

Green Mark Platinum

Nanyang Polytechnic

Developer:	Nanyang Polytechnic (NYP)
Estates Management:	NYP Facility Management Department
Architect:	DP Architects Pte Ltd
M&E Engineer:	Rankine & Hill (S) Pte Ltd
Structural Engineer:	T Y Lin South East Asia Pte Ltd
Landscape Consultant:	Aspinwall Culston – Tropical Environment



Key Green Features

- Innovative and proactive facility management practices towards environmental sustainability including monitoring and improvement of its energy and water consumption.
- Effective management of external lighting system and air-conditioning system in the campus to reduce energy consumption.
- Rain sensor which is linked to the auto-irrigation system and rainwater harvesting enable the polytechnic to save water.
- Environment-related improvement projects is a key feature of its practices.



National Library Building

Developer:	National Library Board
Project Manager:	Rider Hunt Levett & Bailey
Architect:	TR Hamzah & Yeang Sdn Bhd
M&E Engineer:	Buro Happold Singapore Pte Ltd
Structural Engineer:	Buro Happold Singapore Pte Ltd
Landscape Consultant:	DLO Design Pte Ltd

Key Green Features

- Initial design studies include computer simulation and modeling to optimise the building orientation to protect from direct solar radiation, and to maximise the use of daylighting and natural ventilation. Sunshading provides an additional shield against solar heat gain.
- Energy efficient features include energy efficient lightings, motion sensors and equipment. Daylight sensor is used together with automatic blinds at the building facades.
- Extensive landscaping, sky terraces and roof gardens are utilised to lower local ambient temperature and the adoption of automatic irrigation system for rooftop gardens to conserve water.
- Automatic integrated daylighting zoning and control using daylighting sensor.

Green Mark Gold

Alexandra Hospital



Developer: Alexandra Hospital

Key Green Features

- Alexandra Hospital's butterfly trail is a model for nature conservation and is a key feature in the hospital's commitment towards the environment.
- Use of recycled horticulture waste such as leaves and dry grass from the hospital's grounds to make their own compost.
- Rainwater harvesting integrated with automatic irrigation sprinkler system enables savings in water usage.
- Toilets are designed to utilise natural ventilation and daylighting. Motion sensors for lights/taps/flushing system save energy and water.
- Solar energy is harnessed to produce electricity for garden lighting and supplementing the hospital's car park lighting.

Biopolis Phase 1 @ one-north



Developer: JTC Corporation
Architect: Jurong Consultants
M&E Engineer: Jurong Consultants
Structural Engineer: Jurong Consultants
Landscape Consultant: Peridian Asia

Key Green Features

- Use of district cooling system to provide centralised air-conditioning for the 7 buildings within Biopolis.
- Nature conservation through tree transplanting and extensive use of landscape greenery for the development.
- Use of building integrated photovoltaics and solar hot water system.
- Use of pneumatic waste conveyance system.
- Test-bedding of environment-friendly features such as waterless urinals.

Capital Tower



Developer: CapitaLand
Architect: RSP Architects Planners and Engineers (Pte) Ltd
M&E Engineer: Parsons Brinckerhoff Pte Ltd
Structural Engineer: Maunsell Consultants Pte Ltd
Landscape Consultant: PDAA Design Pte Ltd

Key Green Features

- Use of energy recovery wheel for the air-conditioning system.
- Recycling of condensate from the air handling unit to be used as top-up water for cooling towers.
- Use of chiller cleaning system to maintain the efficiency of air-conditioning system.
- Use of motion detector at lift lobby and toilets.
- Carbon dioxide and carbon monoxide monitoring.

Green Mark Gold

Infinium

Developer:	City Developments Limited
Architect:	DP Architects Pte Ltd
M&E Engineer:	Beca Carter Hollings & Ferner (S E Asia) Pte Ltd
Structural Engineer:	Arup Singapore Pte Ltd
Landscape Consultant:	Belt Collins International



Key Green Features

- Motion sensor at all private lift lobbies to automatically turn on and off lights.
- Water conservation measures such as auto-irrigation system using driplines/sprinklers to minimise water wastage and wind sensors to minimise water wastage at water feature areas.
- Solar-powered lamps for landscape and pool deck.
- Provision of Green Guide to raise awareness among homeowners.

Monterey Park

Developer:	City Developments Limited
Architect:	TEAM DESIGN Architects Pte Ltd
M&E Engineer:	Parsons Brinckerhoff Pte Ltd
Structural Engineer:	SBT Consultants
Landscape Consultant:	Cicada Pte Ltd

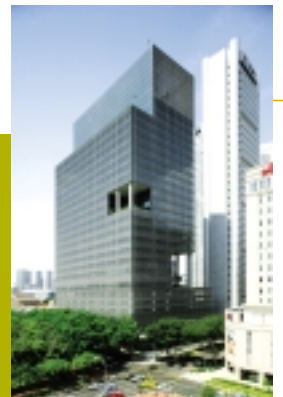


Key Green Features

- More than 100 solar powered lights for lightings at pool deck and driveway.
- Innovative use of "sunpipes" to bring natural lighting into the basement carpark enabling savings in electricity.
- Use of pneumatic waste conveyance system.
- Transplanting of mature trees.
- Carbon monoxide sensor at basement carpark to control ventilation fans.
- Provision of Green Guide to raise awareness among homeowners.

One George Street

Developer:	George Street Pte Ltd
Project Manager:	CapitaLand Commercial Project Management Pte Ltd
Architect:	DCA Architects Pte Ltd
M&E Engineer:	Squire Mech Pte Ltd
Structural Engineer:	T Y Lin International Ltd
Landscape Consultant:	Sitetectonix Pte Ltd



Key Green Features:

- A state-of-the-art façade system which allows optimum daylight penetration while reducing glare and heat transmission.
- Extensive use of landscaping and skygardens to reduce ambient air temperature.
- The building is also structurally designed to allow future extension floors. This eliminates the need to demolish and rebuild in the future.

Parc Emily

Developer:	City Developments Limited / TID Pte Ltd JV
Architect:	ADDP Architects
M&E Engineer:	United Project Consultants Pte Ltd
Structural Engineer:	LSW Consulting Engineers
Landscape Consultant:	Site Concepts International



Key Green Features

- Use of energy efficient equipments such as – energy efficient lightings in common areas, inverter air-conditioning system, motor-roomless lifts.
- Maintenance-free solar-powered lightings for landscape and common areas.
- Use of innovative water recycling system with filtration membrane technology to save water consumption during construction.
- Use of twin-chute pneumatic waste system to encourage recycling.
- Provision of Green Guide to raise awareness among homeowners.

Republic Plaza

Developer:	City Developments Limited
Architect:	RSP Architects Planners and Engineers (Pte) Ltd
M&E Engineer:	Squire Mech Pte Ltd
Structural Engineer:	RSP Architects Planners and Engineers (Pte) Ltd
Landscape Consultant:	Cicada Pte Ltd



Key Green Features

- Strong commitment and efforts in the promotion of recycling among building tenants as part of corporate wide programme.
- Use of air handling unit condensate for cooling tower water top-up.
- Atrium lightings controlled by light sensor.
- Motion detector for toilets and staircase.
- Use of energy saving device for escalator.

Savannah CondoPark

Developer:	City Developments Limited
Architect:	AXIS Architects Planners
M&E Engineer:	Squire Mech Pte Ltd
Structural Engineer:	KTP Consultants Pte Ltd
Landscape Consultant:	Cicada Pte Ltd



Key Green Features:

- Transplanting of 8 mature trees from another site to enhance the ecological environment.
- Photovoltaics (or solar panels) provided at clubhouse to generate electricity for clubhouse lightings and water heater.
- Use of pneumatic waste conveyance system.
- Carbon monoxide sensor at basement carpark to control ventilation fans.
- Provision of Green Guide to raise awareness among homeowners.

Green Mark Award

Buildings which have achieved the Green Mark Award are recognised for their sterling efforts and commitment towards environmental sustainability. In general, Green Mark buildings have adopted energy efficient features and water conservation measures which set them apart from other buildings.

61 Galen

Developer:	Singapore Science Park Ltd (Subsidiary of Ascendas)
Architect:	P&T Consultants Pte Ltd
M&E Engineer:	Alpha Engineering Consultant
Structural Engineer:	Maunsell Consultants (Singapore) Pte Ltd
Landscape Consultant:	ACLA Pte Ltd



Butterworth 33

Developer:	City Developments Limited
Architect:	H·U·A·Y Architects
M&E Engineer:	Belmacs Consulting Engineers
Structural Engineer:	LSW Consulting Engineers
Landscape Consultant:	HUAY Architects

Clydes Residence

Developer:	Clydesbuilt Development Pte Ltd
Architect:	JGP Architecture (S) Pte Ltd
M&E Engineer:	K G Goh Consultants
Structural Engineer:	Ronnie & Koh Partnership



They have also made substantial use of greenery in their projects and taken care in ensuring a good indoor environmental quality for their users.

Kovan Melody

Developer: Wing Tai Holdings Ltd
Architect: P&T Consultants Pte Ltd
M&E Engineer: United Project Consultants
Structural Engineer: DE Consultants
Landscape Consultant: Sitetectonix



Pantech 21

Developer: City Developments Limited
Architect: APCO Architects & Town Planners Collaborative
M&E Engineer: Squire Mech Pte Ltd
Structural Engineer: Sim Bee Teck & Associates
Landscape Consultant: Island Landscape & Nursery Pte Ltd



The Pier

Developer: City Developments Limited
Architect: AXIS Architects Planners
M&E Engineer: Meinhardt Pte Ltd
Structural Engineer: LSW Consulting Engineers
Landscape Consultant: Sitetectonix

