

We shape a safe, high quality, sustainable and friendly built environment.

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Technology Development Group

Tel: 6325 5921 Fax: 6325 4800

Email: tan_tian_chong@bca.gov.sg

CIRCULAR TO BUILDING OWNERS

ANNUAL MANDATORY SUBMISSION OF BUILDING INFORMATION AND ENERGY CONSUMPTION DATA

- 1. From 1 July 2013, building owners will be required to submit building information and energy consumption data relating to their buildings to the Building and Construction Authority ("**BCA**") annually. This requirement comes under "Section 22FJ Power to Obtain Energy Consumption and other Information" of the Building Control Act (Chapter 29). A copy of Section 22FJ is provided in Annex 1 below.
- 2. BCA will be using the data to monitor energy efficiency of buildings in Singapore and formulate the national energy benchmark. The benchmarking data will be made available publicly so that building owners can pro-actively improve their buildings' energy performance.

What and How to Submit

- 3. To allow building owners sufficient time to prepare the data, BCA will serve a written notice to building owners 3 months before the submission date on 1 July 2013. Building owners can proceed to submit their building information via Building Energy Submission System (BESS) using the SingPass, or the system assigned login ID from 1 July 2013 to 31 July 2013. The notice will include the unique system generated login ID and password to facilitate the first-time account registration of the building owners.
- 4. Building owners are then required to submit the required data through the BESS. For the first year's submission, building owners will need to provide all the necessary information.
- 5. For subsequent annual submissions, building owners are only required to update with latest data.

- 6. The following building information are required to be submitted by building owners:
 - 1) Ownership and Activity Type (Ownership, occupancy type, activity type, etc.)
 - 2) Building Data (Gross floor area, air-conditioning floor area, renovation/retrofitting works, etc.)
 - 3) Service Information (Lifts, ACMV, lightings and hot water systems)
 - 4) Energy Consumption (Electricity, diesel, natural gas, town gas, etc.)
- 7. For more information on the submission procedures, please visit the useful links at https://www.bca-bess.gov.sg (see Figure 1). The "Useful Links" contains three self-help tools:
 - 1) User submission manual
 - 2) Technical guide
 - 3) Demo video



Figure 1: BESS Landing Page

Penalty for Non-Compliance

8. The Annual Mandatory Submission of Building Information and Energy Consumption Data is a national initiative that requires building owners to provide the necessary information and in conduct under *Section 22FJ – Power to Obtain Energy Consumption and Other Information under the Environmental Sustainability Measures for Existing Buildings* of the Act. A building owner that fails to comply with Section 22FJ shall be guilty of an offence and shall be liable on conviction to a fine not exceeding \$10,000.

PRESCRIBED GREEN MARK STANDARDS FOR BUILDINGS AND MANDATORY THREE-YEARLY AUDIT OF OPERATING SYSTEM EFFICIENCY

- 9. Besides the Annual Mandatory Submission of Building Information and Energy Consumption Data, BCA will also be implementing two other regulatory measures targeting existing buildings.
- 10. The two regulatory measures are i) the establishing of prescribed minimum green mark standards; and ii) the conducting of three-yearly audits of the Operating System Efficiency (OSE). The abovementioned measures will be implemented at a later date and BCA will be issuing notices to the building owners to whom the measures will apply. Details of the two regulatory measures are provided in Annex 2 below.

Clarification

11. For any queries pertaining to the new legislative requirements, please contact the following officers:

Annual Mandatory Submission of Building Information and Energy Consumption Data	Vinna Tan	vinna tan@bca.gov.sg	6325 5124
	Choo See Loke	choo see loke@bca.gov.sg	6325 5126
Prescribed Minimum Green Mark Standards	Thomas Pang	thomas pang@bca.gov.sg	6325 5025
	Kong Jia Hng	kong jia hng@bca.gov.sg	6325 5174
Mandatory Three-Yearly Audit of Operating System Efficiency (OSE)	Yong Siew Hwa	yong siew hwa@bca.gov.sg	6325 5087
	Joe Tsai	joe tsai@bca.gov.sg	6325 5191

12. For general enquiries, please e-mail: bca_enquiry@bca.gov.sg

Tours!

TAN TIAN CHONG
GROUP DIRECTOR
TECHNOLOGY DEVELOPMENT GROUP
BUILDING AND CONSTRUCTION AUTHORITY
for COMMISSIONER OF BUILDING CONTROL

Annex 1

(Section 22FJ of the Act)

Power to obtain energy consumption and other information

- **22FJ.**—(1) For the purpose of monitoring the energy efficiency and environmental sustainability of any building, the Commissioner of Building Control may do all or any of the following:
 - (a) by a notice in writing to the owner of the building require the owner to furnish to him all or any of the following information in respect of the building:
 - (i) the electricity consumption by users of the building as a whole or any part of the building 20 or by different users in the building;
 - (ii) the consumption of other types of energy by users of the building as a whole or any part of the building or by different users in the building;
 - (iii) the consumption of chilled water supplied to the cooling system of the building;
 - (iv) such other information relating to the building, the users of the building and their energy usage as the Commissioner of Building Control may specify in the notice;
 - (b) by a notice in writing to a supplier of electricity, gas or any other type of energy (referred to in this section as an energy supplier), require the energy supplier to furnish to the Commissioner of Building Control information in the possession of the energy supplier relating to the energy consumption of any building or buildings specified in the notice;
 - (c) by a notice in writing to a supplier of any cooling system to buildings, require that person to furnish to the Commissioner of Building Control information specified in the notice relating to the supply of cooling systems by that person to any building or buildings.
- (2) The person to whom a notice is directed under 10 subsection (1) shall provide the data required in the form and manner and within the time specified in the notice.
- (3) Any person who, without reasonable excuse, fails to comply with subsection (2) shall be guilty of an offence and shall be liable on conviction to a fine not exceeding \$10,000.

PRESCRIBED GREEN MARK STANDARDS FOR BUILDINGS AND MANDATORY THREE-YEARLY AUDIT OF OPERATING SYSTEM EFFICIENCY

i) Prescribed Green Mark Standards for Buildings

- a) Building owners who install or replace their cooling systems will be required to comply with the minimum environmental sustainability standard equivalent to Green Mark (Existing Non-Residential Buildings) (GM(ENRB)) version 3 at the Certified level. In addition, the buildings must achieve minimum specified design system efficiency (DSE) for the cooling system used. Building owners will be required to install permanent measurement and verification instrumentation to monitor the energy efficiency of the central air-conditioning system.
- b) The above mentioned measures will be implemented in phases. In the initial phase, the targeted buildings will be required to meet the minimum Green Mark Standard will be hotels, retail buildings and office buildings with gross floor area (GFA) of 15,000m² or more and that are in the process of installing/replacing a central air conditioning system. Mixed developments (i.e. buildings with both residential and commercial uses within the same building) with GFA of 15,000m² or more for commercial components within the development (i.e. office, hotel and retail), will also be subjected to this regulatory measure.

ii) Mandatory Three-Yearly Audit of the OSE

- a) The installation/replacement of the building cooling system is extensive and costly. In addition, cooling systems consume the most energy in most commercial buildings. While buildings may be designed to have energy efficient cooling systems, operating these systems at an optimum performance level is critical to ensuring that there will be real energy savings for the building. The three-yearly energy audit of cooling systems will help to ensure that the systems continue to operate efficiently throughout their life cycles.
- b) For existing buildings that have undergone retrofitting to comply with the minimum environmental sustainability standard, building owners will have to conduct their first energy audit within the deadlines prescribed by BCA. BCA will notify the building owners on the deadlines building owners have to follow with regard to the conducting of the first energy audit. Subsequently, building owners will also need to subject their cooling systems to an energy audit at three-yearly intervals upon receipt of a notice from BCA.

c) For new buildings with centralised building cooling system that are required to comply with the enhanced Green Mark standards for new buildings that were previously implemented on 1 December 2010, the owners will be required to conduct the first energy audit within one year from the date of the first Temporary Occupation Permit (TOP) or, if no TOP is obtained, within one year from the date of the Certificate of Statutory Completion (CSC). Subsequently, building owners will be required to conduct energy audits at three-yearly intervals from the last audit. Building owners will only be required to submit the first and subsequent energy audit reports after receiving BCA's notices in writing. The notices sent by BCA will prescribe the deadlines that building owners will have to follow.

DISTRIBUTION (via registered mail only):

All office, hotel and retail building owners