

FIRST CARBONNEUTRAL[®] DEVELOPMENT IN SINGAPORE & ASIA PACIFIC

CDL has set yet another milestone in environmental sustainability with the establishment of 11 Tampines Concourse as a CarbonNeutral[®] development – a first in Singapore and the Asia Pacific.

Tampines Concourse's carbon emissions have been reduced to "net zero" by offsetting some 6,750 tonnes of carbon dioxide equivalent (tCO₂-e) for 2009; the total estimated CO₂-e generated during the construction phase and for the first year of operations. This is accomplished with the purchase of carbon credits which will fund carbon offsetting projects in Asia. Moving forward, Tampines Concourse's carbon emissions will be measured and offset on an annual basis, estimated to be approximately 1,500 tCO₂-e per year.

CDL has invested approximately 3.8% of the total construction cost of Tampines Concourse's numerous green innovations. Beyond sustainable design and eco-friendly features for energy and water efficiency, concerted efforts were made to introduce inventive building materials such as "Green Concrete". Tampines Concourse is the first building in Singapore to be constructed with extensive use of recycled materials for the structural building components.

The 108,000 square feet Tampines Concourse is estimated to reap overall energy savings of 620,000 kWh per year which is equivalent to an estimated reduction of 325 tCO₂-e per year.



▲ 11 TAMPINES CONCOURSE

As the first CarbonNeutral[®] development in Singapore and Asia Pacific, Tampines Concourse represents the ideal office address for like-minded businesses looking to enhance their position as an eco-conscious company and reduce their carbon footprint.

EXAMPLES OF GREEN FEATURES

Designed for Energy-Efficiency

- First building in Asia Pacific to incorporate an innovative, indoor non-compressor fresh air cooling system for smart temperature and humidity control
- Extensive facade and roof greening with vertical greening area of 2,504m² and green roof system of 1,921m²
- Natural daylighting system in common areas allows for maximum daylight penetration at atrium and lift lobbies while specially-designed light shaft and sun pipes are installed in the restrooms

Designed for Water-Efficiency

- Water-efficient fittings are installed in all the restrooms and Nano-coating applied on waterless urinals for deodorisation, sterilisation and ease of maintenance

Sustainable Construction Methodology Site / Project Development and Management Practices

- First building in Singapore constructed with extensive use of recycled materials for structural building components. The "Green Concrete" used comprises sustainable materials, namely copper slag, recycled concrete aggregates and ground granulated blast furnace slag
- Use of environmentally-friendly materials in place of natural materials

Designed for Good Indoor Environmental Quality and Environmental Protection

- Use of non-chemical anti-termite treatment to prevent subterranean termite attack and low VOC paints for all internal walls and ceilings

BENEFITS

Estimated overall energy savings of 620,000 kWh per year

- Estimated energy savings of 42,000 kWh per year based on temperature of the common areas set at 26°C
- Mitigates urban heat island effect and solar heat gain
- Maximises natural daylighting

Estimated overall water savings of 280 m³ per year

- Reduces potable water usage and operational costs

- Reduces CO₂ emissions

- Promotes conservation of natural resources

- Improves occupational health and comfort of building's users

