

BCA-LTA GREEN MARK FOR RTS

Launched in 2010, the BCA-LTA Green Mark for RTS was developed to provide a holistic approach in assessing and grading the RTS for existing and future Lines. Setting a sustainable way forward in the development of rapid transit systems and network, the framework comprises various sustainability strategies in the planning, design, construction and operational aspects of the RTS.

The BCA-LTA Green Mark for RTS is based on three key pillars namely: the effective use of energy, environmental protection and sustainable development and water conservation.

Pillar 1: Effective Use of Energy

This pillar promotes the effective use of energy through detailed design and provisions to enhance the operational performance of the RTS. LTA aims to improve the energy efficiency of the rail supporting systems such as the electrical and mechanical systems as well as maximise energy recovery.

An example is the use of regenerative braking in RTS where energy can be harvested from the braking of the trains and channelled back to the electrical network for other uses.

Another means to achieving energy efficiency is to reduce the weight of the train to an optimal level, by using lighter materials such as aluminium alloy which will reduce the overall energy consumption.

Pillar 2: Environmental Protection and Sustainable Development

The second pillar promotes the use of environmentally-friendly architectural designs, innovative construction methodology and recyclable materials.

For example, the use of environmentally friendly materials such as eco-concrete (which comprises green cement, slag, fly ash or recycled aggregates) are encouraged in the construction of stations.

Also, trains that are designed and constructed with recyclable materials to minimise the adverse impact to the environment.

Pillar 3: Water Conservation

This pillar promotes the use of innovative water saving technologies and devices to reduce water usage and recycle waste water for non-potable use.

For example, the recovery of condensate water from air-conditioning systems can be constructively used to offset the use of potable water for cooling tower operation.

Solar Panels at Gali Batu Depot



Bicycle Parking Lots at Bendemeer Station

