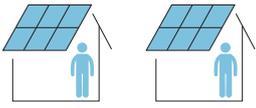
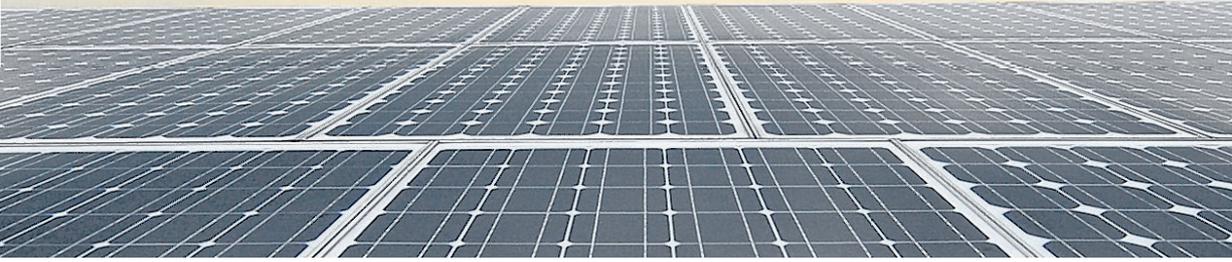


# The Rising Sun

The advent of new business models has accelerated the adoption of solar energy in Singapore; a second wave is now underway

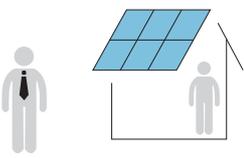
By Chan Yi Wen



## Direct ownership

(2014: Katoen Natie paid S\$2.6 million in cash for a 1.2MWp solar PV installation)

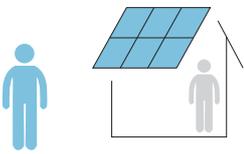
- Customer pays for the solar PVs upfront, and consumes electricity produced by the panel



## Hire purchase agreement

(2012: GreenPac's S\$1 million agreement with Maybank)

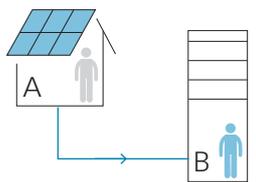
- Customer does not have cash upfront to pay for solar PVs
- Customer pays a fixed monthly fee for a period of time, until the original cost of the solar panels, as well as the interest rates are paid in full



## Solar leasing/power purchase agreement (PPA)

(2014: HDB awarded a 38MWp solar leasing tender to Sunseap Leasing)

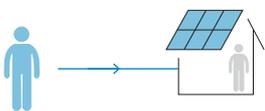
- Panels are installed on the customer's rooftop, but owned by a third-party
- Customer pays for the solar energy consumed, which is typically charged at a competitive rate to prevailing retail electricity tariffs



## Solar rooftop leasing

(2014: Sun Electric's SolarSpace programme)

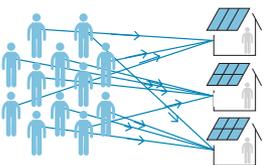
- Customer A wants to profit by installing solar energy on his/her rooftop
- Customer B wants solar energy, but does not have a rooftop
- The electricity produced by the solar PV installation on Customer A's rooftop is, in theory, diverted to Customer B



## Exchange platform

(2014: SolarPVExchange)

- Customers who want to install solar PVs on their rooftops are connected with solar installation companies
- The platform takes a 4 per cent commission from the installation company for each successful deal

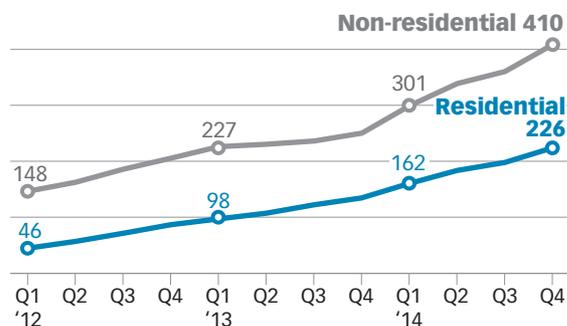


## Crowdsourcing

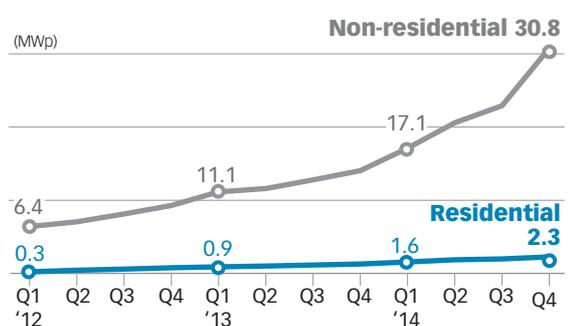
(2015: Sunvest)

- Investors invest a minimum sum into solar assets for a periodic return
- Investors can invest in solar assets within and beyond Singapore

Number of grid-connected solar photovoltaic (PV) installations



Installed capacity of grid-connected solar photovoltaic (PV) systems



Note: MWp refers to megawatt peak, which is a typical measure of the installed nameplate capacity for solar PV systems. MWp represents the amount of electric power that can be produced by a solar PV system at its peak