

FEATURE STORY RACHAEL LIM PHOTOS COURTESY OF DSTA

CAMP GREEN

PIONEER highlights the green features in Headquarters Combat Service Support Command (HQ CSSCOM) that scored it the Green Mark GoldPlus Award in July 2011.

Sustainability is the buzzword these days, and the Singapore Armed Forces (SAF) is doing its part too. Since the launch of the Green Mark scheme in 2005 by the Building and Construction Authority (BCA), the SAF has worked with the Defence Science and Technology Agency's (DSTA's) Building and Infrastructure Programme Centre to design and incorporate green features and initiatives in camps.

Located in Kranji Camp III, HQ CSSCOM was awarded the Green Mark GoldPlus award in July 2011 for obtaining between 85 and 89 points (out of a possible 100) and being certified to have at least 25 percent savings in energy consumption. Under the Green Mark scheme, points are awarded for energy efficiency, water efficiency, environmental protection and indoor environment quality among other green features. **PHOTOS**

RAINWATER RECYCLING

Rainwater, collected in tanks located on roofs, is used to wash military vehicles.

SOLAR POWER

180 solar panels were installed at the roof to generate 30 kilowatt peak of solar power, which is about 32,850 kilowatt per hour (kWh) of electricity generated each year.

NATURAL LIGHTING

Skylights in the workshop and sun pipes in the canteen act as windows which allow sunlight to filter through. This reduces the use of artificial lighting. For example, using light pipes in the canteen results in savings of 3,398 kWh in a year.

NORTH-SOUTH LAYOUT

Using computer simulation to mock up the airflow, a North-South layout of buildings was decided upon as it takes advantage of the North-South winds which are prevalent in Singapore. This reduces the need for fans and air-conditioning.

AIR-CON HEAT RECYCLING

Waste heat is recovered from air-conditioning systems and used to dry clothes.



MORE WINDOWS

In bunks, more windows were put in place for greater natural ventilation.



WATER RECYCLING

Water used to wash military vehicles is filtered and reused for washing again.



FLORA AND FAUNA

Greenery, which includes the Singapore native species *Eugenia Oleina*, lines the perimeter of the camp.



MOTION-ACTIVATED LIGHTS

Motion sensors in toilets reduce the use of lights and result in savings of 5,840 kWh in a year.



WATER-EFFICIENT FITTINGS

Water-efficient taps and flushing systems reduce the consumption of water by about 6.5 million litres each year, the volume of 2.5 Olympic-sized pools.