

Windows on the Park: a bona fide green project

BY HAZIQ HAMID

The number of developments with green features has grown substantially in the past few years. A good number of developers have taken things a step further by obtaining green certification from recognised green rating tools such as Green Building Index (GBI), and the US's Leadership in Energy and Environmental Design (LEED) to prove their sustainability.

Selangor Dredging Bhd opted to take a more different and subtle approach to green with its Windows on the Park (WOTP) development in Cheras. The developer approached Pomeroy Studio in Singapore to provide an objective view as to how sustainable WOTP is as a green development.

Jason Pomeroy, the principal of Pomeroy Studio (the firm is both designer and researcher) says: "Our appointment was to research the design of the building and see how sustainable WOTP will be through water consumption, daylight penetration, air flow, solar insulation and the amount of greenery on the site."

He says that by taking those parameters, it tries to get to a level of objectivity that is usually claimed by other developers of a development to be green, but may not necessarily be so.

Pomeroy Studio used advanced modelling software and its own expertise in understanding what constitutes environmental design. This allowed the company to utilise lessons from the past such as the kampung house design for better airflow. It also looked at designs like narrow footpaths that allowed for better daylight penetration.

"We actually calculated all the green features in order to establish value that would be pertinent to the end user. We may know what GBI is,



PICTURE COURTESY OF POMEROY STUDIOS

Pomeroy: We may know what GBI is, but the average Joe public won't. It's something that can be quite intangible to everyday people

but the average Joe public won't. It's something that can be quite intangible to everyday people. But if you prove to them that they can reduce water consumption by a certain percent, it's something that's far more tangible because you can immediately understand what your energy bill is today and what your energy bill will be tomorrow through green design," he explains.

Pomeroy adds that it is a very useful exercise to try and demonstrate not just to SDB, but to the public as to how green a project can be and to demonstrate the economics of going green.

A development for better quality of life

SDB is out to prove that sustainable development isn't necessarily expensive and a lot of the sustainable principals such as natural lighting, natural ventilation, cross ventilation, and greenery that helps reduce temperatures and absorb rainwater are basic principles that should be inherent in sustainable designs and not cost more.

"The reason SDB appointed Pomeroy Studio to start this exercise is very much about demonstrating that," he says.

According to the research done by Pomeroy Studio, it found that WOTP compared with a "business as usual" development has 258% more greenery which translates to 80% better air quality, 3% energy reduction and a five degree reduction in temperature. Based on the report, Pomeroy Studio noted that the lush green landscape offers a better quality of life for the residents.

"What we always did was compare the project with "business as usual", he says.

It also discovered a 57% deeper daylight penetration and a 100% daylight-occupied space compared with an apartment with a conventional design. The apartments have been designed to be slender between the front and back, and wide from side to side. This ensures that almost 100% of the interior will be adequately lit up by daylight.

Its large windows not only offer a more panoramic view of the park but also ensures easier passage of air into the interior. The apartment is 70% more naturally-ventilated.

The project has been designed to enable rainwater harvesting to meet about 90% of the irrigation requirements without depleting portable water resources. This has thus reduced water consumption from the main source by 90%.

In terms of energy, the above benefits, coupled with a reduction in solar penetration of up to 30% will enable a reduction in energy consumption by 11% annually. This will result in savings in maintenance charges and energy bills.

Looking at all the benefits, they not only enhance the residents' productivity but they also help enhance the selling price of properties in the future. It is clear that there is a cost benefit in the long run.

"The purchaser would immediately identify monetary benefits in their purchases," Pomeroy says.

It took Pomeroy and his team two months to present the data, and Pomeroy notes that WOTP is significantly above average in terms of sustainability.

"What I can say is that WOTP is a significant improvement on your "business as usual" case, and I think that is something that should be highly applauded for the price point of WOTP."

With proof and cost effectiveness of sustainable designs, Pomeroy has seen a cataclysmic change in the built environment.

"Far more developers are awakened to the call for more environmentally responsive buildings that can remove waste, reduce consumption, enhance recyclability and enhance lifestyles," Pomeroy says.

Pomeroy Studio, which sees itself as designers and thought leaders of the sustainable environment, are looking to capitalise on this movement.

Pomeroy says that they are fortunate enough not to have many challenges.

"People come to us for our expertise in sustainable design, we don't look for clients. They also know that when it comes to green products, we actually take it seriously," he says.

"Sustainable design is very much going back to basics and that is something that I've openly shared with not just SDB but with all of our clients that have come to us," he says.

Moving forward, Pomeroy says that it is still looking forward to more opportunities with SDB and it is already in talks with the developer about possible design projects.

"It's been a very enjoyable experience working with SDB. At the end of the day, we'll only take on projects with people whom we actually enjoy working with," Pomeroy adds. **E**