

The Green Mark scheme was introduced in 2005 to assess the environmental friendliness and water conservation measures which set them apart from other buildings. They have environmental quality is provided for their users.

Green Mark Platinum



Republic Polytechnic

Developer	: Republic Polytechnic
Architect	: DP Architects Pte Ltd
Structural Engineer	: Meinhardt (Singapore) Pte Ltd
M&E Engineer	: Beca Carter Hollings & Ferner (S.E. Asia) Pte Ltd
Landscape Consultant	: Ohtori Consultants Environmental Design Institute, Japan
Landscape Contractor	: Nature Landscape Pte Ltd
Acoustics Consultants	: Nagata Acoustic (Japan) & Acvicon Acoustics Consultants Pte Ltd
Façade Consultants	: Meinhardt Façade Technology Pte Ltd
Main Contractor	: China Construction – Taisei Joint Venture

Key Green Features

- Among first few projects to use thermal energy storage system in the region.
- "Campus in the Park" feeling. Inspiration for the lawn came from well known campus grounds around the world, such as the Harvard Yard in Harvard University and Mills Yard in Cambridge University.
- Multiple ventilation modes for sports hall facilitate natural ventilation during normal usage and air conditioning during special occasions.
- "Chemical Free" water treatment for central cooling plant and ionisation water treatment for swimming pool.
- Photovoltaic solar energy panel for general lighting and general power.
- Use of pneumatic waste conveyance system.



Tan Tock Seng Hospital

Developer	: Tan Tock Seng Hospital (TTSH)
Project Manager	: TTSH In-house Facilities Engineering Department
Controls and Energy Specialist	: CNA Group Ltd

Key Green Features

- Use of "clean and renewable hydrogen fuel cell technology" as emergency back-up power saves energy.
- Improved indoor air quality by applying "Bio-Kill" technology onto air-con filter to eliminate bacteria and virus.
- Redesigned operating theatre air-con control system to allow staff to switch from "full operation" mode to "economy" mode when operating theatres are not in use. This innovation won the SPRING Singapore Star Award in 2004 and could save TTSH more than \$120,000 per year.
- Installed heat exchanger to extract air-con package system's waste heat to supply hot water to the kitchen.
- Use of dual sensor (CO² & temperature) system to control the basement carpark mechanical ventilation, saving more than \$290,000 per year on energy cost and prolong equipment life.
- Progressively replacing conventional T8 light fittings with recyclable and brighter T5 light fittings, hence reducing the number of tubes required.