

## The Feed-in-tariff mechanism

Malaysia's Feed-in Tariff (FiT) system obliges Distribution Licensees (DLs) to buy from Feed-in Approval Holders (FIAHs) the electricity produced from renewable resources (renewable energy) and sets the FiT rate. The DLs will pay for renewable energy supplied to the electricity grid for a specific duration.

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

If you are thinking of having your own Solar PV system, the Feed-in Tariff (FiT) system is the way to go. It gives everyone the chance to produce their own renewable energy (RE), make profit and help to conserve the environment. What is next? Please go through the steps as shown in the flow chart and seek a service provider who is able to advise you on how much you are willing to invest including the installation capacity, how much energy you can generate and your monthly income based on energy generation per month. Not only that, you are also reducing your own carbon footprint which is good for the environment and all of us.

For more information, please visit [www.seda.gov.my](http://www.seda.gov.my).

**“The typical ROI for a solar system is calculated to be between 7-9 years using the FIT Mechanism”**

### Green Constitutes Sdn Bhd (916287-M)

No 14-B, Jalan SG 3/5,  
Taman Sri Gombak,  
68100 Batu Caves,  
Selangor, MY

E: [contact@gcenergy.com.my](mailto:contact@gcenergy.com.my)  
P: +603-6186 6931  
M: +6012-245 2500  
F: +603-6185 6931



## Green Constitutes

Energy Division

**Solar Energy Department  
BIPV System**

# Solar Energy

## Harnessing power directly from the Sun

Green Constitutes Sdn Bhd is a supplier and solution provider for small scale solar energy system. We select our manufacturers with highly efficient solar panels and superior technologies.

The selection of solar panels can be divided into two main types; one is the mono crystalline array and the other is the poly crystalline array. Each type has its own pros and cons.

We can provide both types of solar panels, which have different technology, efficiency, capacity and price. Our company is also an authorized dealer for one of the solar panels manufacturer in China. Please contact our solar energy department for more information on our product range.

With the newly implemented FIT Scheme by the Malaysian Sustainable Energy Development Authority, home owners and developers can sell back the power produced to the National grid.

## Products and Services

- Mono-crystalline and Poly crystalline modules supply for both on and off grid applications.
- Solar system equipment supply and installation.
- Integrated or zero-rack retrofitted solar solutions.
- Approved solar system installation
- FIT application service



## Photovoltaic Technology (PV)

Photovoltaic is a method of generating electrical power by converting solar radiation into DC electricity using semiconductors that exhibit the photovoltaic effect.

Materials presently used for photovoltaics include monocrystalline and polycrystalline silicon.

## Micro-Inverter

Micro-inverters contrast with the conventional “solar inverter” devices, which support a large number of solar panels connected to a single inverter. The electric power from several micro-inverters is combined and sent to the consuming devices.

## String Inverter

String inverter, or more commonly known as “Solar Inverter”, may be classified into 3 broad types:

- Stand-alone inverters
- Grid-tie inverters
- Battery backup inverters

Solar inverters use special procedures to deal with PV array, such as Maximum Power Point Tracking (MPPT).

“As the technology for solar cells gets better and better, this form of clean, renewable energy will find more applications that take up less space and produce more electricity to meet the energy needs of our homes, businesses and schools”

## System Application

### Roof-Mounting Solar Panels

Roof-mounting solar panels are the most common applications done in small and medium-scaled installations. These are usually for consumption within the buildings that host the arrays.

### Residential and Commercial

Solar energy is a clean, reliable and infinite resource of energy .Therefore; solar panels can be applied practically in almost all residential houses, and small-scale commercial buildings, as long as it requires electricity. A 5kW-20kW solar energy system can provide enough electricity for a small home and commercial building.

For large scale commercial buildings, the solar panels can replace the conventional facades and the space on the flat or tilted roofs can be utilized with variety of solar arrays.

**Energy division,  
Green Constitutes Sdn Bhd**