



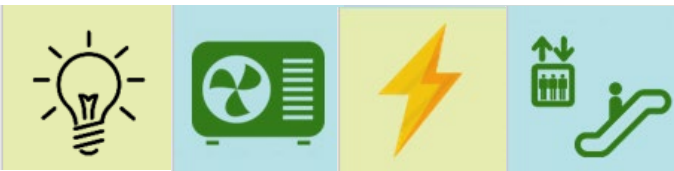
Briefing of BEEO submissions



Terence WONG

E/EEB7/2

Energy Efficiency Office









- Major requirement of BEEO
- e-submissions for forms of BEEO
- Common irregularities in completing BEEO submissions

Major requirement of BEEO



Major Requirement

	Responsible party	Applicability	Code Compliance	Legal Obligation
<p>(1) Newly Constructed Buildings</p> 	<p>Developer</p> 	<p>4 key types of BSIs</p>	<p>Building Energy Code (BEC)</p>	<p>Apply for COCR Stage 1 & Stage 2 (EE1 & EE2)</p>
<p>(2) Existing Buildings</p> 	<p>Responsible person; Owner of installation(s)</p> 	<p>Major Retrofitting Works (MRW)</p>	<p>BEC (Table 10.1)</p>	<p>Obtain FOC (EE4) from REA</p>
<p>(3) Commercial Buildings / Commercial Portion of Composite Buildings</p> 	<p>Building owner</p> 	<p>Energy Audit</p>	<p>Energy Audit Code (EAC)</p>	<p>Obtain EA Form (EE5) and EA Report from REA</p>

(1) Newly Constructed Buildings

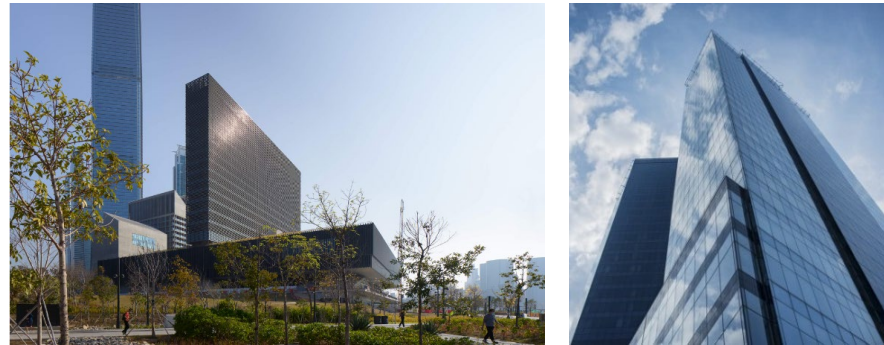
Stage One Declaration

- Developer engage **Registered Energy Assessor (REA)** to submit declaration **within 2 months after** obtaining Consent to commencement of building works (建築工程展開同意書)
- Declare the design of building services installations to comply with the BEC



Stage Two Declaration

- Developer engage **REA** to submit declaration **within 4 months after** the Occupation Permit (佔用許可證) is issued
- Confirm **designed, installed and completed** BSIs complying with BEC + REA inspect BSIs **within 30 days** of declaration
- Full fit-out works under developer's scope



(2) Major Retrofitting Works in Existing Buildings

Works Area

Addition/replacement of a BS installation:

Works area $\geq 500 \text{ m}^2$ in a unit or a common area



LG $\geq 3\text{kW}$

AC $\geq 60\text{kW}$

LE motor/mech drive

Central BS installation (CBSI)

Addition/replacement of **main component**:



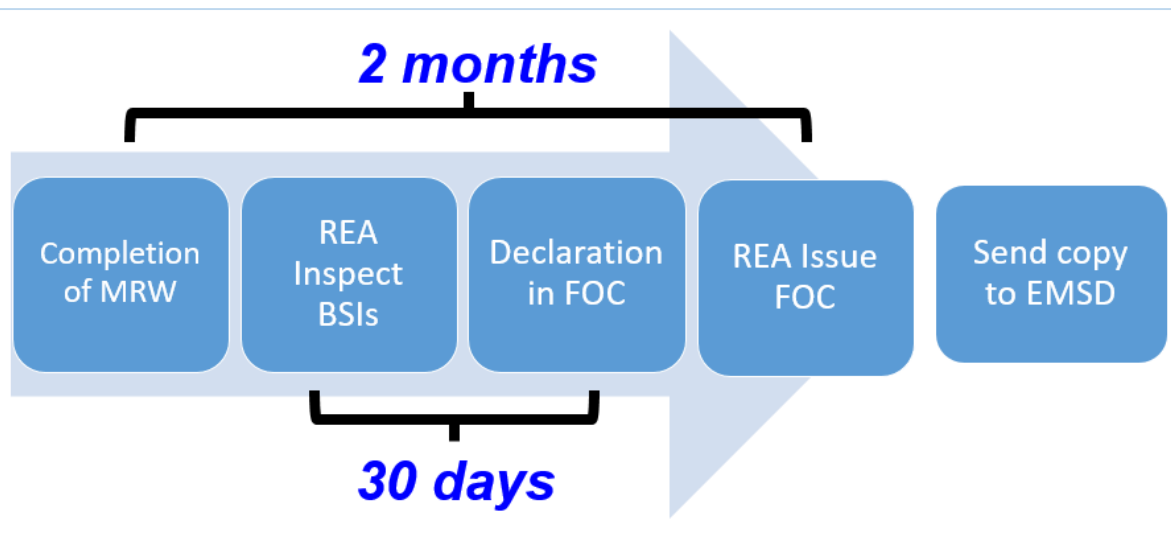
electrical
circuit $\geq 400\text{A}$



A/C installation
 $\geq 350\text{kW}$



motor drive +
mechanical drive



(3) Energy Audit in Existing Buildings

Building Type

1. Commercial Buildings
2. Commercial Portion of Composite Buildings

Energy Audit Interval

- No longer than **10 year**
- **Within 10 year** of buildings first issued with COCR for the above building type

EMSD Submission

- REA issued the Energy Audit Form and Energy Audit Report to building owner
- Send copy to EMSD **within 30 days**

The image shows the Energy Audit Form (Form EE5) and a graphic illustrating the Energy Utilization Index (EUI). The form is divided into two main sections: Section A (General Information) and Section B (Declaration). Section A includes fields for the building name in English and Chinese, the address in English and Chinese, and the district. Section B is a declaration by the building owner, stating that an energy audit was completed and providing the EUI per annum for the past 12-month period. The graphic on the right shows the EUI calculation: $\text{EUI} = \frac{\text{Energy Utilization Index (per annum)}}{\text{Area}} = \frac{\text{MJ/m}^2/\text{annum}}{\text{m}^2} = \text{kWh/m}^2/\text{annum}$. It also includes a comparison of the current EUI with the previous EUI, showing a percentage change.

Building Owner **must exhibit a copy of Energy Audit Form** in a conspicuous position at main entrance of the building after energy audit



e-submission for forms of BEEO





What difference it would cause between Clause 3(a) and 3(b) in REA renewal application

6. Renewal of registration

- (1) A registered energy assessor may make an application to the Director for the renewal of the registration of the assessor.
- (2) The application must—
 - (a) be in the specified form; and
 - (b) be accompanied by the prescribed fee and the documents specified in the form.
- (3) The application must be submitted—
 - (a) at any time before the expiry of the current registration; or
 - (b) within the period of 28 days from the expiry of the current registration.
- (4) The Director may require the applicant to furnish any further information, or produce any additional document, that the Director considers reasonably necessary for the purposes of determining the application.





What difference it would cause between Clause 3(a) and 3(b) in the renewal application

- When Clause 3(a) applied for the expiry of your current application is over 4 months, your renewal application approval date would be granted at a date **usually earlier but different from the expiry** of your REA qualification.
- When Clause 3(a) applied for the expiry of your current application is within 4 months, your renewal application approval date would be granted **on the date of expiry** of your REA qualification.
- When Clause 3(b) applied, your renewal application approval date would be granted at a date **later than the expiry** of your REA qualification.



It means



- Renewal applications later than 28 days from expiry **will not be eligible.**
- When you make your renewal application near the expiry date, you may not have obtained the approval before the expiry of your REA qualification
- There may be a gap between the effective date of your REA renewal and your last REA expiry date, you may have breached the law when you just do your daily work during the gap
- You need **our e-submission platform**
 - 24 hour online application
 - No postal delay
 - Handle on next working day
 - Payment to be transferred only when all information is ready



It means



- Submissions by email to: mbec@emsd.gov.hk is **NOT ACCEPTED**





Download 「iAMSmart」 、Registered 「iAMSmart+」



- Register in mobile app 「iAMSmart」
(Age 18 or above)

<https://www.youtube.com/watch?v=BBYVVsov0wI>

- Kiosk for Self Registration 「iAMSmart+」
(Age 18 or above)

<https://www.youtube.com/watch?v=wpss0PABs2M>



智方便
iAMSmart



智方便+
iAMSmart+



<https://apps.apple.com/app/id1515065344>



<https://play.google.com/store/apps/details?id=hk.gov.ogcio.iamsmart>





EMSD (Regulatory Services) Web-based Registration Services

<https://wbrs.emsd.gov.hk/psps/en/System/login.jsp> ←

機電工程署  **EMSD** EMSD (Regulatory Services) Web-Based Registration Services [繁體版](#)

To submit applications through this portal, applicants are required to register for an account.

Simply complete the [Online Registration Form](#), sign with your Hongkong Post e-Cert and send to us. Alternatively, you can [download](#) and complete the registration form, then send back to the designated address of EMSD as stated in the form.

If you have already got your account information, please enter your User ID and password, then click the Login button to proceed.

User ID:

Password:

[Log in with iAM Smart](#) [More Info >](#)

Technical Support : wbrs_support@emsd.gov.hk

Enquiry : 3741 8892, 3741 8893

Office Hours : Monday - Friday
9:00am - 5:15pm

(Closed on Saturdays, Sundays and Public Holidays)

Version 5.32 Last revision date: 14 Feb 2022



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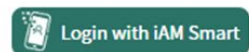


Notices:

Due to system maintenance, the Web-Based Registration Services (Login with iAM Smart) is to be temporarily suspended from 10:00 p.m. on 2 February 2024 to 06:00 a.m. on 3 February 2024.

Welcome to EMSD WBRS

To submit applications through this portal, applicants are required to authenticate with "iAM Smart".



[More Info](#)>

To submit the application using Hongkong Post e-Cert, please login the system with username and password.

[Log in with username and password](#)

Technical Support : wbrs_support@emsd.gov.hk
Enquiry : 3741 8892, 3741 8893
Office Hours : Monday - Friday
9:00am - 5:15pm
(Closed on Saturdays, Sundays and Public Holidays)

Version 1.5.22

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[< Back to online service](#)

Log in with iAM Smart :

1. Please open iAM Smart App in your mobile
2. Tap the scan button in iAM Smart App

 Scan QR Code

3. Scan the QR Code







ROLE SELECTION

Please select the role to begin, some functions are restricted to certain authenticated personnel only.

Click the button below to refresh roles:

Refresh Roles

Or

Representative REC for GF/WR2 Application

Representative REC for GF/WR2 Application

Represent of Registered Electrical Worker

Represent of Registered Electrical Worker

Energy Efficiency Labelling Scheme

Mandatory Energy Efficiency Labelling Scheme (Authorised Person)

Voluntary Energy Efficiency Labelling Scheme (Authorised Person)

Buildings Energy Efficiency Ordinance

Registered Energy Assessor

Other Applicant





ROLE SELECTION

Please select the role to begin, some functions are restricted to certain authenticated personnel only.

Click the button below to refresh roles:

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Representative REC for GF/WR2 Application

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Mandatory Energy Efficiency Labelling Scheme (Authorised Person)

Voluntary Energy Efficiency Labelling Scheme (Authorised Person)

Buildings Energy Efficiency Ordinance

Registered Energy Assessor

Other Applicant



GETTING STARTED

Important Notices

- [Prevention of Bribery](#)

Online Electronic Submission

You can start a new application submission from the list of applications that are eligible to be submitted by you.

Draft Application(s)

If you had saved your incomplete application as draft previously, you can retrieve the draft to resume the submission.

Outstanding payment(s)

When you have applications whose application fee should be paid before the processing of the application started, you can select those applications and pay the application fee by the provided payment method.

Application Payment History

You can review the payment which you had been handled in WBRS.

Role Selection

When necessary, you can switch to an appropriate role for handling the application accordingly.















ONLINE ELECTRONIC SUBMISSION

Please select the required registration form and click "Start" button to input and submit online applications.

Select Type of Service

Buildings Energy Efficiency Ordinance

Select BEEO

Form No.	Form Name	Mobile/Desktop	Online Submission
Form EA1	New Application/Renewal Application /Change of Particulars for Registration as Registered Energy Assessor	 / 	Start
Form EE1	Form of Stage One Declaration	 / 	Start
Form EE2	Form of Stage Two Declaration	 / 	Start
Form EE4	Form of Compliance	 / 	Start
Form EE5	Energy Audit Form	 / 	Start

ENG | 繁

Online Electronic Submission

Outstanding Application(s)

Draft Application(s)

Outstanding Payment(s)

Application History

Application Payment History

Profile

Role Selection

Logout








ONLINE ELECTRONIC SUBMISSION

Please select the required registration form and click "Start" button to input and submit online applications.

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Buildings Energy Efficiency Ordinance

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Form EE2	Form of Stage Two Declaration	 / 	Start
Form EE4	Form of Compliance	 / 	Start
Form EE5	Energy Audit Form	 / 	Start





ROLE SELECTION

Please select the role to begin, some functions are restricted to certain authenticated personnel only.

Click the button below to refresh roles:

[Refresh Roles](#)

Or

Representative REC for GF/WR2 Application

Representative REC for GF/WR2 Application

Represent of Registered Electrical Worker

Represent of Registered Electrical Worker

Energy Efficiency Labelling Scheme

Mandatory Energy Efficiency Labelling Scheme (Authorised Person)

Voluntary Energy Efficiency Labelling Scheme (Authorised Person)

Buildings Energy Efficiency Ordinance

Registered Energy Assessor

Other Applicant

[Continue](#)























ONLINE ELECTRONIC SUBMISSION

Please select the required registration form and click "Start" button to input and submit online applications.

Select type of Service

Buildings Energy Efficiency Ordinance

Form No.	Form Name	Mobile/Desktop	Online Submission
Form EA1	New Application/Renewal Application /Change of Particulars for Registration as Registered Energy Assessor	 / 	Start
Form EA2	Application for Duplicate of Certificate of Registration - Registered Energy Assessor	 / 	Start
Form EE1	Form of Stage One Declaration	 / 	Start
Form EE2	Form of Stage Two Declaration	 / 	Start
Form EE6	Notice of Appeal	 / 	Start
Form EE7	Application Form for Duplicate of Certificate of Compliance Registration, Form of Compliance and/or Energy Audit Form	 / 	Start
Form EE-EN	MBEC Enquiry Form for Project Specific Issue	 / 	Start
Form EE-ET	Application Form for an Extension to the Prescribed Period of Submission of Stage Two Declaration or Obtaining Form of Compliance	 / 	Start
Form EE-EX	Application Form for Exemption from Specified Standards and Requirements for Certificate of Compliance Registration, Form of Compliance or Energy Audit	 / 	Start





Common irregularities in completing BEEO submissions – Form EA1



Common irregularities



Form EA1 表格 EA1

The Government of the Hong Kong Special Administrative Region Buildings Energy Efficiency Ordinance (Chapter 610) Buildings Energy Efficiency (Registered Energy Assessors) Regulation (Chapter 610B, Section 5, 6, 11 & 12) New Application/ Renewal Application /Change of Particulars for Registration as Registered Energy Assessor	香港特別行政區政府 建築物能源效益條例 (第610章) 建築物能源效益(註冊能源效益評核人)規例 (第610B章,第5,6,11及12條) 新申請為註冊能源效益評核人 / 註冊能源效益評核人續期 / 更改個人資料	Official use only 此欄不用填寫 Receipt Date 收件日期 : _____ Receipt Number 收據編號 : _____
---	---	---

Note 注意：
 Please read the "Notes to this Form" attached and complete all the items in block letters.

請參閱於附頁的「本表格備註」，並以正楷填寫各項資料。

To the Director of Electrical & Mechanical Services:

致 機電工程署署長

I hereby apply for the following (Please tick in the appropriate box(s)) :-

本人現欲申請下列項目 (請在適用空格加上✓號) :

For new applicant only 只適用於新申請人士	For current Registered Energy Assessor 只適用於現有註冊能源效益評核人
<input type="checkbox"/> New Application for Registration as a Registered Energy Assessor 新申請為註冊能源效益評核人	Registration No: _____ Expiry Date: _____ 註冊號碼: _____ 有效期屆滿日期: _____ <input type="checkbox"/> Renewal application 續期申請 <input checked="" type="checkbox"/> Change of particulars 更改個人資料 (Name / Correspondence Address / Professional Qualification)* (姓名/通訊地址/專業資格)*

1. Correspondence address was not updated.
2. Professional qualifications for REA application changed from last application and address proof is required.
3. Forget about "Delete as appropriate".



Common irregularities



Section A 甲部：Personal Details 個人資料

5. Forget about “Delete as appropriate” .

4. English name not tally with the first application.

Name: 姓名: (Surname first) (姓氏先行)

English 英文

Chinese 中文

Mr. / Miss / Ms.* 先生/小姐/女士*

Year of Birth: 出生年份:

H.K.I.D NO.: 香港身份證號碼:

OR 或

Travel Document Number: 旅遊證件號碼:

Correspondence Address: 通訊地址:

Flat 室 Floor 樓 Block 座

Building 大廈

Street 街道

District 地區

Contact Phone: 聯絡電話:

H.K. 香港
 Kowloon 九龍
 N.T. 新界



Common irregularities



Section B 乙部：Professional Qualifications 專業資格

(Please read the attached "Notes to Complete this Form" item No.2,3) (請參閱於附頁的「填寫本表格的備註」第2,3項)

Date of Qualified / Membership No. 註冊日期/註冊號碼	Professional Qualifications (Please tick in the appropriate box(s)) 專業資格 (請在適用空格加上✓號)	Discipline 界別 Please indicate below in which Discipline you consider you are qualified for professional practice (Building Services (BSS), Electrical (ELL), Environmental (ENV) and Mechanical (MCL)) 請在下註明你已具備那一個界別的专业實務 (屋宇裝備、電機、環境或機械)
	<input type="checkbox"/> Registered professional engineer within the meaning of section 2(1) of the Engineers Registration Ordinance (Cap.409) 《工程師註冊條例》(第409章)第2(1)條所指的註冊專業工程師	<input type="checkbox"/> BSS <input type="checkbox"/> ELL <input checked="" type="checkbox"/> ENV <input type="checkbox"/> MCL
	<input type="checkbox"/> Corporate member of the Hong Kong Institution of Engineers (HKIE) 香港工程師學會法定會員	<input type="checkbox"/> BSS <input type="checkbox"/> ELL <input type="checkbox"/> ENV <input type="checkbox"/> MCL
	<input checked="" type="checkbox"/> Equivalent qualification recognized by HKIE as being of a standard not lower than that of a corporate member of the Institution in any of these disciplines (please read the attached "Notes to Applicants" Item 2.1) 具有某資格，而該資格獲香港工程師學會承認為不低於該學會屬任該等界別之法定會員的資格標準(請參閱於附頁的「申請人備註」第2.1項) (Please state your professional membership of the relevant professional body based upon the reciprocal recognition agreements between the HKIE and the professional body) (請提供閣下基於在香港工程師學會與相關專業團體的互相認可協議所持的專業會籍) _____	<input type="checkbox"/> BSS <input type="checkbox"/> ELL <input type="checkbox"/> ENV <input type="checkbox"/> MCL
	<input type="checkbox"/> Other : (please read the attached "Notes to Applicant" Item 2.2) 其他：(請參閱於附頁的「申請人備註」第2.2項)	

6. Indicated other professional qualifications different from first application.



Common irregularities



Section D 丁部：Checklist of Supporting Documents 須遞交的證明文件清單

Please tick in the appropriate box(s) 請在適用空格加上✓號

(i)	I attach documentary proof of relevant practical experience. 本人隨申請表附上相關實務經驗證明。	<input type="checkbox"/>
(ii)	I attach a photocopy of document to substantiate my professional qualifications and the qualified discipline. 本人隨申請表附上一份專業資格及註冊類別的證明文件副本。	<input type="checkbox"/>
(iii)	I attach a photocopy of the following documents to substantiate my application made under section 5(2) of the Buildings Energy Efficiency (Registered Energy Assessors) Regulation (Cap. 610B) (please read the attached "Notes to Applicants" Item 2.2) 本人隨申請表附上一份以下的證明文件副本，以作本人在建築物能源效益(註冊能源效益評核人)規例第610B章第5(2)條下的申請。(請參閱於附頁的「申請人備註」第2.2項)	<input type="checkbox"/>
(iv)	I attach a cheque/drafts/cashier orders no. _____ for HK\$ _____ (payable to THE GOVERNMENT OF THE HONG KONG SPECIAL ADMINISTRATIVE REGION) in payment of the fee prescribed for the application. 本人隨申請表附上一張支票/滙票/本票*號碼 _____ 金額\$ _____ 支付「香港特別行政區政府」作為條例訂明的申請費用。	<input type="checkbox"/>

7. Should demonstrate at least 2 years of practical experience in engineering works relating to energy efficiency in buildings acquired while being RPE or 3 years for MHKIE
8. Provide the receipt of payment or other supporting document to substantiate you have maintained your professional qualifications and the qualified discipline



Common irregularities



Section E 戊部：Declaration 聲明

Please tick in the appropriate box(s) 請在適用空格加上✓號

<u>Applicable to new application /renewal application only 只適用於新申請/續期申請</u>	
(i) I declare that I have the knowledge required for the performance of the duties and functions of a registered energy assessor under the Ordinance. 本人聲明本人具有執行本條例下註冊能源效益評核人的責任及職能所需的知識。	<input type="checkbox"/>
(ii) I declare that I have / have not * been convicted in Hong Kong, or elsewhere, of any offence which, if committed by a registered energy assessor, may bring the profession of registered energy assessor into disrepute and sentenced to imprisonment, whether suspended or not and have not committed any misconduct or neglect in a professional respect. 本人聲明 (曾 / 未曾) * 在香港或香港以外地方被裁定犯某罪行，而該罪行如由註冊能源效益評核人所犯，便可能損及註冊能源效益評核人專業的聲譽及被判處監禁(不論是否緩期執行)及未曾在專業方面有任何失當或疏忽行為。	<input type="checkbox"/>
<u>Applicable to all application 適用於所有申請</u>	
(iii) I declare that the information in this form and the entire document submitted in relation to my application for registration are true and correct. 本人聲明在此申請表格填報的一切資料及附上的文件全屬真確無訛。	<input type="checkbox"/>
Signature of Applicant 申請人簽署	Date 日期

9. Forget about “Delete as appropriate”



Common irregularities in completing BEEO submissions – Form EE5 (Energy Audit)



Common irregularities



Buildings Energy Efficiency Ordinance

Part 4
Section 23

4-4
Cap. 610

- (5) A registered energy assessor who carries out an energy audit in respect of a building must, within 30 days after issuing an Energy Audit Form, send a copy of the Energy Audit Form and an energy audit report on the audit to the Director.
- (6) An Energy Audit Form issued under subsection (5) must—
 - (a) be in the specified form; and
 - (b) be accompanied by the documents specified in the form.
- (7) An Energy Audit Form issued in respect of a building ceases to have effect on the issue of another Energy Audit Form in respect of the building.
- (8) An owner of a building who contravenes subsection (1) commits an offence and is liable on conviction to a fine at level 5.
- (9) A registered energy assessor who contravenes subsection (5) commits an offence and is liable on conviction to a fine at level 3.

10. The EA report was failed to submitted within the period specified in Section 22 of Buildings Energy Efficiency Ordinance (Cap. 610).

23. Owner to exhibit Energy Audit Form



Common irregularities



7.2 Step 1 – Collection of Building Information

Information on building operation characteristics and technical characteristics of various energy consuming equipment/systems relevant to the central building services installations should be collected. The essential information should include the following

- (a) record of EMO already implemented in the last 36-month or to be implemented, and corresponding energy audit report if available;
- (b) inventories of the energy consuming equipment, and manuals or technical brochures indicating their configurations and characteristics;
- (c) drawings and system schematics showing the layouts of the energy consuming equipment and systems, and drawings showing the layout of the building;
- (d) equipment day-to-day operation records, including room temperature settings and corresponding room temperatures, chilled water supply & return temperature settings and corresponding water temperatures, supply & return air temperature settings and corresponding air temperatures, building & equipment operation hours etc.;
- (e) energy consumption data in last 36-month or since operation of the building should such period be less than 36-month;
- (f) operation & maintenance programmes including timing of major alterations, additions or replacements for the building;
- (g) areas of relevant spaces attributing to the internal floor area of the building; and
- (h) total internal floor area of the building.

11. Missing essential information



Common irregularities



Form EE5 表格 EE5

The Government of the Hong Kong Special Administrative Region
Buildings Energy Efficiency Ordinance (Chapter 610, Section 22)
Energy Audit Form

香港特別行政區政府
建築物能源效益條例
(第610章 第22條)
能源審核表格

機電工程署
EMSD

Section A 甲部: General Information 一般資料

Name of Building 建築物名稱
English 英文
Chinese 中文

Address of Building 建築物地址
Street No. 街道號碼
Street 街道
District 地區

Section B 乙部: Declaration 聲明

To: Building owner 建築物擁有人
cc 副本抄送: The Director of Electrical and Mechanical Services 機電工程署署長

In accordance with section 22 of the Buildings Energy Efficiency Ordinance (Chapter 610), I, (full name) _____, Registered Energy Assessor (Registration No.: _____) certify that an Energy Audit in respect of the above building was completed on _____ (DDMMYYYY). This Energy Audit Form will expire on _____ (DDMMYYYY). (see note 4)

The energy utilization index (EUI) per annum of the past 12-month period of the above building is _____ MJ/m²/annum, equivalent to _____ kWh/m²/annum. (see note 5)

茲根據建築物能源效益條例第 610 章第 22 條之規定, 本人(姓名) _____ 作為註冊能源效益評核人註冊號碼 _____, 現證明上述建築物的能源審核已於 _____ 年 _____ 月 _____ 日完成。本能源審核表格將於 _____ 年 _____ 月 _____ 日屆滿。(見附註事項 4)

有關上述建築物過去 12 個月期間的按年計能源使用指數為 _____ 兆焦耳/平方米/年, 相當於 _____ 千瓦小時/平方米/年。(見附註事項 5)

Signature of Registered Energy Assessor 註冊能源效益評核人簽名
Date of issue (DDMMYYYY) 簽發日期 (日/月/年)

1/5

能源使用指數 EUI

Energy Utilization Index (per annum)
能源使用指數(按年計)

MJ/m²/annum

Energy Date 能源日期
Completion Date 完成日期

No Energy Audit conducted previously 以前沒有進行能源審核
 Energy Audit conducted previously 曾經進行能源審核

Previous Energy Utilization Index (per annum)
上次能源使用指數(按年計)

MJ/m²/annum

Completion Date 完成日期

Comparison of EUI with previous energy audit
與上次能源使用指數比較

See note 5-7 (見附註事項 5-7)

EMSD/EE5 (Rev. 09/22)

12. Wrong calculations for the Comparison of EUI

7. The comparison of EUI with previous energy audit is calculated as below:

$$\frac{EUI_n - EUI_p}{EUI_p} \times 100\%$$

Where EUI_n is the current EUI,
 EUI_p is the previous EUI.

"-ve" percentage change expresses a decrease of EUI and the building utilizes less energy per m² than the previous energy audit.
"+ve" percentage change expresses an increase of EUI and the building utilizes more energy per m² than the previous energy audit.

與上次能源使用指數比較的計算如下:

$$\frac{EUI_n - EUI_p}{EUI_p} \times 100\%$$

EUI_n 為本次能源使用指數,
 EUI_p 為上次能源使用指數。

比較數值為負值時 "-ve", 代表該建築物的能源使用指數下降及其每平方米能源使用量比上次能源審核低。
比較數值為正值時 "+ve", 代表該建築物的能源使用指數上升及其每平方米能源使用量比上次能源審核高。

2/5

EMSD/EE5 (Rev. 09/22)

Last Revision Date: 19 Jan, 2024

Building Details		
Building Name	The Center	
Building Address	99 Queen's Road Central, Central, Hong Kong	
	Previous Energy Audit	Latest Energy Audit
Expiry Date of Energy Audit Form	30/08/2023	29/08/2033
EUI** (kWh/m ² /annum)**	243.2	182.92
Remark:	Total energy consumption of the central building services installations (kWh / annum)	
Energy Utilization Index (EUI)	= $\frac{\text{Total energy consumption of the central building services installations (kWh / annum)}}{\text{Total internal floor area of building (m}^2\text{)}}$	
** 1kWh is equivalent to 3.6 MJ		



Common irregularities



Executive Summary of Energy Audit Report for Energy Audit Code (EAC)
(Please refer to Section 8, Code of Practice for Building Energy Audit)

Form EE-EAes

Part 2 – Historical Energy Consumption Analysis ²⁹		(EAC Clause 8.1(g))		
1) Annual electricity consumption of last 36-month (kWh/annum) (EAC Clause 8.1(g)ii)		3,062,429.00	3,255,126.00	2,934,032.00
	(kWh/annum)		(kWh/annum)	(kWh/annum)
	Past 1 st 12-month	Past 2 nd 12-month	Past 3 rd 12-month	
2) Annual consumption of energy ³⁰ other than electricity, of last 36-month (MJ/annum) (EAC Clause 8.1(g)ii)		0.00	0.00	0.00
	(MJ/annum)		(MJ/annum)	(MJ/annum)
	Past 1 st 12-month	Past 2 nd 12-month	Past 3 rd 12-month	
3) Annual total energy consumption, of last 36-month (MJ/annum) (sum of figures in 1) & 2)) (EAC Clause 8.1(g)ii)		11,024,744.40	11,718,453.60	10,562,515.20
	(MJ/annum)		(MJ/annum)	(MJ/annum)
	Past 1 st 12-month	Past 2 nd 12-month	Past 3 rd 12-month	
4) Annual Energy Utilisation Index (EUI) of last 36-month (MJ/m ² /annum) (EAC Clause 8.1(g)ii) (Value in kWh/m ² /annum can be obtained by dividing the MJ/m ² /annum figure by 3.6)		79.99	65.03	76.64
	(MJ/m ² /annum)		(MJ/m ² /annum)	(MJ/m ² /annum)
	Past 1 st 12-month	Past 2 nd 12-month	Past 3 rd 12-month	
5) Monthly EUI of past 1st 12-month period (MJ/m ² /month) (EAC Clause 8.1(g)iii)	8.06	6.55	6.50	4.85
	1st mth	2nd mth	3rd mth	4th mth
	4.53	5.47	5.25	6.35
	5th mth	6th mth	7th mth	8th mth
	7.05	7.72	8.57	9.09
	9th mth	10th mth	11th mth	12th mth ³¹
6) Annual energy consumption breakdown, of past 1 st 12-month period (MJ/annum) (EAC Clause 8.1(g)iv)	7,985,192.00	803,217.00	254,793.00	966,081.00
	Air-conditioning ³²	Lighting	Lift & Escalator	Others ³³
7) Energy supply from CBSI to building's units, as a percentage of the total energy consumption of past 1 st 12-month period (EAC Clause 8.1(h))				0.00%
				(%)
8) Energy bill reference month (month for which the most recent energy bill has been issued by the energy supply utility prior to commencement of energy audit, i.e. the 12 th month of item 5) ending on				26/6/2023
				(dd/mm/yyyy)

13. Annual EUI not equal to the summation of 12 monthly EUI (Part 2 of Form EE--EAes2021)



Common irregularities



Executive Summary of Energy Audit Report for Energy Audit Code (EAC)
(Please refer to Section 8, Code of Practice for Building Energy Audit)

Form EE-EAes

Part 1 – Administrative Information & Building Characteristics		
(B) Building Characteristics (EAC Clause 8.1)		
(I) Building Type, Usage & Operation (Please click to select where applicable and insert N/A for non-applicable items.)		
1) Type of Building		
(a) Please choose the type (tick one item only) of building of the building entity ^{^2} audited :		
<input type="checkbox"/> Commercial building	<input type="checkbox"/> Commercial portion of composite (commercial &	<input type="checkbox"/> Commercial portion of composite (commercial & industrial) ^{^3} building
(b) Please indicate the portion of the building entity being common area ^{^4} :		%
(c) Please indicate the no. of blocks ^{^2} of the building entity:		no. of blocks
2) Total internal floor area ^{^5} of the building entity (m ²):		
3) No. of floors ^{^6} of the building entity:		
4) Major type of building façade:	<input type="checkbox"/> Curtain wall <input type="checkbox"/> Non-curtain wall	
5) Date(s) of issue of occupation approval (dd/mm/yyyy) ^{^7} :		

14. Internal floor area / occupation permit not tally with last EA Report



Common irregularities



Section B 乙部:
Declaration 聲明

To 致: **Building owner 建築物擁有人** ←

cc 副本抄送: The Director of Electrical and Mechanical Services 機電工程署署長

In accordance with **section 22** of the Buildings Energy Efficiency Ordinance (Chapter 610), I, (full name) _____, Registered Energy Assessor (Registration No.: _____) certify that an Energy Audit in respect of the above building was completed on _____ / _____ / _____ (DD/MM/YYYY). This Energy Audit Form will expire on _____ / _____ / _____ (DD/MM/YYYY). (see note 4)

The energy utilization index (EUI) per annum of the past 12-month period of the above building is _____ MJ/m²/annum, equivalent to _____ kWh/m²/annum. (see note 5)

茲根據建築物能源效益條例(第 610 章)第 22 條之規定, 本人(姓名) _____ 作為註冊能源效益評核人(註冊號碼: _____), 現證明上述建築物的能源審核已於 _____ 年 _____ 月 _____ 日完成。本能源審核表格將於 _____ 年 _____ 月 _____ 日屆滿。(見須知事項 4)

有關上述建築物過去 12 個月期間的按年計能源使用指數為 _____ 兆焦耳/平方米/年, 相當於 _____ 千瓦小時/平方米/年。(見須知事項 5)

Signature of Registered Energy Assessor
註冊能源效益評核人簽名

Date of issue (DD/MM/YYYY)
簽發日期 (日/月/年)

1/5

kWh/m²/annum

Expiry Date
屆滿日期 _____ / _____ / _____

Completion Date
完成日期 _____ / _____ / _____

No Energy Audit conducted previously
以前沒有進行能源審核

Energy Audit conducted previously
曾經進行能源審核

Previous Energy Utilization Index (per annum)
上次能源使用指數(按年計)

MJ/m²/annum

kWh/m²/annum

Completion Date
完成日期 _____ / _____ / _____

Comparison of EUI with previous energy audit
與上次能源使用指數比較

--- %

(See note 5 - 7)
(見須知事項 5 - 7)

EMSD/EE5 (Rev. 09/22)

- REA to issue the original certified copies of the Energy Audit Form and the Energy Audit Report to the relevant building owner according to Section 22 of Cap. 610.



Common irregularities



- For the renewal of energy audit, REA should strongly remind and advise the building owner to properly maintain the original of energy audit report including the Form EE5 (Energy Audit Form) as well as Form EE-EA (Energy Audit Checklist), as well as for EMSD's inspection. **Their copies would not be provided by EMSD except a duplicate copy of the Energy Audit Form by an formal application (by Form EE7) by the building owner.**





Common irregularities in completing BEEO submissions – Form EE4 (FOC)



Common irregularities



Buildings Energy Efficiency Ordinance (Cap. 610)

ABOUT BEEO | **CODES AND FORMS** | **CIRCULAR** | REGISTER & LIST | REGISTERED ENERGY ASSESSOR (REA) | PUBLICITY | FAQs | USEFUL LINKS | CONSULTATION

Circular

Circular

Date	Circular No.	[PDF format]
31-12-2021	1/2021	Launch of the BEC 2021 and the EAC 2021 (202KB)
29-07-2022	1/2022	Launch of Technical Guidelines and Technical Forms for BEC 2021 and EAC 2021 (565 KB)
26-09-2022	2/2022	Revision 09/22 of Energy Audit Form EE5 (480 KB)
30-06-2023	1/2023	Revision 06/23 of Form EE3, Form EE-SU and Form EE-ET (512 KB)

Get Vaccinated
Together, We Fight the Virus!

香港通 碳中和
向 Carbon Neutral@HK

全英節能 綠標有計
Energy Savings For All

15. The completed forms are old version or obsoleted (check latest circulars and latest forms are available in internet)

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Last revision date: 29 Jul, 2022





Schedule 3

[ss. 2 & 43]

Major Retrofitting Works

(Format changes—E.R. 1 of 2017)

16. The work submitted for FOC may not be justified as a “Major Retrofitting Works”. The definitions are as follows:

1. Works involving addition or replacement of a building services installation specified in a code of practice that covers one or more places with a floor area or total floor area of not less than 500 m² under the same series of works within 12 months in a unit or a common area of a prescribed building.
2. Addition or replacement of a main component of a central building services installation, including—
 - (a) addition or replacement of a complete electrical circuit at rating of 400A or above;
 - (b) addition or replacement of a unitary air-conditioner or air-conditioning chiller of a cooling or heating rating at or exceeding 350 kW; or
 - (c) addition or replacement of the motor drive and mechanical drive of a lift, an escalator or a passenger conveyor.



Common irregularities



Part 3

Major Retrofitting Works in Prescribed Buildings

(Format changes—E.R. 1 of 2017)

16. **Application of Part 3**

This Part applies to a prescribed building.

17. **Duty to obtain Form of Compliance for major retrofitting works**

(1) Subject to subsection (4), if major retrofitting works are carried out in respect of any building services installation that serves any unit or common area of a building, a person who is the responsible person of the unit or the owner of the common area, as may be appropriate, as at the completion of the works must, within 2 months after the completion of the works, obtain a Form of Compliance issued in respect of the installation.

(2) Subject to subsection (4), if major retrofitting works are carried out in respect of any central building services installation, a person who is the owner of the installation as at the completion of the works must, within 2 months after the completion of the works, obtain a Form of Compliance issued in respect of the installation.

17. REA can't provide documentary proof to certify that the Original FOC has been sent to the Responsible Person for the building concerned within 2 months after the Work Completion Date. REA also needed to check the supporting document from responsible person to substantiate the "completion date" of the MRW.



Common irregularities



18. Requirements applicable to Form of Compliance

- (1) A Form of Compliance must—
- (a) be issued by a registered energy assessor;

Verified Copy

Last updated date
15.2.2017

Buildings Energy Efficiency Ordinance

Part 3
Section 18

3-6
Cap. 610

- (b) be in the specified form;
- (c) be accompanied by the documents specified in the form;
- (d) contain a declaration by the assessor that—
 - (i) the assessor has, in the 30 days before the declaration, personally inspected the building services installations in respect of which the major retrofitting works were carried out and which are specified in the Form of Compliance; and
 - (ii) the assessor is satisfied that the installations comply with the specified standards and requirements.

18. REA can't provide documentary proof to certify that the date of inspection by the REA of the Major Retrofitting Works.



Common irregularities



Section B 乙部：Declaration 聲明

To: The above mentioned Responsible Person
致：上述的負責人

cc: The Director of Electrical and Mechanical Services, and property management company (or if none, owner)
副本抄送：機電工程署署長、及物業管理公司(或如沒有，則業主)

In accordance with section 18 of the Buildings Energy Efficiency Ordinance (Chapter 610), I, Registered Energy Assessor, certify that the building services installations in respect of which the major retrofitting works were carried out in the above unit/common area have been designed, installed and completed in accordance with the standards and requirements not lower than the Code of Practice for Energy Efficiency of Building Services Installations (year) _____ Edition; and also confirm that I have, in the 30 days before the declaration, personally inspected the building services installations covered by this Form on _____ (DD/MM/YYYY) and the results of the inspection are satisfactory.
I also declare that all the information reported in this form and in all the attachments is true and correct.
根據建築物能源效益條例(第610章)第18條，本人作為註冊能源效益評核人，現核證於上述單位/公用地方內進行主要裝修工程的屋宇裝備裝置已按照不低於《屋宇裝備裝置能源效益實務守則》(版本見上述英文段落)的標準及規定設計、裝設及完成；及確認本人已在作出本聲明之前的30日內，親自檢查此表格所涵蓋的屋宇裝備裝置(檢查日期見上述英文段落)並滿意檢查結果。
本人亦聲明在本表格填報及所有附件內的一切資料全屬真確無訛。

Registered Energy Assessor
註冊能源效益評核人

Salutation
稱謂 Mr. / Miss / Ms. *
先生/小姐/女士 *

English Name
英文姓名 _____

Chinese Name
中文姓名 _____

Correspondence Address
通訊地址

Room/Flat
室 _____ Floor
樓 _____ Block
座 _____

Building
大廈 _____

Street No.
街道號碼 _____ Street
街道 _____

District
地區 Hong Kong 香港
 Kowloon 九龍
 New Territories 新界

Telephone No.
電話號碼 _____ Fax No.
傳真號碼 _____

E-mail Address
電郵地址 _____

Registration No.
註冊號碼 _____ Expiry Date
屆滿日期 _____

DD / MM / YYYY
日 / 月 / 年

Signature of Registered Energy Assessor (see note 5)
註冊能源效益評核人簽署 (見須知事項 5)

Date (See note 6)
日期 (見須知事項 6)

DD / MM / YYYY
日 / 月 / 年

* Delete as appropriate (刪除不適用者)

3/6

EMSD/EE4 (Rev. 08/22)

19. The Declaration Date on different forms of one submission are different.

Technical Data of Lift & Escalator Installation for Building Energy Code (BEC) 2021

Form EE-LE

(Please refer to Section 8, Code of Practice for Energy Efficiency of Building Services Installation 2021 Edition)

Part 6 – Declaration

I, Registered Energy Assessor, hereby declare that all the information contained in this form and in the substantiation materials attached have been thoroughly examined and well prepared to demonstrate the compliance with the Building Energy Code.
I understand that any missing information, inconsistency and incorrectness on the submitted materials / information may result in jeopardizing the approval process and having the entire submission being rejected.

Name of the REA: _____ Registration No.: _____

Signature of the REA _____ Date: _____
DD / MM / YYYY

* Delete as appropriate (刪除不適用者)

1/11

EMSD/EE-SU (Rev. 06/23)

Date of Declaration by Registered Energy Assessor in Form EE1 / EE2 / EE3 / EE4 *:

載於表格EE1 / EE2 / EE3 / EE4 * 之能源效益評核人的聲明日期：

Is this submission to supersede a form submitted before? (Please give a "✓" in the appropriate box)





Common irregularities in completing BEEO submissions – COCR



Common irregularities



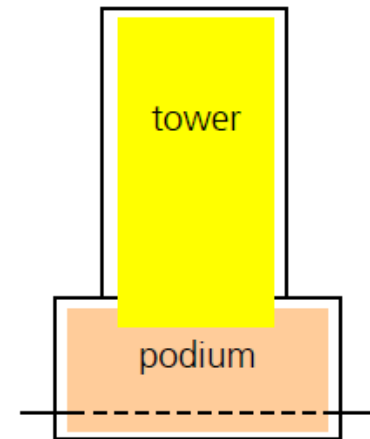
Technical Guidelines on Code of Practice for Energy Efficiency of Building Services Installation

Technical Compliance

4.2.7.1 COCR Per Podium Tower Pair

For a building complex consisting of a podium block and a single tower block, as shown in TG Figure 4.2.7.1, the complex is normally regarded as a single building block requiring a **single COCR** and thus single stage one and stage two declarations.

Figure 4.2.7.1 : Building complex with a podium and a tower counted as a single block



Common irregularities

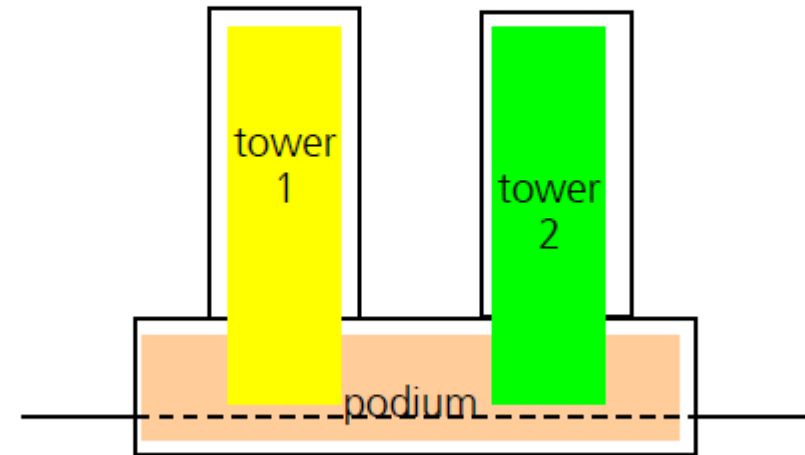


4.2.7.2 COCR Per Building Block

For a building complex consisting of three blocks, namely tower 1, tower 2 and podium, as shown in TG Figure 4.2.7.2, a COCR should be obtained for each building block, namely for podium block, tower 1 block and tower 2 block, that is **a total of 3 nos.**

COCRs, with separate stage one declarations and stage two declarations.

Figure 4.2.7.2 : Two towers with common podium counted as 3 nos. building blocks

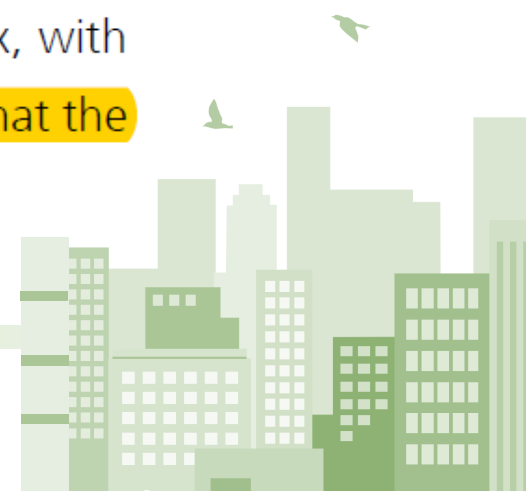
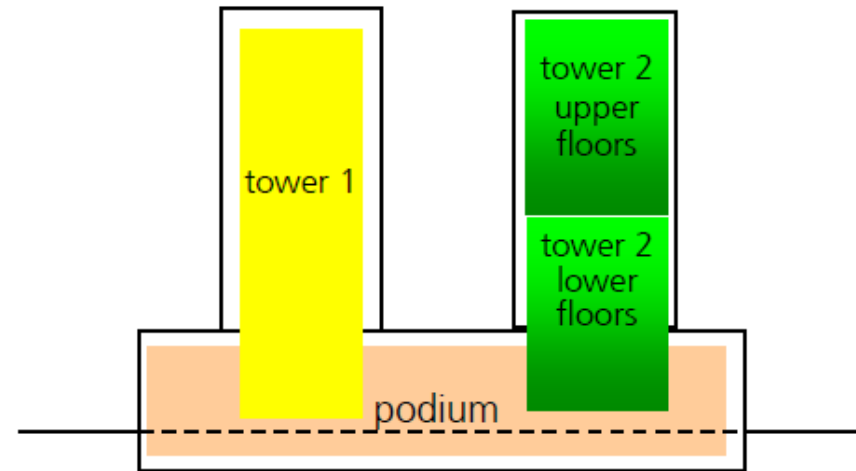


Common irregularities



4.2.7.3 Consider a building complex in TG Figure 4.2.7.3, which is similar to TG Figure 4.2.7.2, but this time tower 2 has different OAs respectively for its upper floors and lower floors. Now there are 4 nos. blocks, namely podium block, tower 1 block, tower 2 lower floors block and tower 2 upper floors block, and it is required to obtain for each of these 4 blocks a separate COCR, that is a total of 4 nos. COCRs for the complex, with separate stage one declarations and stage two declarations. Attention is drawn that the interpretation of OA covers also a temporary occupation permit.

Figure 4.2.7.3 : Building complex with different blocks and phased completion



Common irregularities



- Failed to submit the COCR stage one submission to the Director of the EMSD within 2 months after the day on which the consent to the commencement of building works for the superstructure construction of the building is given.
- Forget to provide copy of full set of Form BD 103 issued by BD or copy of “Order to Commence Work” or “Works Order” issued by ArchSD
- Forget to submit the original Form EE1 signed by RP and REA.
- Submit the COCR stage one for the building which is not governed under Schedule 1 of BEEO, such as:
 - residential building owned by a single owner
 - industrial building without common area
 - the building ceased to exist within 12 months after the date of the declaration



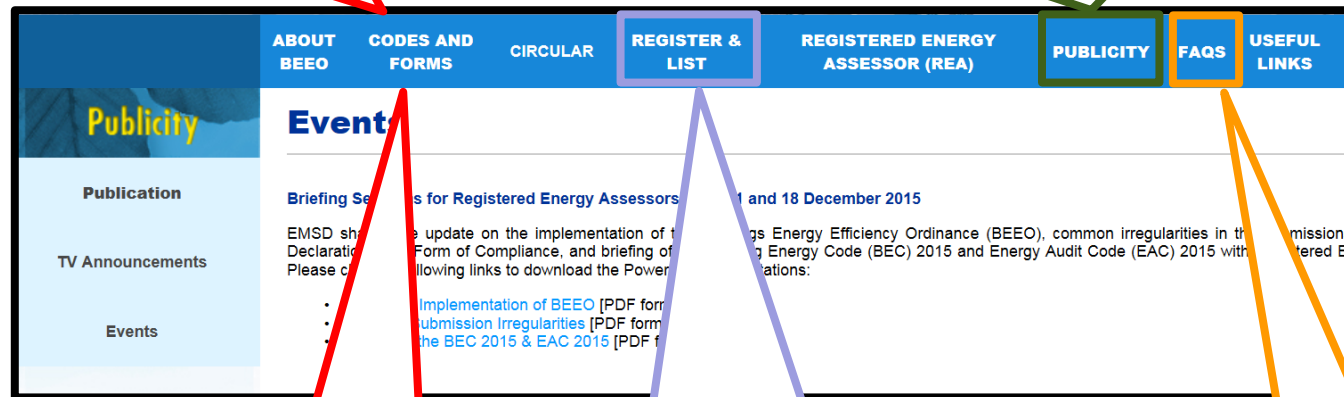
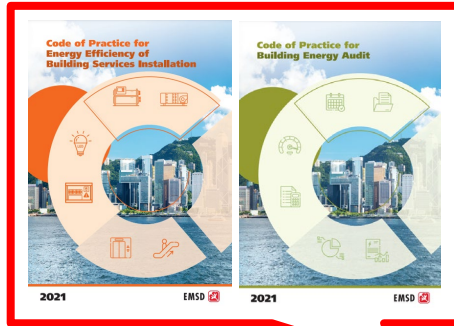
Common irregularities



- REA submitted for extension for COCR stage two submission by Form EE-ET close to the deadline.
- The work site declared by REA in COCR stage two submission was found work in progress and **not ready by our inspection.**



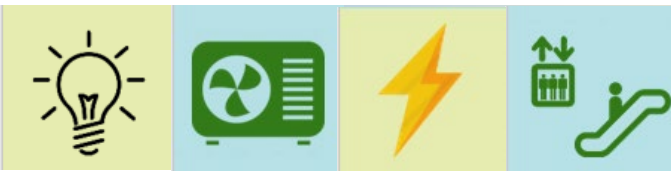
Further Information



- Specified Forms
- Technical Forms
- Technical Guidelines

- Register of REA and COCR
- List of Stage One Declaration, FOC, EA Form and IN

- Frequently Asked Questions



Thank You

