM	STARGAZER MENTORING	HL 1, HALL 1 KLCC
12.30 PM - 1.00 PM	IGEM PRESS CONFERENCE : BEI LAUNCHING	STAGE 1, HALL 4, KLCC
1.00 PM - 2.00 PM	EXHIBITORS APPRECIATION LUNCHEON	LOUNGE HALL 4
2.00 PM - 5.00 PM	KL ECO FILM FESTIVAL FILM FORUM	STAGE 2, HALL 4 KLCC
3.00 PM - 4.30 PM	MINISTER'S DIALOGUE & NETWORKING SESSION WITH YOUNG INNOVATORS	STAGE 1, HALL 4

Minister Supports TPM's Green Initiative



MESTECC Minister Yeo Bee Yin has lend her support for the initiative undertaken by its agency, Technology Park Malaysia (TPM), to set up a solar photovoltaic farm in its campus in Bukit Jalil, Kuala Lumpur as part of its efforts to support the national initiative of sustainable and green Malaysia.

TPM is currently working on building a solar farm of 7.4MW peak utilizing its existing rooftop, buildings, covered carparks and open space to support its internal consumption which is targeting 70% of total power consumption.

Yeo says she is happy to support the TPM initiative and encourages more Government agencies and the private sector to make full use of their rooftop space to generate renewable energy.

TPM, via its wholly-owned subsidiaries, TPM Engineering Sdn Bhd (TPME) will collaborate with GP Energy of Korea for this project.

TPME will be responsible for the fabrication, design, technical, power network consultancy, while GP Energy Sdn Bhd will provide financing services in solar technology, operation and maintenance (O&M) of photovoltaic power generation and management of the facilities.

Through this collaboration, TPM will be able to garner experience and technology transfer that would increase its ability to develop its own solar technology and equipment in the future.

MOU/cooperation Collaboration between MGTC, Industrial Halal Park and GIZ

The collaboration sealed the deal to address the carbon emissions in the country. The transport and building sectors have long been identified as the top priority sectors for countries that are serious about reducing carbon emissions.

After witnessing the signing ceremonies, MESTECC Minister YB Puan Yeo Bee Yin, said IGEM 2018 has lived up to its name for forging new business partnerships, transferring knowledge and growing the green economy.

"The two partnering organisations, GIZ and the Iskandar Halal Park, are leaders in their own fields and there is much we can learn from them. I am confident that we will be able to share expertise and roll out solutions that can be implemented on a large scale," she added.









GREEN ECONOMY & INDUSTRY 4.0 :

Achieving Sustainable Development Goals



DAY 4

SHOW DAILY 20 OCTOBER 2018

10.00am - 5.00pm

www.igem.my

GREEN PENANG BY 2030

1025 -1028 -1048

воотн но.

1099

-1100

BOOTH NO

2233

-2246

(HALL 1)

The Penang Pavilion at IGEM 2018 encapsulates the aspiration to be Malaysia's greenest state by 2030, driven by a green economy, innovative governance with 4P partnerships (public, private, people, professional) and sustainability-led development agenda by 2030.

"In a nutshell, we are showcasing progress achieved by Penang towards becoming a green and sustainable state over a 10-year period beginning 2008," Shahril Zamani Md Zain, Assistant Secretary of the Penang State Economic Planning Division, tells Show Daily.

Additionally, the Penang Pavilion which featured both the Penang Island City Council (MPPP) and Seberang Perai Municipal Council (MPSB), is also showcasing the exquisite aspects of the Batu Kawan Eco-City project which is spearheaded by the Penang Development Corporation and MPSB.

As part of its Go Green effort, Penang is proposing to ban single-use plastic items at food eateries beginning January 2019. To date, close to RM7.8 million has been collected from shoppers through the 20 sen charge for each plastic bag since the "No Free Plastic Bag" campaign was implemented in 2009.



GET FUNCTIONAL ENERGY SAVING ESTIMATES FROM CENERGI

1077 -1078 (HALL 1)

BOOTH NO.

Keen to know how much savings in terms of energy consumption (hence, cost in terms of dollars and sen) that can be derived from the installation of renewable energy (RE) and energy efficiency (EE) devices at one's home or office?

Just head to Cenergi SEA Sdn Bhd's booth at IGEM 2018.

The Malaysian energy efficiency and renewable energy solution provider in collaboration with its Singaporean partner, Sunseap Group, a leading rooftop solar energy developer, has devised an energy saving calculator which is capable of providing energy saving estimates based on specific parameters on www.cses.com.my.

Established in 2013, Cenergi is also the largest grid-connected palm oil mill effluent (POME) biogas players in Malaysia.

Currently, the company owns and operates four plants that together generate 5.5MW of power with another 1.5MW biogas plant to be commissioned in late 2018. It has also recently completed the second phase of a RM40 million energy efficiency project that guarantees electricity savings of up to 33% for a local university.

By 2021, Cenergi aims to have 100MW of operating clean energy assets and a total investment of RM300 million in energy savings performance agreement (ESPA) projects.



CYPARK RESOURCES STAMPS ITS MARK IN RE

The aspiring tagline, "Energising A Sustainable Future", of Cypark Resources Berhad is indeed an inspiration to be emulated by businesses and entrepreneurs striving to achieve success.

Cypark Resources, a public-listed company on the main board of Bursa Malaysia since 2009, has scored tremendous successes in its business activities since its inception in 1996.

It has been recognized as Malaysia's pioneering developer and provider in integrated renewable energy, green technology, environmental engineering solutions, and construction engineering. Cypark Resources' establishment is based on sustainable innovation, progress and development in providing quality living environment through top-notch professional engineering and environmentally friendly products, maintenance and services.

Taking part in IGEM 2018, Muhammad Izzuddin Bin Zahir, Cypark Resources research engineer, said the company have had a successful track record in all the relevant fields that they are involved.

"Take RE, for example, as the leading and most innovative RE developer in Malaysia, we have long years of proven track record of solar projects from ground mounted solar, roof mounted solar, building integrated photovoltaic solar, to floating solar, bio gas to energy, waste-to-energy and biomass," he added.

Cypark Resources' value proposition lies in optimizing resources, minimizing cost and investment, and maxmising results, which gives the company the competitive advantage.



GREAT EXCITEMENT FOR UPM

2233 -2246 (HALL 2)

BOOTH NO

2233

-2246

Universiti Putra Malaysia (UPM) has made a memorable outing at IGEM 2018 on two counts:

- Associate Prof Dr Janet Lim Hong Ngee of its Institute of Advanced Technology bagged the top Researcher Entrepreneur award (RM130,000 prize money) at the Malaysia Commercialisation Year 2018 with her Versatile Graphene product, and
- The product has been successfully commercialised and launched by GO Advanced Solutions Sdn Bhd, a UPM start-up firm under its Innohub programme.

Produced via an eco-friendly and sustainable process, structural modification of the Versatile Graphene has heightened its versatility, thus providing avenues for various applications.

In essence, the product boasts tremendous potential in a myriad of industries due to its attractive electrical, mechanical,

chemical and physical properties.

This includes increasing the effectiveness of radiator: creating

effectiveness of radiator; creating a 'drawable' electronic circuit; preventing an abrupt flow of electricity; good separation of oil from water; facilitating smaller power bank with larger capacity, and prevention against sexually transmitted diseases.



TRANSFORMING RICE STRAW TO PAPER

The Forest Research Institute Malaysia (FRIM) is showcasing the wonders of rice straw pulping at IGEM 2018.

"This can reduce timbre-based paper consumption which has brought about adverse environmental effect such as illegal logging, forest destruction and even the emergence of pulpwood plantations which are threatening our fauna and flora," the institute's principal research officer Dr Rushdan Ibrahim tells Show Daily.

The rice straw pulping method pursued by FRIM involves digesting and refining rice straw to produce pulp and chemicals while recycling the wastewater obtained after digestion.

Rice straw is produced globally as a by-product from rice cultivation. Disposition of large quantity of rice straw is difficult as the options are limited by the great bulk of material, slow degradation in the soil, harbouring of rice stem disease and high mineral content

"The (rice straw) pulp is potentially suitable to be used in paper production," adds Rushdan. FRIM has entered into a technology licensing agreement with Free The Seed Sdn Bhd to produce pulp from rice straw.



MARDI PROMOTES HYBRID COCONUT SPECIES AT IGEM 2018

The Malaysian Agricultural Research and Development Institute (MARDI) is showcasing its high-yielding hybrid coconut varieties at IGEM 2018.

The three hybrid species displayed are:

 Marleca which are able to produce 32,000 coconuts per year (coconut production commencing after 32 months of planting);

 Careca which are able to produce 23,000 coconuts per year (coconut production commencing after 44 months of planting), and

 Mylag which are able to produce 23,000 coconuts per year (with coconut production commencing after 44 months of planting).

The demand for coconut in Malaysia is 640 million fruits per year while supply is a mere 530 million fruits. The National Agro-food policy projected that by 2020, Malaysia needs 1.2 million coconuts annually.

Even though land is limited, coconut production is increasing in view of the planting of MARDI's MATAG hybrid that can yield higher production rate compared to other hybrid species.

The Marleca, Careca and Mylag are able to produce crops earlier, thus ensuring quicker returns to coconut planters.







DAY 4

SHOW DAILY 20 OCTOBER 2018

10.00am - 5.00pm

www.igem.my

STRONGER CREDENCE WITH SIRIM ECO-LABELLING MARK

BOOTH NO. 1271 (HALL 1)

The growing consumer affluence and increasing demand for environmental-friendly products today is a necessity for manufacturers and companies to benchmark their product quality, safety and reliability.

The solution in ensuring transparency and integrity of the product towards a competitive edge is to obtain an international certification such as the SIRIM Eco-Labelling Mark.

The SIRIM Eco-Labelling mark lends a stronger credence for a company to communicate a product's environmental benefits to consumers, thus enabling them to make purchasing decision based on environmental safety attributes.

The SIRIM Eco-Labelling mark will only be approved after an organization has fully fulfilled the stringent requirements and annual surveillance audit of SIRIM QAS.

Apart from the Eco-Labelling mark certification, SIRIM QAS also offers Carbon Footprint Certification.

On SIRIM QAS' participation at IGEM 2018, its senior marketing executive, Zul Arsham, said the main aim is to promote and heighten awareness of the SIRIM Eco-Labelling scheme.

Expressing his satisfaction with the positive response of trade visitors to the exhibition, he added the event was an appropriate platform for the expansion of the Malaysian RE and green technology industries.

SIRIM QAS International is the leading certification, inspection and testing body in Malaysia with accreditations from the Department of Standards Malaysia and the United Kingdom Accreditation Service.



воотн no. **1273** (HALL 1)

MAEESTA PROJECT AND SOLAR THERMAL TECHNOLOGY

The Malaysia Energy Efficiency and Solar Thermal Application Project (MAEESTA), a national initiative supported by the Government of Malaysia, is funded by the Global Environment Facility (GEF) and implemented by the United Nations Industrial Development Organisation (UNIDO).

This five-year project was developed based on Malaysia's vast potential for thermal energy savings and solar thermal energy utilization. It is linked with Malaysia's commitment to reduce greenhouse gas (GHG) emissions through its Intended Nationally Determined Contribution (INDC).

The MAEESTA project aims to reduce fossil CO2 emissions by promoting and demonstrating sector-specific energy efficiency (EE) improvements and solar thermal technology utilization the industry. It focuses on improving EE at manufacturing and processing plants with possible integration of solar thermal systems in targeted sectors.

Mohd Arief Firdaus Mohd Yusof, UNIDO's project technical expert, says the organization provides a grant of 20% for those who are keen to pursue a solar thermal project.

He added that UNIDO has to date provided funding to four businesses for solar thermal building that are involved in the food sector, hospital, chicken slaughter house and a state government building.

On UNIDO's debut participation in IGEM 2018, Mohd Arief expressed satisfaction of achieving its objective of promoting and creating greater awareness of the organisation's role to the targeted stakeholders.

UNIDO plays a pivotal role by providing training and capacity building. The training courses cover user and expert training programme.

The user training is an on-site two-day course that enables participants to get to know solar thermal. It covers a broad range of topics from basics of solar thermal, industrial processes, heat integration to standardized procedures, economics and subsidies, and case studies.

Meanwhile, the expert training programme comprises three modules starting with a four-day course, followed by a six month on-the-job training and finishing with a four-day course. Its scope covers energy efficiency and invitation of companies to become host company; conducting energy audit at the host company; solar thermal system design and final energy audit report.



