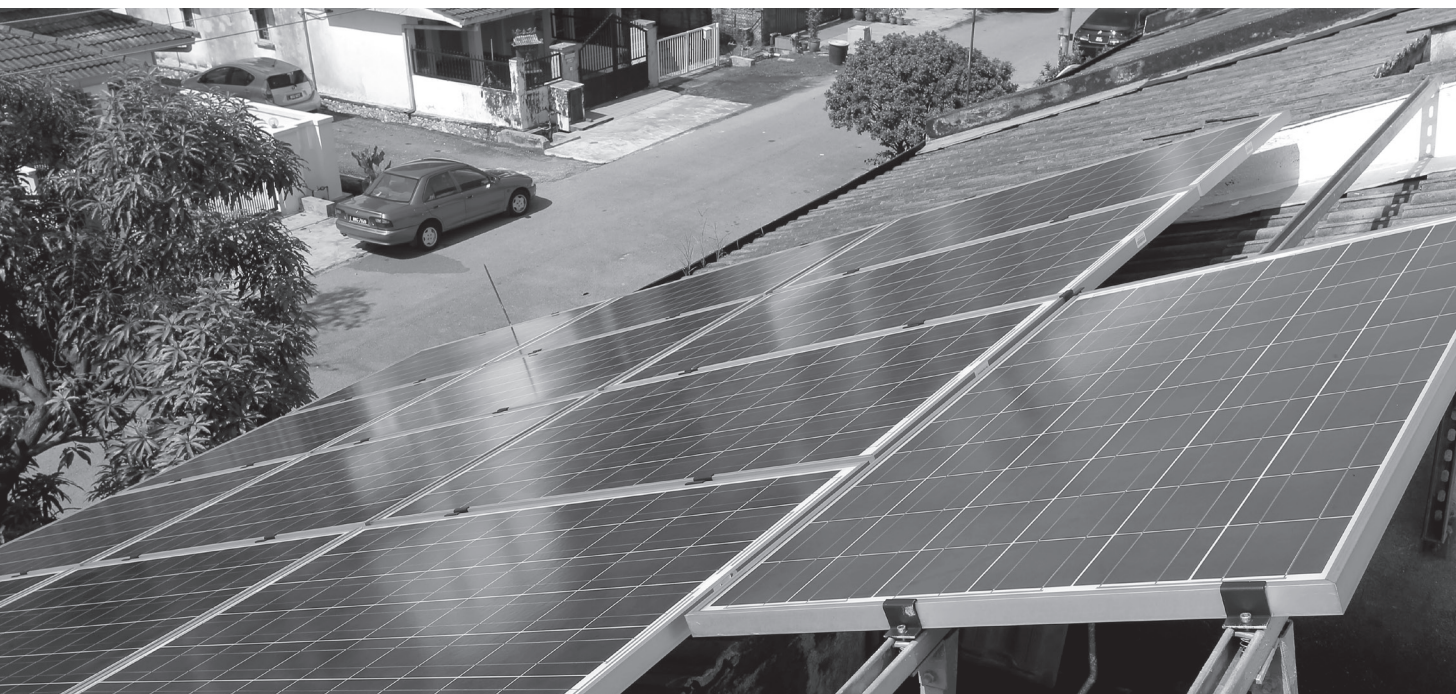




Confident in FiT

Receiving monthly payments for electricity generated from solar photovoltaic (PV) panels on his rooftop for close to one year now, Lai Chin Hai is confident about the good returns of the feed-in tariff (FiT) mechanism. Lai believes his investment is worthwhile as the long-term returns are attractive.



Lai's double-storey terrace house rooftop is making money for him

A double-storey terrace house in Pandan Perdana, Cheras, Kuala Lumpur stands out in this nondescript housing estate because it is the only one where the roof is fitted with solar PV panels. House owner Lai Chin Hai is happy that the 16 PV panels are converting the power of the sun into electricity plus making him money too.

"It is green energy. Anyone can use it because it goes into the grid, and generates income too," he enthuses. Lai has been receiving monthly payments from Tenaga Nasional Bhd (TNB) for close to one year as he is a participant in the FiT scheme implemented by the Sustainable Energy Development Authority Malaysia (SEDA Malaysia).

Depending on the weather conditions and meter-reading period, Lai receives payments ranging between RM300 and RM500 a month. He has done some calculations and is confident that he will recover his investment of RM46,000 in around 10 years.

To encourage more Malaysians to enjoy the financial returns of FiT, SEDA Malaysia launched the Solar Home Rooftop Programme on Sept 24, 2012, targeting home owners for installations up to 12 kW. SEDA Malaysia Chairman Tan Sri Fong Chan Onn, in his announcement, said 2,000 kW of solar PV would be allocated for Q4 2012 and 6,000 kW for 2013.

Renewable Energy Power Purchase Agreement (REPPA)

The REPPA is very important as Lai points out, referring to the 21-year power purchase agreement with TNB which guarantees the utility company will buy



Lai Chin Hai is confident that more homeowners will take part in the FiT scheme

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Solar PV panel system	
Capacity	3.8kWp
PV panels	16 polycrystalline AUO panels (made in Taiwan)
Warranty	PV panels: 25 years SMA inverter: 5 years
Performance	Guaranteed output 90% for 10 years, 80% for 25 years

the electricity generated from the solar PV system. FiT rates for solar PV is valid for 21 years from the date the solar PV system reached its commissioning date. Although the initial investment is high, Lai believes it is worth it. "Even if you put the money in the bank, you will not get that kind of returns," he reasons. Currently, his electricity bill runs into RM100 plus per month. So, on a contra basis with payments from solar power, he is pleased to have a net gain.

Lai, an electrical contractor, is a director of a company that is also certified to install solar PV systems, which makes him familiar with the pricing and technology of PV panels. He recalls that each kilowatt costs around RM30,000 when the country's largest solar PV panel project at Technology Park Malaysia was launched [in 1998]. It is not surprising that when the FiT scheme kicked off in 2011, he recognised the opportunity and quickly submitted his application.

Lai says the installation of the PV panels, solar inverter and meter reader went without a hitch. The solar inverter and meter reader are installed outside the house while the PV panels are angled to capture maximum sunlight.

The inverter converts the direct current (DC) output of the PV solar panels into alternating current (AC) that can be fed into the national grid, while a separate meter reader records the electricity generated.

Lai's solar PV system was commissioned in February 2012. Under the FiT scheme, he is entitled to RM1.49 per kWh of electricity based on the 2012 FiT rate. He finds the rate very attractive, as it is four to five times higher than the

How to join the Solar Home Rooftop Programme

- 1** Contact **03 8870 5800** (Sustainable Energy Development Authority/SEDA Malaysia) or visit www.seda.gov.my
- 2** The list of service providers or installers is available on SEDA Malaysia website. They can advise you on the legal and technical requirements.
- 3** The scheme allows installations up to 12kWp. Most terrace house rooftops are big enough for a 4-5kWp system.
- 4** Tariff and bonus are listed in the Renewable Energy Act 2011. There will be degression every year; so get commissioned early to get the best rates. Once your tariff is fixed, you enjoy that rate for the next 21 years.

Malaysia has committed to 5.5% renewable energy by 2015, up from less than 1% of the energy mix today. The Solar Home Rooftop Programme is your opportunity to support clean energy and help fight global warming.

rate domestic consumers are paying for electricity. (The normal electricity rate currently starts at 21.8 sen for the first 200 kWh, 33.4 sen for the next 100 kWh, rising to 40 sen for the next 100 kWh and higher for subsequent increases.)

Double benefits

Showing payment records from TNB, Lai points out that he enjoys two tariffs for electricity generated – base and bonus. The base rates depend on the installed capacity of the solar PV panels and the year of commencement. Bonus rates are given for the use of the panels as installation in buildings/building structures or as building materials. They are also given for the use of locally-manufactured or assembled solar PV modules and inverters.

Having first-hand experience in generating solar power, Lai is confident more home owners will take part in the FiT scheme. However, he acknowledges not many people know about the scheme as it is new in Malaysia. He is doing his part by spreading the good word. It has gone as far as Pengkalan Hulu, Perak, his hometown. At Lai's family house, 16 solar PV panels have been put up on the roof over a car porch. It has set the whole neighbourhood abuzz and created many enquiries.