

MEDIA RELEASE

BCA INTRODUCES NEW GREEN MARK SCHEME FOR TRANSIT STATIONS

- *Canberra Station accorded first BCA Green Mark Platinum award under new Green Mark scheme for transit stations*

1 November 2019, Singapore – The Building and Construction Authority (BCA) has introduced a new Green Mark scheme for transit stations, which was developed in consultation with Land Transport Authority (LTA) and industry practitioners involved in station developments, to ensure that their design, construction and operation can be enhanced in an environmentally sustainable way. The scheme was piloted in four MRT stations over the past one year. Canberra Station is the first to be accorded the Green Mark Platinum award under the new scheme.

2 With increasing demands from urban development, our rail network will be expanded over the next few decades. It is important for transit stations to be designed with environmental sustainability in mind to cut down on their carbon footprint. Adapted from the BCA Green Mark scheme established in 2005, the new Green Mark for Transit Stations scheme was tailored to the specific needs and operational requirement of transit stations in Singapore. Besides setting a high standard for energy performance, the scheme also considers criteria such as integration with its surroundings with the seamless connectivity and accessibility to all public transports nodes such as bus stops and taxi stands. The scheme also places high emphasis on ventilation performance of the station design, which enhances the thermal comfort of users. At least 50 stations are estimated to be in the pipeline to meet the Green Mark Platinum standard, and from these developments, there is an estimated reduction in energy consumption of about 33 GWh per annum, which translates to the energy used to power up 7,500 4-room HDB flats per year.

3 BCA Chief Executive Officer Mr Hugh Lim said, “BCA has been constantly reviewing and improving the Green Mark scheme to ensure that it remains relevant to the evolving needs of the people and the built environment. With the increasing demand for transit facilities, this new addition to the suite of Green Mark schemes will provide a holistic framework to enhance the sustainability of transit stations. We are glad to have LTA’s support in the development of this new scheme as we continue to push for higher environmental sustainability standards, as part of Singapore’s efforts to mitigate the environmental impact of urbanisation.”

4 Canberra station, the first to be accorded the BCA Green Mark Platinum award under the new scheme, was constructed with an extensive use of environmentally-friendly materials and products. The station incorporates biophilic design to help liven and enhance commuters’ experience with edge planting, green roof and vertical greenery along with daylighting provision within the platform, helping to provide thermal comfort as well as visual relief. During the design stage, the design team also conducted an in-depth study to ensure the effectiveness of weather protection measures against wind-driven rain for commuters’ comfort. This ensures that the station remains well-ventilated at all times, even while minimising infiltration of rain during heavy showers. The station is also equipped with automatic dual speed escalators, energy efficient lift system, LED lighting, water-efficient fittings and an irrigation system with rain sensor.

5 Said Land Transport Authority Chief Executive Ngien Hoon Ping, “As part of our long-term vision to provide a transport network that is convenient and well-connected, we will be adding new stations to our existing network over the next few years. In tandem with our goal of improving rail connectivity, we are equally committed to implementing practices that promote environment sustainability throughout the planning, design and construction of our stations. The Green Mark Platinum certification for Canberra station shows our efforts are on the right track and encourages us to strengthen our efforts.”

Issued by the Building and Construction Authority on 1 November 2019

Enclosed:

Annex A: Factsheet on the Green Mark for Transit Stations scheme

About BCA

The Building and Construction Authority (BCA) of Singapore champions the development of an excellent built environment for Singapore. BCA's mission is to shape a safe, high quality, sustainable and friendly built environment, as these are four key elements where BCA has significant influence. In doing so, it aims to differentiate Singapore's built environment from those of other cities and contribute to a better quality of life for everyone in Singapore. Hence, its vision is to have "a future-ready built environment for Singapore". Together with its education arm, the BCA Academy, BCA works closely with its industry partners to develop skills and expertise that help shape a future-ready built environment for Singapore. For more information, visit www.bca.gov.sg.

BCA Green Mark for Transit Stations

Background

The BCA Green Mark for Transit Stations TS:2018 (**GM TS: 2018**) is a new addition to the suite of Green Mark schemes. It provides a holistic framework for transit stations to be designed, constructed and operated sustainably, while enhancing commuters' experience. The certification applies to both elevated and underground transit station developments.

Criteria

The criteria for BCA Green Mark for Transit Stations is adapted from the BCA Green Mark for Non-Residential Buildings with specific focus on the station's design and functionality, which considers the following:

- Responsive Urban Design
(Leadership, Urban harmony, Tropicality)

Encourage the development of a sustainable and accessible development with collaborative efforts among key stakeholders

- Energy Performance
(Energy efficiency, Energy effectiveness, Renewable energy)

Encourage the use of high-energy efficiency equipment for air-conditioning, lighting, and also the use of solar photovoltaic panels

- Resource Stewardship
(Water, Materials, Waste)

Encourage the conservation of resources such as water, materials and reduction of waste in the development of Transit Stations

- Smart and Healthy Buildings
(Indoor air quality, Spatial quality, Smart operations)

Encourage designs that enhance user comfort and control systems that monitor the operation of the station

- Advanced Green Efforts
(Enhanced performance, Cost effective design, Complementary certifications, Social benefits)

Provide other strategies, designs or processes that demonstrate exceptional levels of sustainable performance and innovation



