

SINGAPORE'S GREENEST TOWN

HDB's first eco-precinct, Treelodge@Punggol, is now completed, three years after its launch. While these flats cost about 5-8 per cent more to build, the precinct will save an estimated

2 gigawatt hours of energy a year, the power used by 400 four-room households in one year. The Straits Times takes a look at its eco-friendly features



ECO DECK

- Situated above the carpark, this podium was designed with lots of greenery in mind, to create a relaxing community space for residents
- The deck also includes a playground which is completely made out of recycled materials (excluding its ground surface) as well as a community garden for residents



OTHER DESIGN STRATEGIES

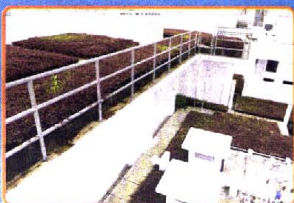
- Architects designed the blocks to face the prevailing North-Eastern winds and to maximise natural ventilation and light
- Balconies placed in positions representing the organic design of ferns and vines
- The chute for recyclables, which is installed next to the regular rubbish chute, is the first for an HDB precinct

ROOF

- Solar panels on the roofs and the Eco Deck provide power for lighting up the staircase and common areas



- The catchment area on the roof also holds a storage tank with a capacity of about 7,000 litres of water – enough to wash a single block's common corridors for a month. Depending on the intensity of the rainfall, it takes up to a month to fill up the tank



- Plots of plants, called green roofs, planted to reduce the surface temperature at the roof deck for better heat insulation

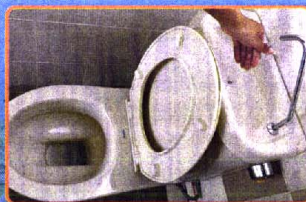
LIFTS

- Installed for the first time in an HDB precinct, the lifts do not need machine rooms and use 10 per cent less energy than conventional lifts



- Amount of energy generated by the rooftop solar panels is shown on electronic boards at lift landings

IN THE FLATS



- Integrated wash basin and toilet pedestal system installed in all bathrooms. Water used for handwashing is re-directed to be used for the next flush
- Walls have a layer of thermal insulating material within them to reduce the amount of heat that enters the flat
- Windows are larger to let natural light in, letting residents reduce the use of electrical lighting

Source: HDB

