



Khoo Teck Puat Hospital is a Green Mark Platinum building – the highest rating for buildings in Singapore. Compared to regular buildings, green buildings are better equipped to filter out more pollutants as well as harmful bacteria and fungi.
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Green buildings are good for health too

Study: Those working in such places less likely to suffer from ills of ‘sick building syndrome’

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Green buildings are not just a boon to the environment, they keep peo-

ple healthier too. Those who work in such buildings are less likely to suffer from fatigue and skin irritation, or the other ills of “sick building syndrome”, according to a new

Building and Construction Authority (BCA) study which shows that the benefits of such buildings stretch beyond energy-saving.

Compared to regular buildings, green buildings are better equipped to filter out more pollutants as well as harmful bacteria and fungi. The result – workers are 60 per cent less likely to get

headaches, for instance.

Khoo Teck Puat Hospital (KTPH), a Green Mark Platinum building – the highest rating for buildings in Singapore – has a cafe where the air-conditioning is turned on only when the temperature hits 34 deg C.

“Initially, staff were not used to a non-air-conditioned place because of the hot weather. But of late, our staff told us that because they are mostly in air-conditioned areas, they actually look forward to having their meals in a natural setting,” said Ms Yen Tan, KTPH’s chief operating officer.

The findings, released yesterday at the opening of Green Building Week, will help BCA in its efforts to

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Scheme being developed to encourage healthy lifestyles at workplaces

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make more buildings here not just environmentally friendly but also health friendly.

BCA has tied up with the Health Promotion Board to develop a new Green Mark scheme to encourage healthy lifestyles at workplaces, with features such as indoor greenery, exercise facilities and access to healthier food and drink options. The scheme will be rolled out next year.

Said BCA chief executive Hugh Lim: "As we bring it forward, we would like to place more balanced emphasis on not only energy savings but also the well-being and health of occupants, and associated with that is the quality of air they enjoy inside Green Mark buildings."

Associate Professor Tham Kwok Wai from the National University of Singapore's Department of Building, who conducted the study with BCA, said it provided "hard evidence" the Green Mark certification for buildings has worked, and

that their occupants were healthier and more productive. Buildings with the Green Mark have environmentally sustainable designs such as carbon dioxide level sensors.

The study was conducted over 3¹/₂ years on eight Green Mark-certified office buildings –and six office buildings which had no certification. It found disparities in the buildings' indoor levels of PM2.5 – microscopic particles harmful to human health. The green buildings were better able to keep PM2.5 particles and other fine particulates such as bacteria and fungi out, thanks to better filters.

Surveys conducted among about 360 occupants of both types of buildings found those working in Green Mark-certified buildings were more satisfied with their office's temperature, humidity, lighting, air quality and indoor environment.

The findings will be used to tweak the existing criteria for BCA's Green Mark schemes, which cover various properties, from

shopping malls to schools.

For a start, it will pilot a new set of criteria for existing non-residential buildings for one year. This will place greater emphasis on the use of smart technologies, for instance, requiring buildings to have smart systems to monitor air quality. Currently, only about one in three buildings in Singapore is Green Mark-certified. BCA aims to increase that to 80 per cent by 2030. It hopes that sharing data on the benefits would spur more building owners, especially those with older buildings, to invest in green upgrades.

This week BCA will, for the first time, release the energy usage of three-quarters or about 1,000 of Singapore's commercial buildings along with their identities, as part of a voluntary scheme. The buildings account for 65 per cent of total building energy consumption. BCA said it is considering making the disclosure of identities mandatory.

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