

These 6 startups want to save the world



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Pitch4Green saw an exciting lineup of startups focusing on clean and sustainable solutions

On the 5th of June, the Business Angel Network of Southeast Asia (BANSEA) and Enrupt co-organised Pitch4Green. The community partners for this event included Shell, the United Nations Global Compact Network Singapore as well as Global Green Connect. As part of the Sustainable Solutions Expo 2018, the Pitch4Green session gave six startups the opportunity to pitch their clean and sustainable solutions to a panel of judges. The panel consisted of a variety of different profiles, with decades of experience:

- Mr. Geert Van De Wouw, Vice President & Managing Director of Shell Ventures
- Ms. Shoko Suzuki, Managing Director of Harbourfront Ventures
- Mr. Pat Markey, Managing Director of Sierra Vista Resources Pte Ltd
- Mr. Jean-Yves Broussy, Vice President of Brand Connection and Digital of Danone
- Mr. Perry Chen, Clean Energy Associate at EnRupt
- Mr. Sanjay Jalali, Consultant at Kaulsons Pte Ltd

The startups were given a strict seven minutes to pitch and an eight minutes Q&A with the judges. EnergyNova, the winner of the pitch, was granted exclusive access to a mentorship from BANSEA's angels, as well as a due diligence session held by BANSEA members to potentially receive funding from angel investors. It was an almost unanimous decision from the judges, selecting EnergyNova as first place, closely followed by UglyGood.

1. EnergyNova, Winner of Pitch4Green 2018

EnergyNova designs and manufactures long-lasting, hydrogen-based batteries that can be used in a wide range of consumer applications. This solves the issue of current hydrogen storage techniques, where a hydrogen tank holds a large volume of hydrogen at extremely high pressure rates. This makes the tank a ticking time bomb, making it difficult for safe usage.

Their new and improved hydrogen battery, H2Batt, is able to support up to 4 hours of drone flights, and the batteries are able to be used for off-grid usage where there is no access to power plugs. Furthermore, the unique properties of their hydrogen fuel ensure that their batteries can still operate even after long term storage of more than 5 years, allowing their batteries to be as a source for backup power in emergency situations. Their batteries neither contain heavy metals nor toxic chemicals, and is not combustible upon exposure to the environment. This makes it safer than the current status quo, where hydrogen is compressed at dangerously high pressures.

2. UglyGood

UglyGood focuses on a B2B upcycling solution which created a circular economy. They aim to tackle to issue of organic food waste in the world and helps organisations recycle their byproduct waste by building innovative business models and products around their existing wastage.

UglyGood specialises in recycling organic waste byproducts such as fruit waste, coffee waste and sugar waste into valued products. Their team of scientists have developed a range of closed-loop solutions for many types of waste and some products they produce include essential oils, organic cleaning agents, animal feed and fertilisers. They partner with F&B manufacturers, hotels, restaurants and small businesses to raise more awareness of food wastage, helping them become more environmentally friendly and sustainable in their operations. They have diverted huge amounts of waste away from landfills and incinerators since the start of their operations, saving over 10,000kg of waste.

3. RESync

RESync aims to drastically reduce the cost of renewables, like solar panels, and to advance the current digital technology. This is to allow an adaption of a new model of energy distribution, encouraging decentralized energy generation and consumption. This is because in the next 2 decades, 25% of all energy will be generated by renewables, which mean every house and every building will have solar panels on their rooftops. Instead of a few big power plants, the world will have thousands of smaller power generation and energy storage units.

RESync will allow an efficient and reliable management of energy through their infrastructure, ensuring high penetration of low-cost renewables without compromising on system reliability. Their on-site hardware and cloud based platform provides full automation of multiple energy sources. They also use historical and real time data analytics to predict energy generation and consumption patterns, which maximises the potential of renewables in the system and reduces the overall electricity bill. They have an interactive dashboard, which enables full system monitoring and helps to track all energy patterns.

Also read: [This startup replenishes greenery in urban cities using lightweight, soil-less products](#)

4. Neutrinos

Neutrinos focuses on reducing pollution from combustion engines in vehicles. Neuto is a patented Smart Hydrogen Dry Cleaning System that can effectively diagnose, prescribe, monitor and clean the car engine with pure and dry Hydrogen Gas stored in the Solid State Metal Hydride Canister. It is exclusively invented for vehicles running on Internal Combustion Engines.

The Neuto dry hydrogen auto-therapy is the cleaning service and treatment provided by Neuto system. Dry Hydrogen Auto-Therapy removes stubborn micro molecular carbon layers at hard to reach places like air manifolds, piston rings, valves, and spark plugs without causing any damage to the car engine wall and components in the engine, naturally cleansing the car engine in a sustainable and organic way.

5. Positive Energy

Positive Energy aims to reimagine the energy funding process to accelerate the deployment of renewable energy assets globally. They provide blockchain based asset financing and a trading and management platform that digitizes the transaction workflow, making green investments fast, liquid and economically viable for all parties involved.

They aim to engage institutional investors in the financing of renewable energy projects to free-up balance sheets of project developers and project finance banks, reduce overall costs, and thereby encourage new investment in the sector.

Also read: [The alarming environmental impact of Bitcoin mining](#)

Positive Energy helps investors and assets portfolio managers to source new opportunities of investment related to small to mid-size assets and so help project developers to finance their projects faster and at better conditions.

6. Sunny Irrigation

Sunny Irrigation focuses on resolving the water shortage issue in sub-saharan Africa, where they have inadequate access to a sustainable water source, forced to rely on highly inconsistent rain.

Their approach is a solar powered irrigation system, which allows farmers to increase their crop yield, and generate greater income for their communities. The water system is manufactured by qualified, local suppliers. Their pump works by harnessing solar energy to power a submersible water pump that draws water as much as from 15 meters below the land surface. The solar panel provides power to the pumps motor, irrigating a 1/4 to 1+ acre plot of land depending on season and water level, so farmers do not have to rely on rainwater.