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Dear Sir/ Madam

**CIRCULAR TO PROFESSIONAL INSTITUTES/ ASSOCIATIONS**

**AMENDMENTS TO THE CODE ON PERIODIC ENERGY AUDIT OF BUILDING COOLING SYSTEM**

**Aim**

- 1 This circular is to inform the industry on the amendments to the Code on Periodic Energy Audit of Building Cooling System.

**Background**

- 2 Under 22FH (1) of the Building Control Act, building owners will be served a Notice to conduct an energy audit on their building cooling systems. The three-yearly energy audit shall be carried out by a PE (mechanical) or an energy auditor registered with BCA and conducted in the manner prescribed and specified in the Code on Periodic Energy Audit of Building Cooling System ("Code").
- 3 In the revised Code, additional building performance metrics including indoor air quality measurements (under normal operating room condition), permanent temperature sensors verification by the appointed PE (Mech)/ EA (Appendix B, Code) and total cooling system efficiency (including air-side) (Appendix C, Code) will be required in the energy audit report. The above amendments are detailed in Annex A.

**Implementation Timeline**

- 4 Energy Audit report submitted on and after 1 Sep 2020 will have to comply with the revised Code (PEA Code 3.0).

**For Clarification**

- 5 We would appreciate it if you could convey the contents of this circular to members of your organisation. For clarification, please submit your enquiry through BCA's Online Feedback Form at <https://www.bca.gov.sg/feedbackform/> or call us at 1800 342 5222.

Yours faithfully



ANG KIAN SENG  
GROUP DIRECTOR  
ENVIRONMENTAL SUSTAINABILITY GROUP  
for COMMISSIONER OF BUILDING CONTROL  
BUILDING AND CONSTRUCTION AUTHORITY

**Annex A – Amendments to the Energy Audit Code**

Items	Requirements																				
<ul style="list-style-type: none"> <li>○ <b>Permanent temperature sensor verification</b></li> </ul>	<p>Before any data extraction for analysis and computation of performance data, the PE(Mech) /EA shall check the accuracy of permanent temperature sensors and attach the measured results to the audit report (in Appendix B).</p> <div style="text-align: center;"> </div> <hr/> <div style="text-align: center;"> </div>																				
<ul style="list-style-type: none"> <li>○ <b>Total building cooling system efficiency to include airside.</b></li> </ul>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th data-bbox="646 1012 883 1058">Average reading</th> <th colspan="2" data-bbox="886 1012 1133 1058">Period</th> <th data-bbox="1135 1012 1295 1058">Unit</th> </tr> <tr> <td data-bbox="646 1062 883 1121"></td> <td data-bbox="886 1062 1013 1121">Daytime<sup>^</sup></td> <td data-bbox="1016 1062 1133 1121">Night-time<sup>~</sup></td> <td data-bbox="1135 1062 1295 1121"></td> </tr> </thead> <tbody> <tr> <td data-bbox="646 1125 883 1192">Overall airside efficiency**</td> <td data-bbox="886 1125 1013 1192"></td> <td data-bbox="1016 1125 1133 1192"></td> <td data-bbox="1135 1125 1295 1192">kW/RT</td> </tr> <tr> <td data-bbox="646 1197 883 1264">Overall waterside efficiency</td> <td data-bbox="886 1197 1013 1264"></td> <td data-bbox="1016 1197 1133 1264"></td> <td data-bbox="1135 1197 1295 1264">kW/RT</td> </tr> <tr> <td data-bbox="646 1268 883 1335">Total cooling system efficiency</td> <td data-bbox="886 1268 1013 1335"></td> <td data-bbox="1016 1268 1133 1335"></td> <td data-bbox="1135 1268 1295 1335">kW/RT</td> </tr> </tbody> </table> <p data-bbox="565 1348 1247 1371">** applicable for projects certified under NRB 2015 w.e.f 1 Dec 2016.</p>	Average reading	Period		Unit		Daytime <sup>^</sup>	Night-time <sup>~</sup>		Overall airside efficiency**			kW/RT	Overall waterside efficiency			kW/RT	Total cooling system efficiency			kW/RT
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Overall airside efficiency**			kW/RT																		
Overall waterside efficiency			kW/RT																		
Total cooling system efficiency			kW/RT																		

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