

Country Report from Singapore

1. Green buildings assessment system adopted
 - a. The Green Mark certification scheme was launched in January 2005. It is a green building rating system designed to evaluate a building's environmental impact and performance. It provides a comprehensive framework for assessing the overall environmental performance of new and existing buildings to promote sustainable design, and best practices in construction and operations in buildings.
 - b. More details can be found here, <https://www1.bca.gov.sg/buildsg/sustainability/green-mark-certification-scheme>
2. Statutory requirements on the following elements of green buildings
 - a. Regulatory Requirements for Existing Buildings
 - i. To achieve an all-round sustainable built environment, it is important to ensure that existing buildings continue to operate efficiently throughout their life cycle.
 - ii. Based on Part IIB – Environmental Sustainability Measures for Existing Buildings in the Building Control Act, owners of existing buildings must:
 - Comply with the minimum environmental sustainability standard (Green Mark standard)
 - Submit periodic energy efficiency audits of the building's cooling systems
 - Submit information in respect of energy consumption and other related information as required by the Commissioner of Building Control
 - iii. From 2 January 2017 onwards, the Building Control (Environmental Sustainability Measures for Existing Building) (Amendment) Regulations 2016 will apply to all buildings that:
 - Have a GFA greater than 5,000m²
 - Install or replace the building cooling system
 - iv. These buildings are excluded from the requirement:
 - Any industrial building
 - Any railway premises, port services and facilities or airport services and facilities
 - Any religious buildings
 - Any data centres
 - Any utility buildings
 - Any residential building, excluding serviced apartments
 - Mandatory periodic energy audits
 - b. Regulatory Requirements for New Buildings and Existing Buildings Undergoing Major Additions and Alterations (A&A)
 - i. To advance sustainable development, the Building Control (Environmental Sustainability) Regulations requires a minimum environmental sustainability standard for new buildings and existing buildings that undergo major retrofitting.

- ii. The Building Control (Environmental Sustainability) Regulations 2008 together with the Building Control (Environmental Sustainability) (Amendment) Regulations 2021 and Building Control (Environmental Sustainability) (Amendment) Regulations 2022 applies to:
 - All new buildings with a gross floor area of 5,000m² or more
 - Additions or extensions to existing buildings that involve increasing the GFA by 5,000m² or more
 - Major retrofitting to existing buildings with a GFA of 5,000m² or more
 - c. More details can be found here, <https://www1.bca.gov.sg/regulatory-info/legislation-on-environmental-sustainability-for-buildings>
3. Government incentives for providing new green buildings and existing green buildings
 - a. GMIS for Existing Buildings 2.0 (GMIS-EB 2.0)
 - i. Cash incentive to lower upfront costs of energy efficiency retrofits for building owners who achieve higher energy performance standards (i.e. Platinum, Super Low Energy, and Zero Energy) for their buildings.
 - b. Built Environment Transformation Gross Floor Area Incentive Scheme
 - i. Additional GFA for developers/building owners adopting enhanced Construction Industry Transformation Map (ITM) standards in areas of digitalisation, productivity and sustainability ("ITM Outcome Requirements") in private sector developments
 - c. More details can be found here, <https://www1.bca.gov.sg/buildsg/sustainability/green-mark-incentive-schemes>
4. Quantity Surveyors' involvement in green buildings
 - a. Sustainable cost estimation for green buildings
 - b. Carbon cost planning
 - c. Life cycle costing
5. Useful links relating to green buildings
 - a. See above
6. Updated developments of green buildings
 - a. See attached Annex A.