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TOWERING EXAMPLE OF GREEN

■ Welcome to GTower Hotel. It's built from the ground up to make less of an impact on the environment.

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ACCORDING to Colin Ng, you don't have to sacrifice comfort, form and function in order to have a "green" hotel. He knows what he's talking about — as the executive director of GTower Hotel, the first hotel in this country to be internationally green-certified, he's made sure that the hotel lacks nothing in comfort and luxury.

Standing tall at one end of Jalan Tun Razak, GTower houses a number of corporate offices, with the adjoining hotel largely serving those corporate customers, although it is open to the general public as well.

"Some people I've taken for a tour of the hotel are disappointed because it looks and feels just like any other hotel. Well, that's the point. These people expected a hotel that's open to the environment, with no air-conditioning and cold showers," he laughs.

"That's not the case with GTower Hotel. Our pools are heated, there's air-conditioning throughout the building and, hot and cold running water in every room."

It's how GTower goes about offering these amenities that makes it green. For example, the pools and the showers are warmed by the excess heat generated by the air-conditioning system; the lighting system utilises energy-efficient fluorescent bulbs; and the air-conditioning system uses up less power thanks to the extensive use of double-glazed glass throughout the hotel.

Double-glazed glass is two-layer glass with a vacuum between the layers, which works better as insulation to keep the heat out while keeping the coolness from the air-conditioning in.

Using double-glazed glass is more expensive (GTower's cost was about RM22mil, compared to RM7mil for regular glass) but reduces heat transmission by 5.4%.

According to Ng, while the amount of air-conditioning equipment used by the hotel is roughly the same as



SAVING TREES: The wood panelling used in most parts of GTower's Bridge Bar are sourced from old wood panels from another building. any other hotel, careful planning and implementation means that GTower's air-conditioning system is about 20% more efficient.

Behind the scenes, there's also a rain collection system which collects rainwater and stores it for use in the sprinkler system to water the many plants in and around the building.

The sprinkler system is smart enough to monitor the days when there is rain and turn itself off during those periods, and turn itself on to water the plants during dry periods.

»Sometimes you
just have to lead
by example«

COLIN NG, EXECUTIVE
DIRECTOR OF GTOWER HOTEL

In fact, every plant gets an optimum amount of water from the sprinkler system based on pre-programmed watering cycles set by a garden consultant, so there's no wastage due to overwatering.

The plants themselves aren't just there for show either; and there are a lot of them on the roof of the hotel, where they remain unseen by the guests. These plants are there specifically to improve insulation and reduce heat generated by sunbaked concrete.

This level of attention to saving energy and resources goes from something as big as choosing energy



NEW FROM OLD: A lot of the decorative items used in GTower Hotel are made from sustainable resources or from recycled material.



GLOWING: While the rooms look much like those in other five-star hotels, energy-efficient lighting is used.

efficient escalators and elevators to the smallest of details, like choosing tap fittings which use less water, but it all adds up, says Ng.

Guest comfort

GTower wouldn't be worth its salt if it didn't also provide its guests with the level of comfort befitting a world-class hotel. Apart from an extensive and speedy broadband service — available anywhere in the building, GTower also has less obvious but still vital benefits for guests.

Each room is equipped with carbon-dioxide monitors that constantly monitor the CO2 levels in the rooms and adjusts the airflow whenever the level of CO2 rises.

Similarly, while the above-ground parking is designed to be as airy with as much natural light as

possible, the subterranean parking bays have carbon-monoxide monitors that are tied to a ventilation system. The system regulates the airflow when carbon monoxide levels rise in the car park.

The hot water system, served by two giant insulated water tanks, is run by waste heat generated by the air-conditioning system and produces enough hot water to provide hot showers to all the guests whenever it's needed.

Networking

As a hotel that supports several corporate customers, Ng says that it is important that GTower have the fastest gigabit network and datacentre possible, yet be able to keep its energy usage as green as possible.

As such, a range of green-certified

Hewlett-Packard Co networking equipment was installed by a systems integrator using gigabit-capable fibreoptics and CAT6 Ethernet cables.

In each room, instead of a multiple cable setup for the phone, the TV and Internet connection, a single Ethernet connection is utilised with a set-top box that handles an IP telephony system, HDTV content and the Internet connection.

By Ng's reckoning, GTower saved almost RM1mil worth of copper cabling by opting for a high-speed fibreoptic network that handles not only the in-room networking, telephony and TV on demand, but also the security system with its 400-plus IP-based CCTV's running on the same network.

Leading by example

Choosing to go green has not been an easy task, however. It was difficult for the GTower management to find a local carpet vendor that could supply floor coverings and rugs made from partially recycled material, which would be good for the environment.

"We wanted green-certified carpets, i.e. those with at least 30% recycled material and a base made up of old carpeting material," Ng says.

"And you know what? All the local companies we went to kept insisting that their carpets never use old carpets and were all new. These guys lost the tender right there."

In the end, GTower had to procure its green-certified carpets from the United States.

Another item in the hotel which Ng insisted on was the use of low-VOC (volatile organic content) paint throughout the hotel.

Apart from reducing the amount of harmful chemicals present in the paint, low VOC paint also have the advantage of having very little of that "new paint smell" that many people find offensive.

Much like the carpets, Ng found that at the time when the hotel was being built, procuring low-VOC paint from local vendors was practically impossible, necessitating sourcing the paint from Singapore.

"Sometimes you just have to lead by example — hopefully by doing this we'll encourage other local industries to follow suit," he says.

Not all of the green material had to be imported, though. The "wood panelling" on the poolside floor, for one thing, is actually made from rice husks obtained from a local producer.

Ng's involvement in every detail of the process is evident in a lot of the hotel. Much of the fittings and decorations in the hotel have been personally vetted by him, such as the wall panels in the hotel's Bridge Bar, which are made from recycled wood taken from an old building with a bit of refinishing and revarnishing.

Apart from the use of low-VOC paint, Ng also decided that each room should not have the additional false plaster ceiling or cornice that most hotel rooms have. This not only saved on material but also had the additional benefit of giving the room a more airy and spacious feel thanks to the higher ceilings.

In the end, Ng says that although the savings are small for the individual parts, the sum total of going green when building the hotel amounts to quite a lot of savings in the long run, and yet offers the same level, or better, of comfort as other five-star hotels.



POINT MAN: Ng talking about what it takes to build a green-certified hotel.