How S'pore aims to soak up the sun

Singapore wants to harness more of the sun's energy to power the nation. It is on track to meeting its 2020 target of having 350 megawatt-peak (MWp) of installed solar capacity, but wants to increase it more than five times to hit 2 gigawatt-peak (GWp) by 2030 – enough to power around 350,000 households here for a year.

Meeting this target in land-scarce Singapore would involve maximising space and output. The Energy Market Authority outlines four ways.

ROOFTOPS AND INFRASTRUCTURE

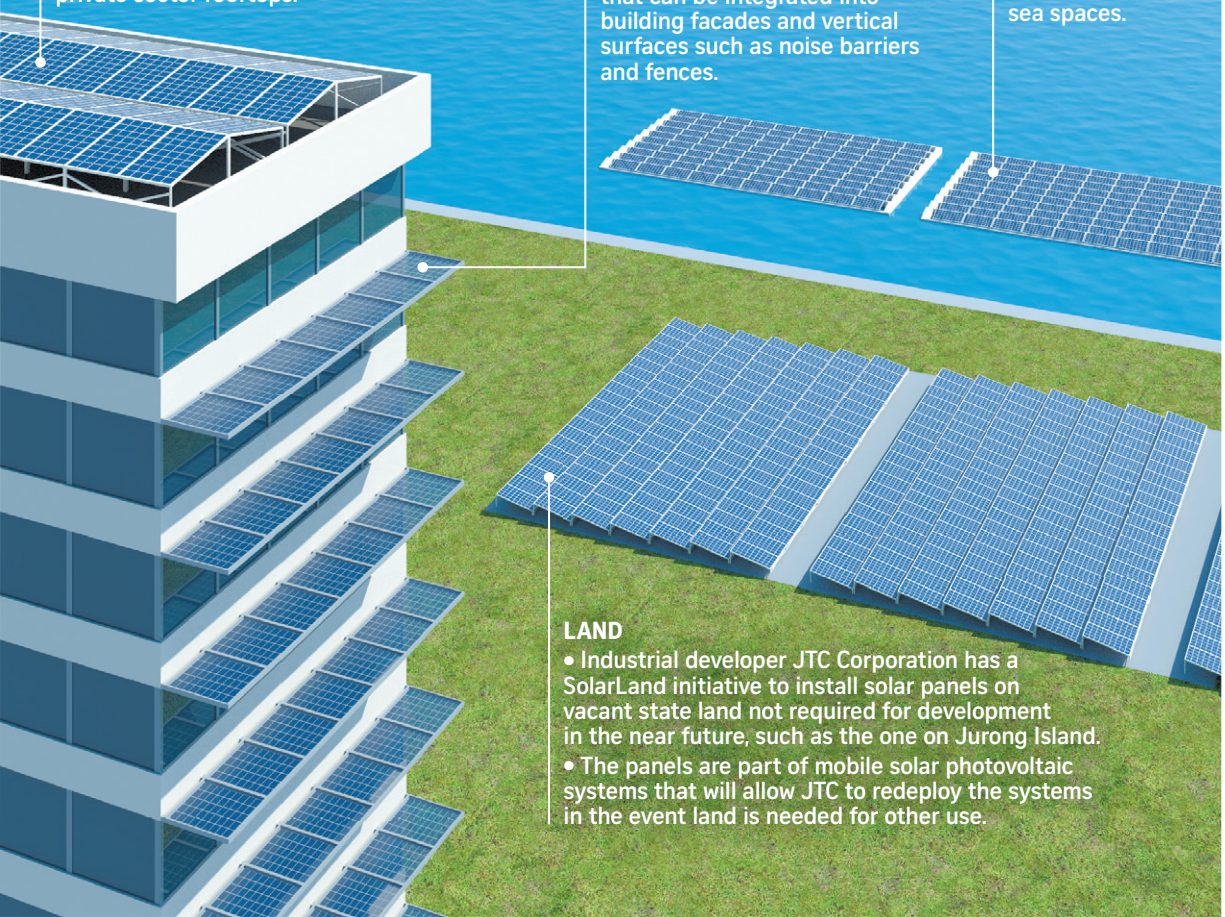
- The Government will scale up its SolarNova programme so that solar panels can be installed not just on Housing Board blocks, but also on other public sector buildings, including schools.
- It will also reach out to private developers to increase solar deployment on private sector rooftops.

BUILDING-INTEGRATED PHOTOVOLTAIC

- More research and development efforts will be put into the development of innovative solutions.
- This includes solar panels that can be integrated into building facades and vertical surfaces such as noise barriers and fences.

FLOATING SOLAR SYSTEMS

Trials are being conducted to see if solar panels can be deployed at reservoirs and on offshore sea spaces.

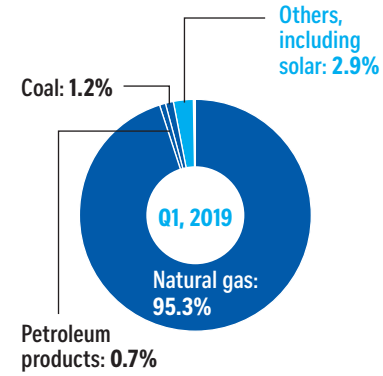


LAND

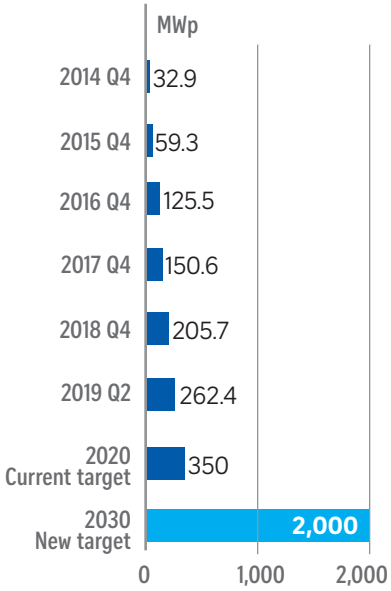
- Industrial developer JTC Corporation has a SolarLand initiative to install solar panels on vacant state land not required for development in the near future, such as the one on Jurong Island.
- The panels are part of mobile solar photovoltaic systems that will allow JTC to redeploy the systems in the event land is needed for other use.

Fuel mix for electricity generation

(by energy product)



Installed solar capacity



Source: ENERGY MARKET AUTHORITY
STRAITS TIMES GRAPHICS