Ocean Financial Centre

Ocean Financial Centre (OFC) is a redevelopment of two existing office buildings (Ocean Building and Ocean Towers) in Singapore’s central business district (CBD). This eco-friendly office of the future adopts numerous green features that are incorporated with state-of-the-art technologies to maximize indoor environment quality, employee health and productivity, while minimizing energy consumption.

**GREEN FEATURES AND SUSTAINABLE TECHNOLOGIES**

**TRIPLE-GLAZED FAÇADE GLASS**
Triple-glazed façade glass with state-of-the-art low emissive coating is used to maximize light transmittance and transparency while minimizing heat gain. The high-performance and low-emission triple-glazed glass curtain-wall system is not only engineered to provide maximum protection for occupants, but the unitized curtain-wall design is also prefabricated locally to minimize carbon footprint.

**POWER-SAVING LIGHTING**
The use of power-saving LEDs on the building façade and the roof crown creates an unforgettable silhouette along Singapore’s magnificent skyline.

**PHOTOVOLTAIC (PV) CELLS**
The building has the largest PV system for a high-rise commercial building in the CBD area, with more than 400 m² of solar PV panels harnessing 75kWp of solar energy. Located on top of one of the tallest buildings in Singapore, at approximately 250 m AMSL in height, it will be the highest PV assembly in Singapore.

**REGENERATIVE DRIVE LIFTS**
All passenger lifts are fitted with regenerative drive. This feature feed energy usually lost during braking back into the building where it can be used for other loads, hence reducing overall energy usage.

**ECO-SWITCH**
A programmable switch that provides an option for tenants to control their air-conditioning temperature and lighting level to suit their needs during off peak and lunch hour.

**PAPER RECYCLING**
An integrated paper recycling facility encourages the recycling of paper waste generated by the commercial office.
A paper recycling chute is provided to serve users on all office floors.

**Greenery**
OFC uses extensive vertical green walls for a cooler and greener environment. The building’s green plot ratio (a measure of greenery provision in building development, which takes into consideration the three-dimensional volume covered by plants) exceeds the industry’s best practice of 4.0.

**Water Efficiency**
Water conservation measures include using water-efficient fittings, using sub-meters for monitoring and leak detection, and harvesting rain water for irrigation.

**Other Notable Green Innovation**
- Energy efficient air-conditioning
- Energy efficient lighting
- Motion sensors for all toilets and staircases
- Insulating paints for all external walls
- Auto-condenser tube cleaning system
- Heat recovery system for hot water production
- Anti-corrosion coating for pre-cooled AHUs
- Collection of condensate water for cooling tower make-up
- Car parking guidance system
- Recycling of existing buildings materials, such as plywood and timber for use in the construction of the new building
- Conservation and transplanting of existing trees and use of horticulture recycled waste

**Cost and Benefits**
By incorporating green features and innovations, construction cost for OFC has increased by approximately four percent. However, the long-term benefits translate to a payback period of seven to nine years, based on the energy and water savings achieved.

The eco-features will also bring about savings in energy and water consumption in the long term for tenants. Other intangible benefits include better indoor air quality and environment, which contribute to improved employee productivity and wellness.