

FAQS

Periodic Energy Audit

Q1. Why should the energy efficiency of cooling systems be audited?

The system performance of any cooling system, including the energy efficient ones, may deteriorate overtime if not properly operated and maintained.

The aim of the periodic energy audit is to ensure that the cooling system continue to operate as efficiently as per its initial design throughout its life cycle, and continue to comply with the minimum standards stipulated.

Q2. What buildings are subject to the energy audit?

The following buildings will have to carry out the energy audit:

- Any building in respect of which an application for planning permission is submitted on or after 1st December 2010; or
- Any building installing or replacing its air-cooled or water-cooled chiller and subject to the minimum standards under the Building Control (Environmental Sustainability Measures for Existing Buildings) Regulations 2013.

Q3. What buildings are not subject to the energy audit?

- Any buildings in respect of which an application for planning permission was submitted on or after 15 April 2008 but before 01 December 2010 will not be required to conduct the periodic energy audit.
- Under the periodic audit requirement, the energy auditor engaged by the building owner would need to have the record of the building energy consumption data from the instrumentation to verify the efficiencies of the systems. However, this particular group of new buildings were not required to install permanent measurement and verification instrumentations under the earlier Green Mark standards.
- While building owners can install temporary or permanent instrumentation during building operation, this could be disruptive and costly.

Q4. Will building owners be informed if they are subject to the energy audit?

BCA will issue notices to building owners and allow a reasonable timeframe for them to complete the energy audit.

Q5. Is there requirement for the energy audit to achieve a certain result?

Building owners must ensure that the energy audit on the cooling system efficiencies meet the minimum system efficiencies stipulated in the Code on Periodic Energy Audit of Building Cooling System.

Q6. What must the building owner do if the result of the energy audit fails to meet the minimum design system efficiency? Must he carry out another round of energy improvement works?

The owner needs to carry out appropriate remedial and maintenance works to bring the system efficiency back to its design standard or the prescribed minimum system efficiencies.

Q7. Who are qualified to carry out the energy audit of the cooling systems?

The energy audit shall be carried out either by a PE(Mech) who has in force a practising certificate) or an Energy Auditor whom is registered with BCA.

Q8. Can the building owner's own employee, such as the facility manager, carry out the energy audit of the system?

Yes, provided that the employee is a PE(Mech) or an Energy Auditor whom is registered with BCA.

Q9. How do the energy efficiency measures under the Building Control Act and the Energy Conservation Act compare with one another?

- See table:

Measures	Building Control Act	Energy Conservation Act *
Target group	Office, hotel and retail buildings	Large energy users in the transport and industry sectors that consume >15Gwh each year

Any minimum standards?	Yes. Under initial phase, office, hotel, retail buildings >15,000 m ² required to meet min. standards. Min. standards triggered by installing/replacement of cooling systems.	No, but companies have to submit energy efficiency improvement plans.
Report energy use?	Utilities and building owners to submit energy consumption and building related information.	Companies to appoint energy managers to submit energy efficiency plans.
Monitor energy use?	Periodic energy audit for 2 types of buildings: <ul style="list-style-type: none"> • Any building in respect of which an application for planning permission is submitted on or after 1st December 2010; or • Any building installing or replacing its air-cooled or water-cooled chiller and subject to the minimum standard under the Building Control (Environmental Sustainability Measures for Existing Buildings) Regulations 2013. 	No mandatory energy audits, but companies to appoint energy managers to assist in the preparation of energy efficiency improvement plans.

* Source- <http://app2.nea.gov.sg/energy-waste/energy-efficiency/industry-sector>