

CleanTech Park

About CleanTech Park



CleanTech Park (CTP), Singapore's first eco-business park, will be the choice location for forward-looking corporations that have embraced environmental sustainability as a means to differentiate their business and also as part of their corporate social responsibility. It is envisioned to position Singapore as a global test-bed and the preferred site for early adoption of clean technology products and solutions for urbanized settings in the tropics. This development will push the boundaries of green sustainability, serving as a large-scale integrated "living laboratory" for testbedding and demonstration of system-level clean technology solutions.

JTC is developing CTP within a 50-hectare site next to Nanyang Technological University (NTU). The development of CTP at Nanyang Avenue will be carried out in 3 phases over 20 years, Phase 1 will commence in July 2010, starting with the development of the infrastructure within CTP. When completed, Phase 1 will provide approximately 17 ha of business park land. CTP will house a working population of 20,000 when it is fully built in 2030.

The close proximity to NTU will enhance the integration between the academia, research institutes and the business industry, providing synergies for a full value chain of the clean technology cluster, from R&D to downstream manufacturing. It will be the nucleus for R&D and business activities in and supporting clean technologies, and sustainable urban solutions.

The development of CTP will establish a significant milestone in the development of green technologies in the Tropics. JTC will implement cutting edge green systems in CTP, establishing it as the greenest and most sustainable eco-business park in Singapore.

CTP is located on a large contiguous greenfield site. It has a natural undulating terrain and matured lush greenery with natural streams running through it. The master plan was developed to optimise the natural environmental heritage to create a conducive eco-environment for the cleantech research community. CTP is developed around a central green core, a green lung to the park, which serves as a social node for the community of cleantech researchers and professionals. The emphasis rests on the efforts to maintain a long-term sustainable balance, between the commercial needs of CTP and its preservation of the site's biodiversity.

The cleantech industry is a strategic growth area which is expected to contribute S\$3.4 billion to Singapore's GDP and create jobs for 18,000 by 2015.

The master plan for CTP was unveiled in Feb 2010.

Project milestones

Feb 2010 Unveiling of CleanTech Park's master plan.

2010 - 2018 Phase 1 of development

- Development of infrastructure
- Development of central green core (designated green corridors) and supporting amenities

2019 – 2025 Phase 2 of development

2026 – 2030 Phase 3 of development

End 2030 Completion of CleanTech Park

(Please refer to Appendix for additional information on CleanTech Park)

For more information on JTC Corporation
please log on to JTC's web site at <http://www.jtc.gov.sg>

APPENDIX

Green Strategies

- Stormwater management
To maintain a sustainable CleanTech Park, we will make use of the existing topography of the site to channel stormwater into the low-lying areas for storage and reuse. The stormwater within CleanTech Park will be channelled into a central wetland where the water can be treated and be reused for irrigation or toilet flushing. The pond will also reduce the ambient temperature through evaporative cooling.
- Sky Trellis
An innovative idea which will be testbedded within CleanTech Park is the sky trellis concept which is created by JTC. These trellises will be constructed between adjacent buildings and covered with plants. By shading open spaces between buildings, we hope to reduce heat gain by the buildings from the environment and enhance 'walkability' within open spaces in the area.
- Conservation of Green Zones
These conservation zones are essentially demarcated areas within CTP where trees and plants are conserved. Development works are planned around these conservation zones to protect the existing trees and plants.
- Protection of biodiversity
By keeping the existing trees in the park, we will help to retain the biodiversity, such as the birds and butterflies to remain within CTP.
- Designated Green Corridors
The designated Green Corridors are green areas between the buildings and land parcels within CTP. These green corridors are strategically located to provide secondary greenery between the buildings and land parcels and are aimed at promoting enhanced walkability within the Park.
- Building a Green Community
CTP will nurture the first green business community and environment by way of introducing and inculcating green practices such as recycling programmes, car pooling programmes.

Green Features that reduce demand on resource utilization:

- Building orientation with minimum East-West facing facades
- Creating the wind tunnel effect to maximize wind-capture within the buildings.
- Green District – use of recycled and green materials for infrastructure development.