

**THE MDBC INNOVATION & SUSTAINABILITY AWARDS 2019**  
**SHORTSLITED PROJECTS DESCRIPTIONS**



**BEST INNOVATIVE WASTE MANAGEMENT PROGRAM**

**Better - Bev**

W: [www.better-bev.com](http://www.better-bev.com)

**Title of Innovation:** Reusable cup service

**Summary:** Better – Bev is a reusable, closed – loop, cup – as – a – service start – up 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 landfills each day in Malaysia. Our circular economy and tech based approach offers stakeholders the opportunity to opt – out of wasting and opt – in to reusing, by doing away with all of the fuss and hassle of having to remember, bring, and clean your own reusable cup.

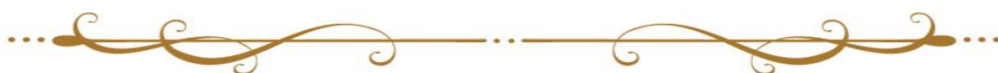


**Big Dutchman**

W: [www.bigdutchman.asia](http://www.bigdutchman.asia)

**Title of Innovation:** Big Dutchman Waste Management Solution (CompoTower)

**Summary:** 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 transforms organic waste into a high – quality compost which is applicable as high – value fertilizer for different plants and crops, with an air cleaning option before clean air is released into the environment.



**HQ Pack Sdn Bhd**

W: [www.hqpack.eu](http://www.hqpack.eu)

**Title of Innovation:** Reusable Packaging Solutions for Sustainable Product Deliveries

**Summary:** HQ Pack solves the waste generated from packaging material by designing and developing reusable packaging solutions to completely eliminate packaging material waste, especially when shipping large machinery. As the world is suffering from hundreds of tons of waste generated each year, overfilling landfills, poisoning our environment, and wasting millions of dollars on single – use packaging material, HQ Pack turns that situation around 180 degrees and helps companies deliver their products in a sustainable way using reusable packaging and save millions in the process.



**Invest Energy Sdn Bhd**

W: [www.investenergygroup.com](http://www.investenergygroup.com)

**Title of Innovation:** Waste Heat Recovery Power Project at SLSM

**Summary:** The Waste Heat Recovery Power Project takes place at Safran Landing Systems Malaysia (SLSM) in Bandar Sri Sendayan, Seremban, Malaysia. It involves the construction of a 2MW Organic Ranking Cycle (ORC) Waste Heat Recovery power plant with the key objective of utilizing the waste gas generated from the manufacturing process to generate 2MW of power to supplement the plant's overall energy requirement. This not only effectively turns waste to energy and solves the current environment issues, but also enhances their operation cost over the long term.



**Recycle for Life / Cenviro**

W: [www.rfl.com.my](http://www.rfl.com.my)

**Title of Innovation:** Sustainable Waste Management

**Summary:** Our project is a systemic buy – back system to increase recycling practices to enhance waste reduction mechanism and stimulate a culture of recycling and entrepreneurial spirit. We are on a mission to divert valuable waste from ending up at the landfills and tackling pollution. Hopefully, one day, we'll achieve our green utopia that every single Malaysian should recycle at least, if not every trash they generate with our Recycle For Life (RFL) system that we developed in collaboration with MyKasih Foundation. Our aspiration is

to inspire systemic solutions to waste challenges. We want the public to see valuable packaging as a reusable resource, not waste.



**SWCorp Malaysia**

W: [www.swcorp.gov.my](http://www.swcorp.gov.my)

**Title of Innovation:** Zero Waste Community Initiatives (ZeComm)

**Summary:** The establishment of SWCorp is a complement to the success of the National Solid Waste Management Policy. Through the Strategic Plan for Solid Waste Management 2014 – 2020, SWCorp aims to reduce solid waste generation at the community level. In accordance with SAS, SWCorp proposes a new initiative to be undertaken in selected residential areas or low cost housing projects, called the Zero – waste Community Initiative (ZeComm). The initiative is designed to facilitate residents to earn rewards by carrying out separation of food waste, recycle items, and send them to a ZeComm centre. ZeComm has also become one of the community empowerment programs under the National Community Policy.



**Teleplan Technology Services Sdn. Bhd.**

W: [www.teleplan.com](http://www.teleplan.com)

**Title of Innovation:** NAND Flash Harvesting

**Summary:** In the context of SSD remanufacturing, NAND flash chip harvesting is a branch focusing on the media, i.e. the NAND flash. It includes research & development of the entire process of NAND chip removal and testing to capture the in – service chips that will be retired so that it can be enabled for re – use in a secondary market.





## **BEST DIGITAL GREEN TECH**

### **Cybiant Asia Sdn. Bhd.**

W: [www.cybiant.com](http://www.cybiant.com)

**Title of Innovation:** Cybiant ADA – Advanced Detection Analysis

**Summary:** Cybiant ADA® is Cybiant's flagship product for the detection and interpretation of irregular patterns. ADA is an abbreviation for Advanced Detection Analysis, as well as a reference to Ada Lovelace, the first female computer pioneer. Cybiant ADA® allows governments and enterprises to find and display irregular patterns in their data. Our software uses proprietary machine learning algorithms that tailors the results towards your organization's key requirements, making ADA a better predictor over time. Built on leading and secure infrastructure from Google and IBM, the data is kept confidential and compliant to international data privacy and security standards.



### **Intel Technology Sdn. Bhd.**

W: [www.intel.com](http://www.intel.com)

**Title of Innovation:** Intel Penang Warehouse SMART IoT LED Lighting Solution

**Summary:** "If it's smart and connected, it's best with Intel." This SMART Internet of Things (IoT) lighting solution has an Intel 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.



**NEAPOLI Sdn Bhd**

W: [www.neapoli.com](http://www.neapoli.com)

**Title of Innovation:** Waste Automated Tracker System (WATS)

**Summary:** WATS is a web – based platform providing insights in our efforts to divert construction waste from landfills and encourage re – use and recycling. All involved stakeholders can finally monitor the truth, preventing illegal waste dumping and encouraging sustainable construction waste management, saving money, effort, and the planet. WATS combines on truck scales, GPS, and a cloud – based platform developed to ensure the users know exactly if and how our waste is diverted from landfill.



**Satelligence**

W: [satelligence.com](http://satelligence.com)

**Title of Innovation:** Satelligence Prioritized Deforestation Alerts Platform

**Summary:** Malaysia is a leading palm oil producer. This industry suffers from concerns over the environmental impact of production, as sustainability is now mission critical for businesses. Satelligence delivers an Artificial Intelligence and satellite data – driven sustainability risk platform that can help ensure the country’s palm oil is recognized as a sustainable commodity. We showcase, in real – time, those suppliers who are not involved in deforestation and other environmental damage, but produce responsibly and re - green the planet.



**Shell Malaysia Trading**

W: [www.shell.com.my](http://www.shell.com.my)

**Title of Innovation:** Shell Recharge in Malaysia, in collaboration with ParkEasy

**Summary:** Introducing smart EV charging parking bays that connect to your mobile phone via an application for users to easily find available EV bays and guaranteed parking upon reservation. This project is a first – in – market innovative solution that promotes electric mobility by providing charging and parking convenience to users, eliminating unsolved EV charging challenges where there is limited opportunity to charge. The user of Shell Recharge can avoid up to 60% of carbon emissions and create cleaner air.





**Telekom Research & Development Sdn Bhd**

W: [www.tmrnd.com.my](http://www.tmrnd.com.my)

**Title of Innovation:** DR – CD: Development of Reusable Cable Drum

**Summary:** DR – CD is a Telekom Malaysia green initiative project aligned with Industrial Revolution 4.0 (IR 4.0) that innovates the reusable cable drum design by eliminating the wooden drum dependency and equipped with Internet of Things (IoT) for intelligent drum management via 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.



**Telekom Research & Development Sdn Bhd**

W: [www.tmrnd.com.my](http://www.tmrnd.com.my)

**Title of Innovation:** Enterprise Electricity Management System (EENT)

**Summary:** In EENT, we develop 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 hence, 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 improves energy conservation efforts. The analytics engine subsequently crunches data to propose actionable insights for electricity / building managers.





## BEST PRACTICE FOR RENEWABLE ENERGY

### **Antah Renewables Sdn Bhd**

W: [antah.com.my](http://antah.com.my)

**Title of Innovation:** Largest Solar PV System on Private / International School

**Summary:** Kolej Tuanku Jaafar Mantin has been the pinnacle of education in its region and category. We initially installed a 70 KW system three years ago and realized that under the self - consumption model we could only install this much because in the summer (during school holidays), not all of the electricity would be consumed. After the net Metering (NEM) announcement by MESTECC, we realized that this was the time to exploit the possibility to utilize the roof space that the school has to offer and expanded the system to a one (1) MW PV system.

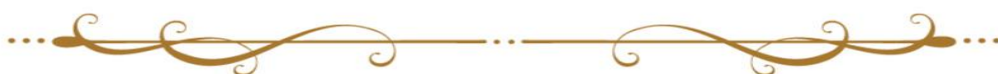


### **BESI APAC**

W: [www.besi.com](http://www.besi.com)

**Title of Innovation:** Newly developed plating process improving efficiency of solar cells.

**Summary:** Besi 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 more sustainable and are recyclable, adding several benefits in the total product life cycle of a solar cell.



**Cenergi – SEA Sdn Bhd**

W: [www.cenergi-sea.com](http://www.cenergi-sea.com)

**Title of Innovation:** Bioenergy from Palm Oil Mill Effluent (POME)

**Summary:** Cenergi develops, designs, finances, builds, owns, and operates bioenergy (biomass and biogas) projects that generate renewable energy from organic waste streams. For biogas projects, we treat POME wastewater to produce biogas and use it as fuel for power and / or steam generation while reducing greenhouse gas (GHG) emissions and improving the waste water effluent quality. From 2016 to July 2019, our biogas plants have exported over 129 GWh of clean energy to the national grid.



**Concord Group**

W: [concord.com.my](http://concord.com.my)

**Title of Innovation:** Lepar Hilir Biogas Power Plant

**Summary:** The Lepar Hilir 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.



**Intel Technology Sdn. Bhd.**

W: [www.intel.com](http://www.intel.com)

**Title of Innovation:** Solar Thermal Hot Water System

**Summary:** Intel Malaysia is always looking for new ways to advance environmental sustainability. Solar thermal system implementation started at Intel Malaysia in 2015 with the objective of displacing more carbon intensive energy sources. In 2019, Intel Malaysia installed 7 solar thermal systems to support 100% of the hot water supply for dishwashers in all cafeterias. The solar installation in Intel Malaysia is the largest solar thermal system installed in a semiconductor factory for domestic hot water applications.





**Suncrox Solar**

W: [www.suncroxsolar.business.site](http://www.suncroxsolar.business.site)

**Title of Innovation:** Suncrox Solar

**Summary:** 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 the 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 one kilowatt installed.

