

MDBC FLOWER LOGO

HIBISCUS

TULIP

MDBC
Malaysian Dutch Business Council



**INNOVATION &
SUSTAINABILITY
AWARDS 2019**

Special Supplement with MDBCONNECTS 2019





**HIS EXCELLENCY
AART JACOBI
NETHERLANDS AMBASSADOR &
CHIEF JUDGE - MISA '19
9 OCTOBER 2019**

Dear readers, members, and friends of the Malaysian Dutch Business Council (MDBC),

It was a great pleasure for me and my embassy colleagues to be closely involved in MDBC's Innovation and Sustainability Awards (MISA) '19.

Economic ties between the Netherlands and Malaysia are strong. The Netherlands has always been one of the largest foreign investors in Malaysia and bilateral trade is flourishing, as Malaysia is the second largest trading partner of the Netherlands in ASEAN. We can proudly look back on a long history of fruitful trade, investment, and economic cooperation. But in the wake of climate change and environmental degradation, now is the time to also cooperate on something equally as important: sustainability.

In order to ensure the protection and conservation of our natural environment as economies continue to advance, cooperation and knowledge sharing are key. Both Malaysia and the Netherlands have much to gain from working together in the field of sustainability and the Netherlands has a lot to offer!

The Netherlands is at the forefront of innovations in sustainability. We are pioneers in circular economy as the Dutch government recently presented the intergovernmental circular economy program. We are also experts in innovative solutions in renewable energy, waste management, and sustainable agriculture, just to name a few.

One of the embassy's efforts to increase collaboration between Malaysia and the Netherlands for a sustainable future has been to organize a trade delegation of waste management companies from the Netherlands to visit Malaysia and present their innovations and solutions for the sector. This coincided with the International Green-Tech & Eco-Products Exhibition Malaysia (IGEM) where Dutch companies were represented in a Dutch pavilion.

In addition, we organized a waste management seminar to highlight the contributions that companies and businesses from the Netherlands can make towards increasing the sustainability of the Malaysian waste management sector. We were honored to have YB Puan Hajah Zuraida Kamarudin, Malaysian Minister of Housing and Local Government speaking at this seminar. She expressed a strong interest in the expertise from the Netherlands and is looking forward to further collaborations.

With MISA '19, MDBC has provided the local Dutch and Malaysian business communities with an outstanding platform to share knowledge, best-practices, and inno-

“Economic ties between the Netherlands and Malaysia are strong... We can proudly look back on a long history of fruitful trade, investment, and economic cooperation. But in the wake of climate change and environmental degradation, now is the time to also cooperate on something equally as important: sustainability.”

vations in the field of sustainability, both amongst peers and the wider public.

In addition, the MISA awards ceremony offered a unique opportunity for members of the business community to make meaningful connections with each other, investors, government representatives, and other stakeholders. The attendance and inspiring speech by YB Yeo Bee Yin (Minister of Environment Energy, Science, Technology, Environment and Climate Change), further contributed to the success and the impact of the event.

It proves that we have successfully demon-

strated to the Malaysian government that the Malaysian - Dutch business community is strong and has much to offer.

This year was the first time I had the honor of chairing the panel of judges, which was tasked with deciding on the winners in the categories Best Innovative Waste Management Program, Best Digital Green Tech, and Best Practice for Renewable Energy.

All of the shortlisted candidates, and in particular the winners, impressed us with their innovative and sustainable solutions. I would like to take this opportunity to congratulate the winners: Better Bev for Best Innovative Waste Management Program, Satelligence for Best Digital Green Tech, Concord Group for Best Practice for Renewable Energy, and Besi APAC for the Audience Award.

Let me end by commending MDBC for their work for the Malaysian - Dutch business community, and to thank my fellow judges, all participating companies, and of course, MDBC for organizing this inspiring and successful event.

We are looking forward to the next edition!

**H.E. Aart Jacobi
Ambassador of the Kingdom of the Netherlands to Malaysia and
Chief Judge MISA '19.**



Kingdom of the Netherlands



THE MALAYSIAN DUTCH BUSINESS COUNCIL INNOVATION & SUSTAINABILITY AWARDS 2019

The eighth edition of the MDBC Innovation & Sustainability Awards (MISA) took place this year on Wednesday, 9 October at the Grand Hyatt Kuala Lumpur.

Over the years, the program has experienced an incredible amount of growth. What started out in 2011 as the MDBC Sustainability Awards (MSA), has evolved and was rebranded to the MDBC Innovation and Sustainability Awards in 2016.

MDBC's unique and innovative Awards Program is a platform to showcase the best

practices of companies in the areas of Sustainability and Innovation. It recognizes them for their excellence and trailblazing spirit in these fields as well as provide a way for companies to benchmark their efforts against leaders in these fields.

In recognition of the unique nature of the awards, and the part it has played in the education of the general Malaysian business community on sustainability and innovation, MDBC was invited by GreenTech Malaysia to organize MISA as part of the 10th edition of the International Green Technology and Eco Products Exhibition & Conference Malaysia (IGEM).

IGEM established itself as Southeast

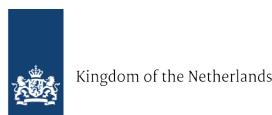
Asia's largest trade event for green technologies and eco solutions. IGEM is the ideal platform for solution providers and green energy businesses to tap into the fast expanding ASEAN market by showcasing the latest innovations to policy makers, government organisations, investors, and the mass market. Over the years, IGEM has successfully generated RM 23 billion in business leads since its initiation in 2010.



MDBC Member HYVA had their MOU signing witnessed by YB Yeo Bee Yin (Minister of Energy, Science, Technology, Environment and Climate Change)



MISA '19 Partners



Hotel Partner



MISA '19 Sponsors



MISA '19 Advertisers



MISA '19 Supporters



MISA '19 Supporters





Winners of MISA '19 with VIP guests.

l to r: Marco Winter (Executive Director, MDBC), Kees W. Kwant (Judge - Best Practice for Renewable Energy / Senior Expert, Netherlands Enterprise Agency), Henk Jan Jonge Poerink (SVP - Global Operations, Besi APAC / Winner MISA '19 Audience Award), Maharti Rihana (Liaison Indonesia, Malaysia & Papua New Guinea, Satelligence / Winner MISA '19 Best Digital Green Tech), Zainul Rahim (Chairman, MDBC), YB Yeo Bee Yin (Minister of Energy, Science, Technology, Environment and Climate Change), Yin Peng Chok (Group Head - Commercial, Concord Group / Winner MISA '19 Best Practice for Renewable Energy), Farouk Aizat (Commercial Manager, Concord Group). (2nd row): H.E. Aart Jacobi (Ambassador, Embassy of the Kingdom of the Netherlands / Chief Judge MISA '19), Sibrandes Poppema (Judge - Best Practice for Renewable Energy / Member of the Board, Sunway University), Zulfahmi Fauzan Zulkhepli (Co - Founder, Better - Bev / Winner MISA '19 Best Innovative Waste Management Program), Esteban Mario Fernandez (Co - Founder, Better - Bev), Herman Huisman (Judge - Best Innovative Waste Management Program / Senior Advisor, RWS Environment), and Navin Sinnathamby (Judge - Best Digital Green Tech / Senior Program Manager - Data Economy Division, MDEC).

To date, IGEM has attracted the attendance of over 420,000 visitors including delegates, dignitaries, and companies from over 50 countries.

This provided a strong and mutually beneficial partnership for MISA '19. Due to MISA being an official part of the IGEM program, the Day Program was held at the Kuala Lumpur Convention Center Hospitality Lounge. This allowed attendees at IGEM to walk in, listen, and participate in the day program, which serves as the platform for the sharing of best practices. This part of the program, which was open to all, also served as the final round of judging and is the focus of MISA.

MISA is judged by an independent, expert panel of judges led by the Chief Judge - H.E. Aart Jacobi (Ambassador, Embassy of the Kingdom of the Netherlands). Ensuring transparency in the awards, judges and audience members had the opportunity to ask questions of the finalists regarding their projects, ensuring a learning experience for attendees.

Held immediately after the Day Program, the MISA '19 Awards Ceremony & Dinner was organized in the Grand Hyatt Kuala Lumpur. The evening featured guest of honor YB Yeo Bee Yin (Malaysian Minister of Energy, Science, Technology, Environment and Climate Change (MESTECC)). Also in attendance were guests of honor H.E. Maria Castillo Fernandez (Ambas-

sador & Head of Delegation, Delegation of the European Union to Malaysia) and Datuk Seri Dr. Mohd Azhar bin HJ Yahaya (Secretary General, MESTEC).

The MISA Awards Ceremony & Dinner is the culmination of a hard fought contest in the MISA '19 categories of Best Innovative Waste Management Program, Best Digital Green Tech, and Best Practice for Renewable Energy.

Best Innovative Waste Management Program:

Waste Management contains the activities and actions required to manage waste from its inception to its final disposal. Companies in this category manage their waste with an innovative program (new to market) and take into account the impact their waste is having on their environment.

Best Digital Green Tech:

In this category, we showcase digital technology used for achieving green and clean goals; tech that results in transformational innovation through data. Now, more than ever, achievements in green tech are necessary to address some of the most pressing issues brought about by problems such as climate change and food shortages.

Recent advancements in digital tech, such as artificial intelligence (AI), 5G, and blockchain, mean that new and exciting solutions are appearing in green tech. As digital tech itself is not sustainable (con-

suming a lot of energy), the digital green tech innovation in this category needs to add value to conducting sustainable business.

Best Practice for Renewable Energy:

In this category, we were looking for companies who implement and encourage a broad based innovative and sustainable use of renewable energy models. Renewable energy is energy from, but not limited to, renewable resources. For example: sunlight, movement, wind, rain, tides, waves, and geothermal heat.

Audience Award:

Shortlisted candidates were also automatically entered into competition for the MISA Audience Award. Finalists had to go through a popular vote elimination round. Videos on the projects from each shortlisted candidate were uploaded onto the MDBC YouTube channel and everyone was invited to vote for their favorite by liking the video.

Leaders from the popular vote then advanced to the live voting round which took place at the MISA Awards Ceremony & Dinner itself. Each finalist had to present their one minute elevator pitch to the evening audience. This also provided the evening audience who were not in attendance during the day program a chance to learn more about the projects in competition for MISA. The winner of the Audience Award was chosen by attendees during the dinner



Top: MC duties performed by Jason Desmond



based on the result of a live vote.

Sponsored by Hibiscus Petroleum, Signify, Randstad, InvestKL, Sunway University, Arcadis, Invest Selangor, Pacques, Basis Bay, and MDEC, MISA '19 proved itself an innovative and sustainable event. It's unique and innovative platform nurtures an accelerated development and understanding of these two topics, very much in line with the achievements and ongoing developments by both Malaysia and the Netherlands.

Winners of MISA '19 were announced by

YB Yeo Bee Yin. Additional information on each of these winners and their projects is available within this supplement. Short summaries on the projects submitted by other shortlisted finalists have also been made available so that those who were not able to attend the event can still learn from these innovation and sustainability champions. Videos which were submitted for the Audience Awards will also remain up on the MDBC YouTube channel to continue the sharing of best practices. These can be found at: <https://www.youtube.com/channel/UCSsyDERFaUQW4aoz8hKswBw>

MDBC would like to thank all of the competitors who took part in this year's awards program, helping to strengthen the program as a knowledge platform for the business community through the sharing of best practices, ensuring knowledge and skills transfer between Malaysia and the Netherlands.

MISA will be back next year. Keep an eye out for new categories as they change every year. We look forward to seeing you there!

thalesgroup.com

THALES

Decisive technology for decisive moments

The people we all rely on
to make the world go round,
they rely on Thales

Search: Thalesgroup

in
t
f
▶

© 2019 Thales Group. All rights reserved. MISA '19 is a trademark of MDBC. Images: Shutterstock

MSA'19 JUDGES

It is with much pride and pleasure that we present to you this year's distinguished panel of judges. Each category featured a panel of independent judges led by the Chief Judge, Netherlands Ambassador H.E. Aart Jacobi

**CHIEF JUDGE:
H.E. AART JACOBI**



H.E. Aart Jacobi recently joined the embassy here in Malaysia after a posting to Japan. The Ambassador brings with him a wealth of experience in the Asian region.

Skilled in Intercultural Communication, Political Science, Government, Dutch and International Relations, he is a strong community and social services professional with a Master of Arts focused in Japanese Constitutional Law from Kyoto University.

CATEGORY 1: BEST INNOVATIVE WASTE MANAGEMENT PROGRAM

Herman Huisman

Senior Advisor / Expert, RWS Environment

An environmental biologist by training, Herman began his career at the Scientific Council for Government Policy. He was asked to set up the Bureau of the Waste Management Council, which was then merged with RWS.



Kasturi Nathan

Partner, KPMG

Kasturi is an MIA Chartered Accountant and a Fellow CPA, Australia, with KPMG specializing in Corporate Governance Advisory, Sustainability & Climate Change Advisory & Assurance related services, and Sarbanes - Oxley.



CATEGORY 2: BEST DIGITAL GREEN TECH

Freek van Eijk

CEO, Holland Circular Hotspot

Freek is one of the more senior Dutch experts in the fields of Waste Management and Circular Economy. He is a frequent jury member in innovation challenges. He serves as an Advisory Board Member of the World Biogas Association.



Karamjit Singh

Founder, Digital News Asia (DNA)

After 19 years as a print journalist, Karamjit moved to launch an online news portal focusing on technology and innovation news. He founded DNA with a vision that media should play its role as the Fourth Estate.



Navin Sinnathamby

Senior Program Mgr - Data Economy Division, MDEC

Navin oversees disruptive technologies such as IoT, Big Data, and AI as key innovation enablers across industry verticals to drive digital adoption towards realizing the Digital Economy in Malaysia.



CATEGORY 3: BEST PRACTICE FOR RENEWABLE ENERGY



Azah Ahmad

Senior Director, Strategic Planning Division, SEDA

Azah has been in the renewable energy and energy efficiency industry for 17 years and is in charge of net - metering implementation, RE industry development & support, and human capital development in RE.



Kees W. Kwant

Senior Expert, Bio Energy & Biobased Economy, RVO

Kees has extensive experience in innovation and enabling the development of a sustainable bio - based economy and renewable energy. He was the Chair of the IEA Bioenergy Technology Collaboration Program until 2018.



Sibrandes Poppema

Member of the Board, Sunway University

Sibrandes is a TS Jeffrey Cheah Distinguished Professor, a member of the Board of Sunway University, Knight of the Order of the Netherlands Lion, and President Emeritus University of Groningen.

MSA'19





**BEST INNOVATIVE
WASTE MANAGEMENT
PROGRAM**

THE SHORTLIST

BIG DUTCHMAN



Big Dutchman is a recognized global market leader in innovative technology and equipment for modern poultry and pig management. It is represented in more than 100 countries worldwide and has a significant presence in Asia Pacific. The company has developed a waste management solution called the CompoTower. CompoTower is a vertically enclosed high - quality fermentation system which evaporates the moisture in manure and slurry through a high - temperature fermentation process. The CompoTower process transfers organic waste into high quality compost which is applicable as high value fertilizer for different plants and crops. CompoTower also has an air cleaning option before clean air is released into the environment. Big Dutchman's CompoTower is one of the first of its kind. It requires minimal space due to its compact design and is an optimal and sustainable waste processing system. Instead of untreated waste being released into the environment (which can be harmful), CompoTower turns it into a high grade by - product - fertilizer or compost, that can be safely used in any vegetation for healthier and high quality produce.

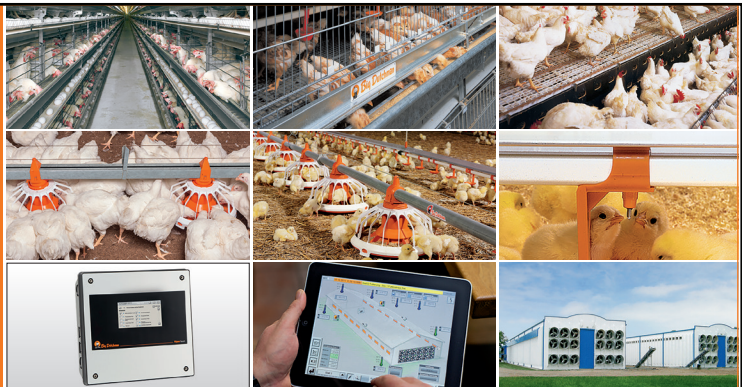
HQ PACK



HQ Pack designs and produces customer specific packaging solutions for high - tech and sensitive industrial equipment. With a highly trained and experienced engineering department and technical workforce, HQ Pack provides a solution to every imaginable packaging and transport problem. HQ Pack eliminates the waste generated from packaging material by designing and developing reusable packaging solutions to completely remove packaging material waste, especially when shipping large machinery. It helps companies deliver their products in a sustainable way by using reusable packaging and saving millions in the process. Globally, any product delivery using our reusable packaging systems will help totally eliminate (not reduce) waste from packaging material. One of HQ Pack's customers used a single reusable crate 10 times in a year and eliminated 6.8 tons of waste from being dumped into a landfill. Over a 10 year period, that customer eliminated 68 tons of waste from packaging material for every HQ Pack crated used. In that 10 year period, our customer used 12 reusable crates and saved \$840,000.

Innovation by
experience.

www.bigdutchman.asia



Big Dutchman.



**BEST INNOVATIVE
WASTE MANAGEMENT
PROGRAM**

THE SHORTLIST

INVEST ENERGY



Invest Energy is a growing international total energy solutions company leading the charge in Renewable Energy (RE) generation, Clean Energy (CE), and Energy Efficient (EE) solutions and management by providing and investing in innovative, cost-effective, reliable, and proven energy solutions. The company is operating a Waste Heat Recovery Power Project at Safran Landing Systems Malaysia (SLSM) in Bandar Sri Sendayan, Seremban, Malaysia. The project involves the construction of a 2MW Organic Ranking Cycle (ORC) Waste Heat Recovery power plant at SLSM. This turns waste to energy and solves the plant's current environmental issues while enhancing their operational cost over the long term. This PRC Waste Heat Recovery technology is the first of its kind in Malaysia and involves a significant transfer of technology and technical know-how from world class companies. The system minimizes the degradation of the environment, has zero or low greenhouse gas emissions, and will provide future clients a stepping stone to implement such technologies across industries. It has also assisted the government in drafting new policies for waste to energy industry.

RECYCLE FOR LIFE / CENVIRO



Cenviro stands for 'Clean Environment' and is the flagship of Khazanah Nasional's investment in sustainable development. Cenviro is on a mission to tackle pollution and divert valuable waste from ending up at landfills. Their Recycle for Life (RFL) system was developed in collaboration with MyKasih Foundation with the intention of inspiring systemic solutions to waste challenges. Through RFL collection, recyclables will be weighed and a cash value credited into the RFL smart card (electronic wallet approved by Bank Negara Malaysia) based on the current market price. The RFL smart card can be used for purchase of goods at participating school canteens, bookshops, hypermarkets, and merchant partner outlets. The RFL program collects Paper, Plastic, Steel, Aluminium, and Household electronic waste. RFL, in collaboration with Global Environment Centre, is implementing this program in communities and schools engaged under the River of Life Public Outreach Program. It is also in partnership with the Coca-Cola Foundation to implement this program in 80 secondary schools beginning in 2019 and is expected to benefit an additional 40,000 students.

INVEST IN SELANGOR

 CLOSE PROXIMITY To Kuala Lumpur Business Centre and Putrajaya Administrative Capital	 2 Major Airports (KLIA, KLIA2 & Subang SkyPark)	 12th Busiest container port (Port Klang)	 160 Institutions of higher learning	 CYBERJAYA The national ICT Capital of Malaysia and 2 other Cyber centres
 3.4 MILLION Largest workforce (skilled & multilingual)	 More than 40,000 graduates per annum	 98.7% Literacy rate	 WORLD CLASS Cities & Towns	 FREE From natural disasters

Contact Us!

Invest Selangor Berhad (481741-M)
 No. F1-2-G, Jalan Multimedia 7/AG, CityPark, 40000 Shah Alam, Selangor Darul Ehsan, Malaysia
 Tel: +603-5510 2005 • Fax: +603-5519 6403 • Email: enquiry@investselangor.my


www.investselangor.my



INVEST SELANGOR
THE GOLDEN STATE OF MALAYSIA



**BEST INNOVATIVE
WASTE MANAGEMENT
PROGRAM**

THE SHORTLIST



SWCORP

The Solid Waste Management and Public Cleansing Corporation (SWCorp) was introduced to complement the success of the National Solid Waste Management Policy. As of 2015, the Government has mandated the separation of "solid at source (SAS)" household solid waste. Through the Strategic Plan for Solid Waste Management 2014 - 2020, SWCorp aims to reduce solid waste generation at the community level. SWCorps' Zero Waste Community Initiative (ZeComm) is designed to facilitate residents earning rewards by carrying out the separation of food waste and recyclable items and sending them to a ZeComm centre. ZeComm has become one of the community empowerment programs under the National Community Policy. Through ZeComm, those separating food waste and recyclable goods (1 kg of food waste and 2 kg of recycled waste) will be rewarded with one (1) stamp on a special coupon. Coupon redemption is in the form of daily items such as rice (5 kg), cooking oil, and so on, subject to the number of stamps obtained. It is expected to entice residents to separate waste and recycled goods and bring the recyclables to the designated centers.



TELEPLAN TECHNOLOGY SERVICES

Teleplan is the dedicated and trusted market services partner for leading communications, computer, and consumer electronics, and technology companies. In the context of SSD remanufacturing, NAND flash chip harvesting is a branch focusing on the media, including research & development of the entire process of NAND chip removal and testing to capture the in - service chips that will be retired, enabling re - use in a secondary market. Being able to re - utilize SSD averts landfills and saves the environment. It allows consumer applications utilizing NAND Flash memory to be offered at lower prices, ensuring that new technology can reach the underprivileged within their price point. Based on the business case, Teleplan is able to generate 29,700 NANDs at 99% processing yield, which is equivalent to 950,000 GB of memory. This brings in an additional \$85,000 in terms of monthly revenue for the company, which is directly recovered from scrapable parts. This project allows the industry to explore new technology while nurturing new talents and skillful operators who will be handier in their tasks. With Teleplan's sister sites around the globe, this project can be expanded.



SUNWAY UNIVERSITY

WORLD'S TOP 150 QS RANKED UNIVERSITY UNDER 50 YEARS OLD



A CLASS ABOVE

university.sunway.edu.my



SUNWAY UNIVERSITY DU 025 (B) A member of Sunway Education Group • No. 5 Jalan Universiti, Bandar Sunway, 47500 Selangor Darul Ehsan.



4 QUALITY EDUCATION



RM 402 million
awarded in Scholarships & growing
jeffreycheahJouandation



Jeffrey Cheah Foundation
Nurturing the Seeds of Wisdom

OWNED AND GOVERNED BY THE JEFFREY CHEAH FOUNDATION (800946-T)



BEST

DIGITAL GREEN TECH

THE SHORTLIST



CYBIANT ASIA SDN. BHD.

Cybiant offers leading and globally accredited Big Data Training, professional services for the design, development, and architecture of Big Data environment and projects, as well as Big Data Technologies and Architecture. They recently developed Advanced Detection Analysis (ADA), Cybiant's flagship product for the detection and interpretation of irregular patterns. Cybiant ADA[®] allows governments and enterprises to find and display irregular patterns in their data. The software uses proprietary machine learning algorithms that tailors the results towards an organization's key requirements, making ADA[®] a better predictor over time. Built on leading and secure infrastructure from Google and IBM, data is kept confidential and compliant to international data privacy and security standards. Because of its strong backbone, ADA[®] can be used by any organization that is looking for irregular patterns and outliers, which are frequently the result of fraud, intrusion, or failure. Insurance companies use ADA[®] to evaluate claims, whereas immigration authorities use ADA[®] for the analysis of immigration records. It helps organizations make better decisions every single day.

INTEL

INTEL TECHNOLOGY SDN. BHD.

Intel is an American multinational technology company that is the world's second largest and second highest valued semiconductor chip manufacturer based on revenue. The Intel Penang Warehouse has a SMART Internet of Things (IoT) LED Lighting System which has Intel's ATOM Processor embedded in the LoRa (Long Range) module as part of the LED driver and gateway. Old T5 High Output lighting has been replaced with a SMART IoT LED High Bay Parabolic Lighting Solution. This team has successfully implemented the first SMART IoT LED Lighting with Intel Processor, which has the ability to control light output based on occupancy and lux control. This project achieved annualized energy savings of 572,904 kWh equivalent to 10,195 tree seedlings grown for 10 years. Lux level improved by 111% with 62% energy savings compared to the previous T5 high output lighting. The warehouse work environment also improved through increased visibility at the racking area. In addition, this SMART system has the ability to monitor energy consumption by area, which is used to optimize space for efficiency and future expansion. It will be implemented in Intel warehouses globally.

 **randstad**

**partner with us
for your hiring needs.**

randstad.com.my

03 2036 6666





**BEST
DIGITAL GREEN TECH**

THE SHORTLIST



SHELL MALAYSIA

Shell has been a partner in fuelling Malaysia’s progress for over 125 years. Shell is engaged in every aspect of the modern oil and gas business. It is introducing smart EV charging parking bays that connect to your mobile phone via an application for users to easily find available EV bays and guarantee parking upon reservation. This project is a first in market innovative solution that promotes electric mobility by providing charging and parking convenience to users and eliminating unsolved EV charging challenges where there is limited opportunity to charge. The use of Shell Recharge can avoid up to 60% of carbon emissions and create cleaner air. Shell continues to grow with 172% on average users per month, with a revenue growth of 171% average monthly. On average, our users spent 2.68 hours at the Shell parking bays. There are 38,000 registered users with 1,100 reviews scoring an average app rating of 4.6 out of 5. With just 12 active EV chargers, the project was able to produce 20,164 km of Zero Emission travels in just 6 months of operations. This solution is easily scalable and expanded to many cities around the world, with the app easily downloadable via Apple / Google app stores for free.

TELEKOM R&D (CD)



Telekom R&D is a Malaysian government approved R&D company and innovation hub for Telekom Malaysia (TM) group. They are a key enabler, driving TM’s digital aspirations as it moves beyond connectivity into new value - added digital and smart services, covering customer experience, process optimisation, and new business opportunities. DR - CD or Development of Reusable Cable Drum, is a green initiative project by Telekom Malaysia aligned with Industrial Revolution 4.0. It innovates the reusable cable drum design by eliminating wooden drum dependency and is equipped with Internet of Things for intelligent drum management via a mobile and web based application. DR - CD utilizes available telecommunication access infrastructure through 4G / 5G coverage in its online tracking and monitoring features to locate the drum’s geographical location and record the drum ownership in a system via QR code scanning. Every successful cycle of reusable drum usage will significantly prevent 1.8 square meters of forest from legal / illegal logging / deforestation, saving 0.38 trees from being cut (using the reusable drum 8 times will prevent 3 trees from being cut).

INTERNATIONAL RANKINGS

1st Recognised 1st in Southeast Asia as a World Energy City <small>(Source: WECP)</small>	2nd Ranked 2nd in Southeast Asia for Ease of Doing Business <small>(Source: World Bank)</small>	3rd Global Services Location Index <small>(Source: AT Kearney 2019)</small>
---	---	---

BUSINESS POTENTIAL

EXCELLENT ECOSYSTEM

<p>3.2 Bil Asia middle-class market by 2030 <small>(OECD Observer)</small></p>	<p>US\$2.7 Tri for SEA energy supply, transmission and efficiency measure <small>(International Energy Agency)</small></p>	<p>3rd In Asia for English Proficiency Index 2018 <small>(Education First)</small></p>	<p>258,972 Total Graduates in Malaysia for 2018</p>
<p>US\$8 Tri Of new infrastructure in Asia by 2020 <small>(Asian Development Bank)</small></p>	<p>33.8 Mil Malaysia’s Population by 2020 - up 40% <small>(Department of Statistics Malaysia)</small></p>	<p>74 Double Tax Agreement Offered in Malaysia <small>(Inland Revenue Board Malaysia)</small></p>	<p>16th in Asia and 54th Worldwide for World Best Airport <small>(Skytrax 2019)</small></p>
<p>US\$2.77 Tri ASEAN GDP 641 Mil people - ASEAN Population <small>Ministry of International Trade and Industry (MITI)</small></p>			



THE SHORTLIST

TELEKOM R&D (EENT)



Telekom Malaysia developed an Enterprise Electricity Management System (EENT). In EENT, Telekom developed an end - to - end electrical digital twin of a physical building. EENT models the energy utilization and triggers user awareness to reduce total energy cost - reducing green house effect impact on the environment. Novel gamification methodology helps to sustain user behavior and encourages users to actively take responsibility of their building area and actively improve energy conservation efforts. The analytics engine subsequently crunches data to propose actionable insights for electricity / building managers. EENT is especially useful for large buildings, data centers, and office buildings due to its capacity of aggregating data from multiple sources such as dedicated sensors, smart meters, and building management systems that are usually found in commercial buildings. Automatic calculation of PUE and EEI metrics for data centers and large buildings allows building managers to spend time on more valuable activities such as building maintenance and day - to - day operation needs. The EENT platform is designed to handle massive incoming IoT data traffic.

**BEST
DIGITAL GREEN TECH**

Think global, go Beyond.

Expanding your business

One Stop Boutique Consultancy in doing Business and living in Malaysia.

* Company Incorporation	* Immigration	* MM2H
* Accounts & Payroll	* Labuan Offshore	

For more info, contact +603 - 2181 8383 or drop us a line at: mohdyusoff@bch.my

Corporate Group

Corporate Services

Human Resource Management

Expatriate Advisory Services

25 YEARS OF SERVICE EXCELLENCE BEYOND CORPORATE GROUP



**BEST PRACTICE FOR
RENEWABLE ENERGY**

THE SHORTLIST

ANTAH RENEWABLES



Antah Renewables is owned by members of the royal family of Negeri Sembilan. The Antah Group is a conglomerate with diverse interests in the areas of Renewable Energy, Power Generation, Property Development, IT & Telecommunications, Education, Agriculture, Healthcare & Hospitality. Antah Renewable installed the largest Solar PV system on a private / international school. What initially began as a 70 kw system three years ago, has now been expanded to a 1 MW PV system at the Kolej Tuanku Jaafar Mantin, making maximum use of the roof space available at the school. This solar panel system not only increases the Green Building Index (GBI) of the school, it also exposes the students, teachers, and parents of the students that having a green mindset is beneficial. It is hoped that having seen this implemented, the parents of the students will take steps to make their own businesses more green.



CENERGI - SEA

Cenergi is a premier sustainable energy solutions company specializing in reducing carbon footprint through investment in renewable energy and energy efficiency projects. Cenergi designs, develops, finances, builds, owns, and operates bioenergy (biomass and biogas) projects that generate renewable energy from organic waste streams. For biogas projects, Cenergi treats POME wastewater to produce biogas and use it as a fuel for power and / or steam generation, while reducing greenhouse gas (GHG) emissions and improving waste water effluent quality. From 2016 to July 2019, Cenergi biogas plants exported over 129 GWh of clean energy to the national grid. By coupling innovative financing arrangements with renewable power sources, Cenergi ensures that their cost effective on and off grid clean energy projects have a measurable impact on consumer and investor interests. As of July 2019, Cenergi has offset a total of 86,764 tonnes of CO₂ equivalent from its five biogas power plants. This is an equivalent to displacing 8.5 million gallons of diesel. Currently, Cenergi is the largest biogas developer in Peninsular Malaysia.



Leading in biological wastewater and gas treatment

with over 3,000 references worldwide

Asia Pacific
Kuala Lumpur, Malaysia
+603 2169 6331
info@paques.com.my

www.paques.nl



BEST PRACTICE FOR RENEWABLE ENERGY

THE SHORTLIST

INTEL INTEL TECHNOLOGY

Intel is an American multinational technology company that is the world's second largest and second highest valued semiconductor chip manufacturer based on revenue. Intel has the largest solar thermal system in a semiconductor factory for domestic hot water application. Solar thermal system implementation started at Intel Malaysia in 2015 with the objective of displacing more carbon - intensive energy sources. As of 2019, Intel Malaysia has installed seven solar thermal systems to support 100% of the hot water supply for dishwashers in all cafeterias at Intel Penang and Kulim. As Intel Malaysia is driving towards renewable energy implementation; this team is currently installing solar PV at rooftops and cartops to generate more electricity to supply factories and offices in an ongoing effort across Intel Malaysia. 240 units of solar thermal collectors were installed with 453 m2 of aperture area used for solar thermal collection, and 23,500 liters / day of hot water generated every day. The project displaces 550,112 kWh annually from the grid which is equivalent to the supply of clean energy to 2,065 houses for a month and offsets 410,536 kg of carbon dioxide emissions annually.



Solar for all. All for solar.

SUNCROX SOLAR

With a tagline of "Solar for all, All for solar", Suncrox Solar is a social enterprise that fulfills the high growth solar energy commercial sector like self - consumption or standalone solar energy application while ultimately serving an underprivileged group, the off - grid community. Suncrox Solar advocates cross - subsidization to connect the growth of the solar energy industry and off - grid community by subsidizing one person electrification rate for every kilowatt installed. Suncrox Solar has installed more than 75 commercial projects in Southeast Asia. They have served more than 1,250 direct beneficiaries with fully subsidized (free) solar energy systems, mostly Tier 1 solar home systems. They managed to install solar powered lights and fans for delivery and operation rooms in a rural hospital in Bago, Myanmar. Suncrox Solar effectively solves grid power and fossil fuel dependency for basic home appliances such as light, fan, and charging. A family can have an average of four extra hours of operation at night in their house. 90% of health and hazard risk due to smoke (from fuel burning of candles, kerosene, and generators) can be eliminated.

ARCADIS MALAYSIA

INNOVATE | DESIGN | DELIVER

Contact us to find out more:

SELANGOR

Level 5 Menara TSR, 12 Jalan PJU 7/3 Mutiara

Damansara, 47810 Petaling Jaya, Selangor

info-my@arcadis.com

www.arcadis.com/asia

ArcadisAsia @Arcadis_Asia



Urban environments face increasing challenges around how they plan, build and maintain their natural and built assets. Today's cities need to be able to respond to global mega trends such as climate change, energy consumption, inefficient mobility and rapid urbanization to remain competitive on the world stage.

At Arcadis, we work with governments, businesses and organizations alike to transform the environments in which they operate delivering sustainable outcomes. Our world leading experts provide solutions in project & program management, cost management and design & engineering across multiple sectors that improve quality of life.

Arcadis and its affiliate companies have successfully delivered projects across Malaysia for over 70 years, and will continue to make a positive contribution towards achieving its leading vision.



The winner of the MDBC Innovation & Sustainability Awards (MISA) 2019 Audience Award is Besic APAC. Besic is engaged in one line of business, the development, manufacturing, marketing, sales, and service of semiconductor assembly equipment for the global semiconductor and electronics industries.

It is a global company with headquarters in Duiven, the Netherlands and it operates seven facilities in Asia and Europe for production and development activities, as well as eight sales and service offices across Europe, Asia, and North America.

Besic always innovates towards sustainability in their manufacturing processes, providing the best plating solution with the lowest ecological footprint. To this end, Besic has developed a new plating process that is more cost efficient than the current processes used in solar cells, while improving the efficiency and output per solar cell.

By replacing certain materials, the cells become more efficient while the cost per Watt output is lower. The new materials used are also more sustainable and recyclable, adding several benefits in the total product life cycle of a solar cell.

By using a different process and materials to produce solar cells, Besic can improve the efficiency of a solar cell and reduce the cost per Watt produced, with a more sustainable process. The efficiency from a solar cell can be improved by 0.5% from 22.5 to 23% (relative improvement of 2.5%,



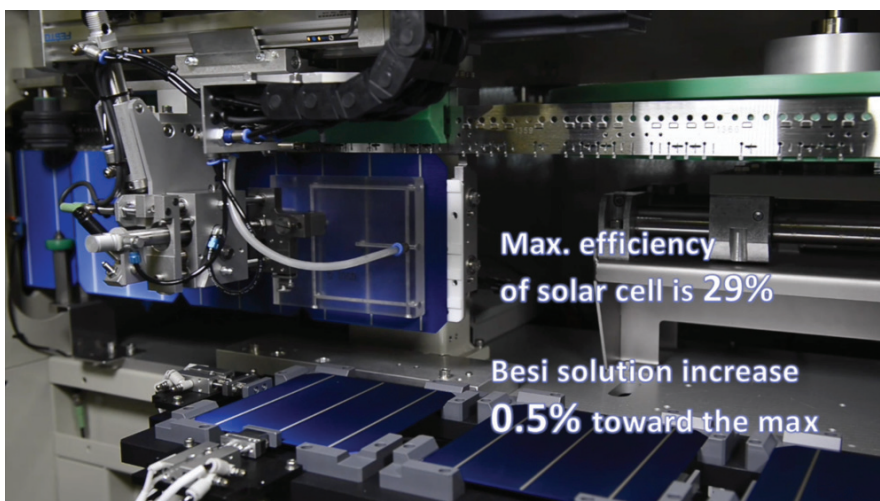
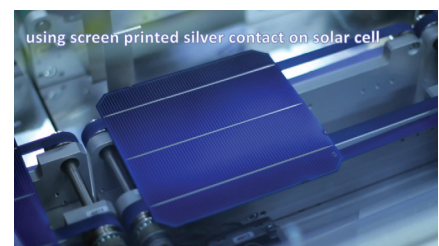
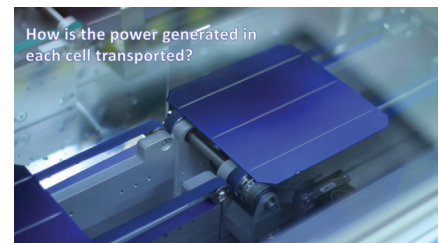
From left to right: Zainul Rahim (Chairman, MDBC), YB Yeo Bee Yin (MESTECC Minister), Henk Jan Jonge Poerink (Senior Vice President Global Operations BESIC and Managing Director BESIC APAC), H.E. Aart Jacobi (Ambassador, Embassy of the Kingdom of the Netherlands & Chief Judge of MISA '19), and Marco Winter (Executive Director, MDBC)

while the cost can be reduced USD \$0.03 per Watt output. This is a significant improvement compared to current solar cells on the market.

The new process by Besic involves changing from silver to copper and has the following proven benefits:

- * Copper plating equipment (up to >3,000 wph) is available with mechanical yield losses of < 0.1%, this is a huge improvement compared to the conventional process
- * Copper plating equipment can be used for IBC, HJT, nPERT, TOPCon cells
- * + ~ 0.5% efficiency improvement can be achieved when using laser opening of SiNx layer + Besic DPL; metallization onto high Ohmic emitters feasible (100 - 12- 1Ω / sq)
- * 23.1% efficiency achieved with Meco DPL (nPERT); on HJT and IBC cells > 24.5% efficiency achieved

This means strong cost reductions: USD 2 - 3 cents / Wp on bifacial HJT cells feasible. There is also freedom of choice on plating metals (Ag or Ni, Cu, Sn). The processes are qualified with chemistries from top tier



vendors, and gives a strong reduction of chemicals used vs the traditional way of solar cell production. Furthermore, copper is a more sustainable and better for recycling than silver, leading to a better overall sustainable product life cycle for solar cells.

The new process and equipment has successfully been sold to First Solar, Q - Cell, and Sunpower. The last two have facilities in Malaysia with Besic's new equipment. Sunpower has plans to expand their use of the new equipment in the next two years based on results with the first Besic machine installed. Overall, Besic sees huge potential in ASEAN for their new product on top of the environmental benefits highlighted above.



l to r: Marco Winter, Zainul Rahim, YB Yeo Bee Yin, H.E. Aart Jacobi, Esteban Mario Fernandez (Co - Founder, Better - Bev), and Zulfahmi Fauzan Zulkhepli (Co - Founder, Better - Bev)



schedule

- Provide a proactive measure to reduce and eventually stop single - use plastics, as stated by MESTECC (Phase 2)
- Incorporate MESTECC's Phase 3 objective of utilizing biodegradable and compostable products in the F&B industry

Better - Bev's cups are made from rice husk and natural, non - plastic resin which helps the massive rice farming industry in Asia to innovatively convert rice farming byproduct waste into a reusable product that is a 100% biodegradable product at the end of its lifecycle.

It also solves the problem of low recycling rates currently in Malaysia. Their service circumvents the need for recycling as they are using 100% biodegradable, BPA - free products that can decompose within 60 - 90 days at the end of its lifespan (2 - 3 years depending on the amount of use), as verified by independent certification bodies such as SGS and TUV Rheinland.

Their digital reusable cup service builds on the "premise that each individual has the capacity to make positive changes by adopting a wise use approach to their consumption patterns" (Malaysia's Roadmap Towards Zero Single - Use Plastics 2018 - 2030, pg 12).

This initiative will also reduce the operational cost of vendors, which can then be reinvested into growing their businesses. It also illustrates a circular economy solution to actively phase out single - use waste to the approximately 14 million tourists who visit Kuala Lumpur each year.

As an additional benefit, this service can be licensed to other partners in neighboring ASEAN countries and other regions. It reduces waste management costs associated with the disposal of cups for major economic centers, such as shopping centers and office buildings.

The winner of the MDBC Innovation & Sustainability Awards (MISA) 2019 Best Innovative Waste Management Project is Better - Bev.

Better - Bev is a Malaysian company offering consumers a better solution than single - use, disposable cups. By adopting a circular economy approach, Better - Bev is offering a cup - as - a - service initiative that allows beverage retailers and their loyal customers the opportunity to opt - out of wasting and opt - into reusing. They are currently the only reusable cup service to use sustainably sourced up - cycled natural fibers to manufacture their cups, making them 100% biodegradable. Cup sleeves and lids are also sustainably sourced and made from 100% recyclable high - grade silicone.

With Better - Bev, customers can request a reusable cup when ordering drinks from any of their participating vendors. Once finished, customers can return the cup to any drop location where the cup will then be collected, cleaned, sanitized, and redistributed for reuse again and again.

This closed - loop, cup - as - a - service start - up is aimed at engaging cafes, beverage retailers, and consumers to collectively work together to significantly reduce the number of single - use disposable cups wasted and sent to landfill each day within Malaysia.

Single - use disposable cups are a modern convenience that create massive complications for Malaysia's waste management industry, while also having a devastatingly negative effect on local environments and eco - systems.

Current estimates state that globally each year, nearly 600 billion disposable single

- use cups are wasted. Furthermore, the Ministry of Energy, Science, Technology, Environment, and Climate Change (MESTECC), has indicated that Malaysia is currently the world's eighth worst country for plastic waste mismanagement.

Better - Bev's human centered approach helps eliminate single - use waste at the source while also addressing the pain points faced by consumers, who lack the incentive to regularly use their own reusable cups.

Their digital platform allows stakeholders the opportunity to directly measure the amount of waste they collectively divert from landfills and is easily scalable and expandable. Most importantly, their service is simple and easy to use, while helping to solve the problem facing each modern consumer.

Onboarding 300 cafes in one year could offset:

- Approximately 70,000+ cups from landfills
- 2.95 Tonnes of carbon
- 750 bins worth of waste from landfills
- Save 30 trees
- Utilize 12,000 cups for circulation
- Save approximately RM 25,000 worth of cups
- Save approximately RM 10,000 in waste management costs.

One of the major benefits of Better - Bev's reusable cup service is that it directly addresses targets as outlined in MESTECC's "Malaysia's Roadmap Towards Zero Single - Use Plastics 2018 - 2030" as detailed below:

- Implementing major targets in MESTECC's Circular Economy Roadmap (Phase 1)
- Bring the service online based on MESTECC's Phase 2 proposal 3 years ahead of



The winner of the MDBC Innovation & Sustainability Awards (MISA) 2019 Best Digital Green Tech Award is Satelligence.

This Dutch company specializes in providing highly detailed, semi-automated satellite-based insights and actionable results over large areas. Satelligence has world class expertise on scalable processing of radar and optical satellite images to assess patterns and trends in forests, agriculture, and water. The team combines environmental science, software engineering, data science, and years of experience with operational applications.

Malaysia is a leading palm oil producer, and with an industry suffering from concerns over the environmental impact of production, as sustainability is now mission critical for businesses, it only makes sense to ensure that there is a way to monitor the risks on the ground. Being able to achieve transparent and sustainable supply chains and local engagement with independent facts is increasingly important.

Satelligence delivers an Artificial Intelligence and satellite data-driven sustainability risk platform that can help ensure the country's palm oil is recognised as a sustainable commodity. Satelligence showcases, in real-time, those suppliers who are not involved in deforestation and other environmental damage, but produce responsibly and greener the planet.

The palm oil industry is a significant contributor to Malaysia's overall economy. Meanwhile, the Netherlands is the largest importer of palm oil within the EU. Satelligence's platform performs big data analysis on thousands of images with advanced Artificial Intelligence to pinpoint highest risk areas and to enable users to do a follow-up engagement and risk mitigation using independent facts.

The Satelligence platform helps to know where and when deforestation is happening in the supply chain, to take action to protect the forest while feeding the world.

Satelligence now has over 20 million hectares of plantations and forests in Malaysia under monitoring since their launch in 2018. They have prevented an estimated



l to r: Marco Winter, Zainul Rahim, YB Yeo Bee Yin, Maharti Rihana (Liaison Indonesia, Malaysia & Papua New Guinea, Satelligence), and H.E. Aart Jacobi

25,000 hectares of deforestation related palm oil from entering supply chains.

Ongoing scientific research into their system by their partner Wageningen University shows that Satelligence information is generally one to two months earlier than that of alternative, public services. This gives companies much more lead time to mitigate the situation and demonstrate good practice proactively.

In a few cases, traders have pushed a stop work order to one of their palm oil sourcing providers because they didn't comply with the zero-deforestation policy.

While working with the sustainability team of one of their clients, a global top four commodity trader, Satelligence noticed competing solutions are a one-size-fits-all approach and do not create both the overview of large scale areas many global organizations need, as well as the detail and reliability required to take concrete action.

In response to this, Satelligence decided to create their own prioritized deforestation alerts platform. Now this client works with Satelligence for the input data for their dashboard to monitor plantations. Their alerts enable the client to manually check areas under serious threat of deforestation within their concessions and make well-informed sourcing decisions.

The palm oil industry needs more attention on the positive stories of achievements making the sector more sustainable and deforestation-free. Further increasing transparency is inevitable. Satelligence gives sustainability teams of organizations dealing with complex food and agri supply chains a complete overview containing the most pressing satellite-observed expo-

sure and sustainability risks. Clients can use this information to take quick action in their supply chains and obtain certification by sourcing responsibly. They make progress measurable and there is a clear international trend towards the use of satellite technology for this purpose.



l to r: Marco Winter, Zainul Rahim, YB Yeo Bee Yin, Yin Peng Chok (Group Head - Commercial, Concord Group), H.E. Aart Jacobi, and Farouk Aizat (Commercial Manager, Concord Group)

The winner of the MDBC Innovation & Sustainability Awards (MISA) 2019 Best Practice for Renewable Energy Award is the Concord Group.

The Group was formed in 1994 and was initially involved in businesses such as commodity trading, real estate, and financial consultancy. From 2014, the Group embarked into the Renewable Energy Industry.

The Lepar Hilir Biogas Power Plant is a waste - to - wealth project, conceptualized by Concord under the Build - Own - Operate (BOO) model. This plant treats palm oil mill effluent (POME), captures its biogas for power generation, and sells 1.5 MW of electricity to Tenaga Nasional Berhad (TNB), which is governed by the Renewable Energy Power Purchase Agreement (RePPA) under the Feed - in - Tariff (FiT) Scheme.

This project addresses the greenhouse gas emission issue in the palm oil industry and valorizes it into a form of renewable energy. The development of the biogas power plant initiated a value chain activity within the communities, which has a direct impact on People, Planet, and Profit. It promotes sustainable practices by performing a true circular economy business model.

The execution of this project has set a new benchmark in the industry. It was successfully commissioned within 14 months and was followed by another three similar plants within six months. The project also meets all expectations of stakeholders, i.e. Financial Institution, Mill Owner, Authorities, and Vendors.

There are two positive impact attributes to the successful commissioning of the Lepar Hilir Biogas Power Plant: economic impact

on the industry, and environmental impact.

Deployment of this project has stimulated a new trade flow of equipment sales and construction services in the local market during the construction of this project. The investment of RM 20 million entailed 40% for renewable energy equipment trade from local and import sources, 30% for localized construction material and services, and 20% for manpower and financial expenses.

The biggest economic impact comes upon the commissioning of this project.

Export Power: 1,500 kW
 Total of 85% uptime: 85% x 365 days / year x 24 hrs / day = 7,446 hr / year
 FiT Tariff: RM 0.4669 / kWh

The real job opportunity generated under this biogas power plant comes in during the operation stage. The total head count of 11 employees are directly engaged in carrying out the day to day operational activities in this plant with a total fixed overhead cost of over RM 500,000 per annum.

This operation team consists of:

- 1 x Chief of Plant
- 1 x Chargeman
- 1 x Assistant Chief of Plant
- 1 x Finance cum Admin
- 2 x Technicians
- 5 x Operators

This biogas capturing system has significantly reduced the greenhouse gas emission from POME. Assuming the year milling capacity of the mill is 200,000 TFFB / year, there will be approximately 47,400 MT CO₂e generated and captured.

The Lepas Hilir Biogas Power Plant was the first biogas project receiving project financing from Hong Leong Bank Berhad,

and was subsequently delivered according to expectation. This has set a good example which will instill a higher level of confidence to financial institutions who are looking to venture into biogas project financing. As a result, there are now a few more commercial banks ready to offer project financing for biogas projects.

The availability of project financing encourages more players to venture into the development of biogas projects in the palm oil industry. This domino effect of the boosted demand for biogas project developments have resulted in the Sustainability Energy Development Authority (SEDA) of Malaysia to systematically release more FiT quota since 2018. As a consequence of this, there has been an allocation of 60 MW of FiT quota for biogas projects per year since November 2018, as compared to previous years, which were approximately 20 MW per year. This will help Malaysia achieve its renewable energy target of energy generation mix to 20% by 2025.

Concord has been inviting interested mill owners from neighboring countries to visit the plant during its construction, as well as after its commissioning. The main objective is to share the business model and its reliable technology. The visits have served to convince two private millers from Indonesia to implement a biogas capturing system for power generation facilities at their mills.

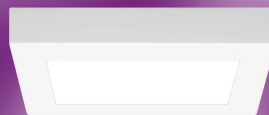
A higher awareness of the benefits of using biogas as renewable energy has been embedded among the palm oil mill owners, which will allow us to achieve the collective target of 23% primary energy mix by 2035 within the ASEAN countries.

In the long run, the world will change their perception of the palm oil industry with these sustainable practices. The Concord Group captures biogas to reduce the global warming effect and generate green energy which will reduce dependency on fossil fuels.

PHILIPS

Lighting

#Mariberkawan



“Light has a new shape”

Check out the new additions to our family of Philips LED EyeComfort lights. Different shapes, multiple applications.



No visible flicker**



Even light distribution



Reduced glare



Natural color rendering



Designed for reliability



Designed for
the comfort
of your eyes.

* Designed for the comfort of your eyes. Visit www.philips.com/eyecomfort for flicker, strobe and other EyeComfort criteria and product details.

** Pst LM \leq 1.0 measured according to IEC 61547-1 and IEC 61000-4-15.