### **REA Briefing 2025**

# **Updated Submission Forms and Common Irregularities**

2 & 15 May 2025





### **Updated Submission Forms for Trade Faciliation**

### **Streamlining**

- Make use of existing project resources as supporting document (e.g. as-fitted schematics or layout drawings) and REA account for FULL compliance of BEC
- Streamline the requirement of annual energy consumption data for energy audit [at least 12-month (mandatory) + 24-month(prefer) in EAC 2024]

### **Standardizing**

- Focus on technical details of major equipment to facilitate the Energy Audit in future
- Keep a compliance checklist in TG for voluntary use (launch with TG)
- Issue a standardize calculation sheet for lighting power density for voluntary use (launch with TG)

### **Simple**

- Computerized the input for the submitted form and migrate to paperless submission
- Make electronic file acceptable for the submission of supporting documents in the Technical Form (EE-TECH)
   (Entire submission via EMSD online submission platform is also recommended)
- Prepare for fully implementation of E-submission for REA renewal / new application

### **Streamline of BEEO Submission Forms**

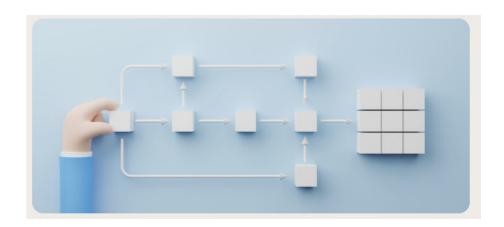
### • Original Form - divided by Specific Function

Single function for each of Forms (i.e. Stage 1, Stage 2, FOC, EA, checklist, supplementary info., technical forms for each installation, etc)

### After Streamline - divided by Type of Submission

=> 1 Admin Form + 1 Technical form for Stage 1/ Stage 2/ FOC Submission

=> 1 Energy Audit Form + 1 EA Report Template for Energy Audit



### **Streamline of the BEEO Submission Forms**

#### **Stage One/Two and FOC**

Form No.	Type of Form	Nos. of page	After Streamline	Nos. of Page
EE1	Stage One Declaration	6	Consolidated EE1	8
EE2	Stage Two Declaration	6	Consolidated EE2	8
EE3	Application for renewal of COCR	6	Consolidated to EE3	9
EE4	Form of Compliance	6	Consolidated EE4	9
EE-SU	Supplementary Information	11	Consolidate to EE1/2/3/4	-
EE-CH	Checklist of COCR / FOC Submission	1	Consolidate to EE1/2/3/4	-

#### **Technical Form**

Form No.	Type of Form	Nos. of page	After Streamline	Nos. of Page
EE- TECH	Technical Data of Building Services Installation	+	New EE-TECH Simplify with essential info.	11
EE-LG	Technical Data of Lighting Installation	7	Consolidate to EE-TECH	-
EE-AC	Technical Data of Air-conditioning Installation	25	Consolidate to EE-TECH	-
EE-EL	Technical Data of Electrical Installation	10	Consolidate to EE-TECH	-
EE-LE	Technical Data of Lift & Escalator Installation	11	Consolidate to EE-TECH	-
EE-CH	Checklist of LG/AC/EL/LE Submission	4	Consolidate to EE-TECH	-

#### **Energy Audit**

Form No.	Type of Form / Report	Nos. of page	After Streamline	Nos. of Page
EE5	Energy Audit Form	5	Simplify with essential info.	3
EE-EAR	Energy Audit Report Template	-	New EE-EAR	33
EE- EAes	Executive Summary of Energy Audit Report	11	Consolidate to EE-EAR	-
EE-EA	Energy Audit Checklist	3	Consolidate to EE-EAR	-
-	Content of Energy Report prepared by REA	~60		

**Remarks**: Energy Audit Report Template (EE-EAR) to be issued at the soonest

#### Streamline of the BEEO Submission Forms

#### **Stage One/Two and FOC**

#### Form EE1 /EE2 /EE3 /EE4

- Only 1 admin form
- Filling 1 form instead of 3

#### Form EE-SU & EE-CH

 Combine supplementary information and checklist to EE1 to EE4

#### **Technical Form**

#### Form EE-TECH (new)

- Only 1 technical form
- Filling 1 form instead of 5

### Form EE-LG, EE-AC, EE-EL, EE-LE & EE-CH

- Combine 4 installations and checklist into 1 form
- Trim down the checklist to major equipment only

#### **Energy Audit**

#### Form EE5 & EE-EAR (new)

- Only 1 EA report template +
- Form FF5

## Form EE-EAes & EE-EA and Energy Audit Report

 Combine the executive summary, checklist and standardize a simplified report template

#### Example: Stage Two Declaration c/w Technical Form Submission

Before: EE2 + EE-SU + EE-CH = 22 pages Before: (EE-LG + AC + EL + LE) = 53 pages After : New EE2 = 8 pages After : New EE-TECH = 11 pages

(reduced by > 70%)

#### **Example: Energy Audit Submission**

Before: EE5 + EE-EAes + EE-EA + Report = 79 pages After : EE5 + New EE-EAR = 36 pages

(reduced by **>50%**)

### Streamline of the BEEO Submission Form – EE TECH 2024 (V.0)

Documents submitted for demonstration of compliance	No. of sheets
Please tick where applicable)  Lighting Installation (Section 5 of BEC)	
☐ Lighting layout(s) and calculation sheet(s) for Lighting Power Density and provi Lighting Control (For compliance of BEC Clause 5.4, 5.5 and 5.6)	sion of Automatic
<ul> <li>Calculation sheet(s) for provision of daylight responsive control for daylight and daylight control zone. (For compliance of BEC Clause 5.6.2 and 5.6.3)</li> </ul>	d the area of
Air Conditioning Installation (Section 6 of BEC)	
Schematic or layout drawings with highlighted the air conditioning system ser zone(s) and comfort only zone(s) (if any) (For compliance of BEC Clause 6.5) It AC system(s) to be shared with any processing zone if this item not be selecte	is deemed to no
☐ T&C document(s) for the air leakage limit of a ductwork system(s) (For compliance Clause 6.6)	ance of BEC
☐ Equipment Schedules and / or Calculation Sheet for system fan power (For cor Clause 6.7)	npliance of BEC
☐ Schematic and / or control drawings showing the low-speed operation of CAV VAV systems (For compliance of BEC Clause 6.7.4.1 and 6.7.4.2)	and / or
☐ Schematic and / or control drawings showing the water side pumping arrange design arrangement under part load condition (For compliance of BEC Clause	
$\hfill\square$ Calculation Sheet for frictional loss of water pipping system (For compliance of	BEC Clause 6.9)
Schematic and / or control drawings and / or BMS captures showing the control temperature / humidity / provision of auto damper / demand control of ventila provision / Chilled water temperature reset (For compliance of BEC Clause 6.1	tion / DDC
☐ Schedule showing the thermal insulation thickness and thermal properties for casing, ductwork & pipework (For compliance of BEC Clause 6.11)	installed AHU
☐ Equipment Schedules and Manufacturer-issued technical documents to indicate rating and COP of Air-conditioning equipment(s) (For compliance of BEC Clause	se 6.12)
☐ Equipment Schedules and Manufacturer-issued technical documents of cooling performance (For compliance of BEC Clause 6.12.4 & 6.12.5)	5) For su structu
☐ LMCP schematic(s) and / or control drawing(s) showing the energy meter prov	ision of air- 6) REA a

conditioning equipment(s) and AHU(s) (For compliance of BEC Clause 6.13)

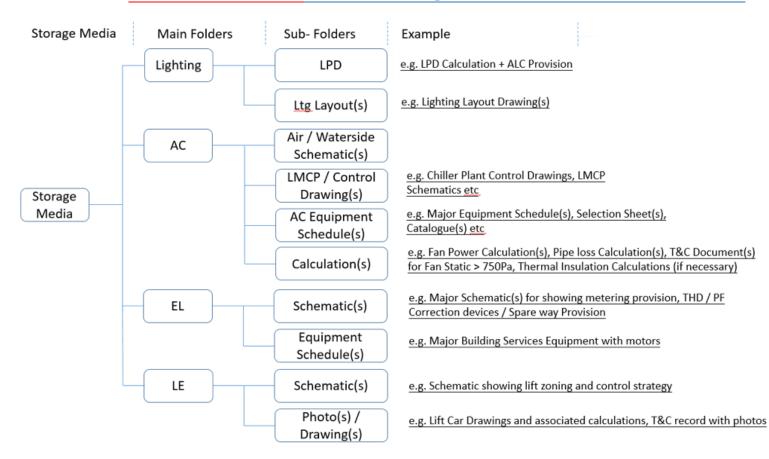
Accept the supporting documents under EE-TECH to be submitted in electronic files (save in storage media (i.e. CD-Rom, USB, etc)

Electrical Installation (Section 7 of BEC)					
	☐ Electrical schematic(s) highlighted the provision of metering device(s); power factor correction device(s) or connection point(s) for correction device(s) and / or harmonic correction device(s) or connection point(s) for correction device(s) and calculation sheet(s) (For compliance of BEC Clause 7.4, 7.6 and 7.7)				
	Equipment schedules and Manufacturer-issued technical documents to indicate the motor rating and its rated efficiency (For compliance of BEC Clause 7.5)				
Lift	and Escalator Installation (BEC Section 8)				
	Lift fit-out drawing and calculation sheet for lift decoration load (For compliance of BEC Clause 8.5.2)				
	Lift Schematic drawing(s) showing the number of lift and / or escalators and control diagram showing the parking mode and lift lighting and ventilation control (For compliance of BEC Clause 8.5.3, 8.5.4 and 8.5.6)				
	lift drawing or photo record for the lift regenerative brake (For compliance of BEC Clause 8.5.3 and 8.5.5)				
	Control diagram showing the speed reduction mode of escalator (For compliance of BEC Clause 8.5.7)				
	Schematic and photo record showing the provision of metering device (For compliance of BEC Clause 8.7)				
	Others (Please give details)				

- For supporting document, the REA should submit electronic file of PDF format with proper file name & folder structure and save in a media (e.g. CD-Rom, etc.) to attach in the COCR / FOC submission.
- REA are also recommended to make the entire COCR / FOC submission through the EMSD online electronic submission platform (https://wbrs.emsd.gov.hk/psps/en/System/login.jsp)

### Streamline of the BEEO Submission Form – EE TECH 2024 (V.0)

#### electronic files (save in storage media (i.e. CD-Rom, USB, etc)



Sample hierarchical folder structure

### Streamline of the BEEO Submission Form – EE TECH 2024 (V.0)

#### **LPD Calculations**

Standard Template for Lighting Power Density Calculation (LPD) & Automatic Lighting Control (ALC)

				Luminarie S	chedule (Ple	ase add extra	column if ne	ecessary)								
			Designation	Fixture 1	ixture 1 Fixture 2 Fixture 3			7.1					Provision of			
Name of space / Space Ref. No.*1	Type of Space	Area of Space (m²)	Nominal Lamp Wattage (W)	10	12	20				Total Citcuit Wattage	Installed LPD (W/m²)	m²) Allowed	Compliance Check for	Control		Provision of ALC fulfill BFC Clause
		Space (III )	Gear Loss (W)	0.8	1	1.5				(W) *2	*3	LPD (W/m²)	LPD	Required	BEC Clause	
			Total Wattage (W)	10.8	13	21.5	0	0	0						3.3	
Testing	Bar / Lounge	50	95	1	1	1				45.3	0.906	10	YES	No	Yes	Yes
			l space							0	ı	N/A	N/A	N/A		
			each							0		N/A	N/A	N/A		
			. <b>.</b>							0		N/A	N/A	N/A		
			inari							0		N/A	N/A	N/A		
			of luminarie							0		N/A	N/A	N/A		
			ge of							0		N/A	N/A	N/A		
			ћ tуре							0		N/A	N/A	N/A		
			each							0		N/A	N/A	N/A		
			ty of							0		N/A	N/A	N/A		
			quantity							n		N/A	N/A	N/A		
			T ed							0		N/A	N/A	N/A		
			ify t							0		N/A	N/A	N/A		
			Please specify the							0		N/A	N/A	N/A		
										0		N/A	N/A	N/A		
			ä							0		N/A	N/A	N/A		
Remarks											'					

<sup>\*1</sup> Please indicate the space Ref No. / name of space on the relevant drawing. Spaces each having total electrical power consumed by the complete fiexed lighting installation not exceeding 70W may be exclude

<sup>&#</sup>x27;2 Submit details of each of the lamp type, nominal lamp wattage & lamp control gear loss in that space on separate sheets with clear cross-referencing and attach to this form

<sup>\*3</sup> Lighting where BEC Clause 5.1.2 is applicable and emergency lighting of non-maintained type can be excluded in the LPD calculation

### Streamline of the BEEO Submission Form – EE5 (Rev. 3/25)

Simplify the Energy Audit Form EE5 to Fill-in essential information only

Use commencement date of Energy Audit to count for the interval of next energy audit



### Streamline of the BEEO Submission Form – EA1 (Rev. 3/25)

# Amend the Form EA1 with Option to publish the contact details

### Form EA1 表格 EA1

| 機電工程署 | EMSD

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



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
□ New Application for Registration as a Registered Energy Assessor 新申請為註冊能源效益評核人

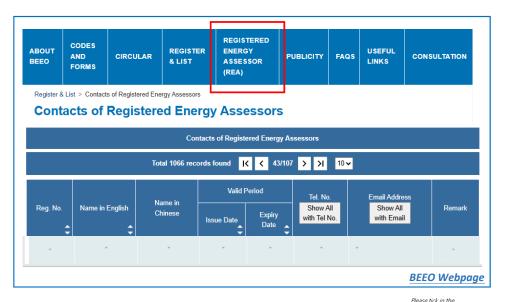
#### Section A 甲部: Personal Details 個人資料 English

英文

Name: 姓名: (Surname first) (姓氏先行)

Chinese Mr. / Miss / Ms. \* Year of B

Disclosure of Particulars



1	Section E 戊部:Disclosure of Particulars 披露資訊	appropriate box(s) 請在適用 空格加上/號			
	As a Registered Energy Assessor (REA), I (agree / do not agree) * to publish my following information at the Electrical and Mechanical Services Department's webpage for public's reference:				
I	作為註冊能源效益評核人,本人 (同意/不同意) * 披露以下個人資料於機電工程署網頁內供公眾查閱:				
ı	(i) Email address (電郵地址):				
l	(ii) Telephone number (電話號碼):				
l					
l					
l					
l					

\* Delete as appropriate (删除不適用者)

3/11

EMSD/EE/EA1 (Rev. 03/25)

### **Effective Date of New Forms & Grace Period**

1 Apr 2025

Effective Date of New Forms (03/25)

23 August 2025

only accept
New Forms (03/25)



**Grace Period** 

a grace period is provided to continue using the previous versions of forms signed by REA until 22 August 2025 to allow sufficient time for the trade to transition to the new forms

Obsolete previous version of forms

#### **Example of Stage 2 Declaration:**

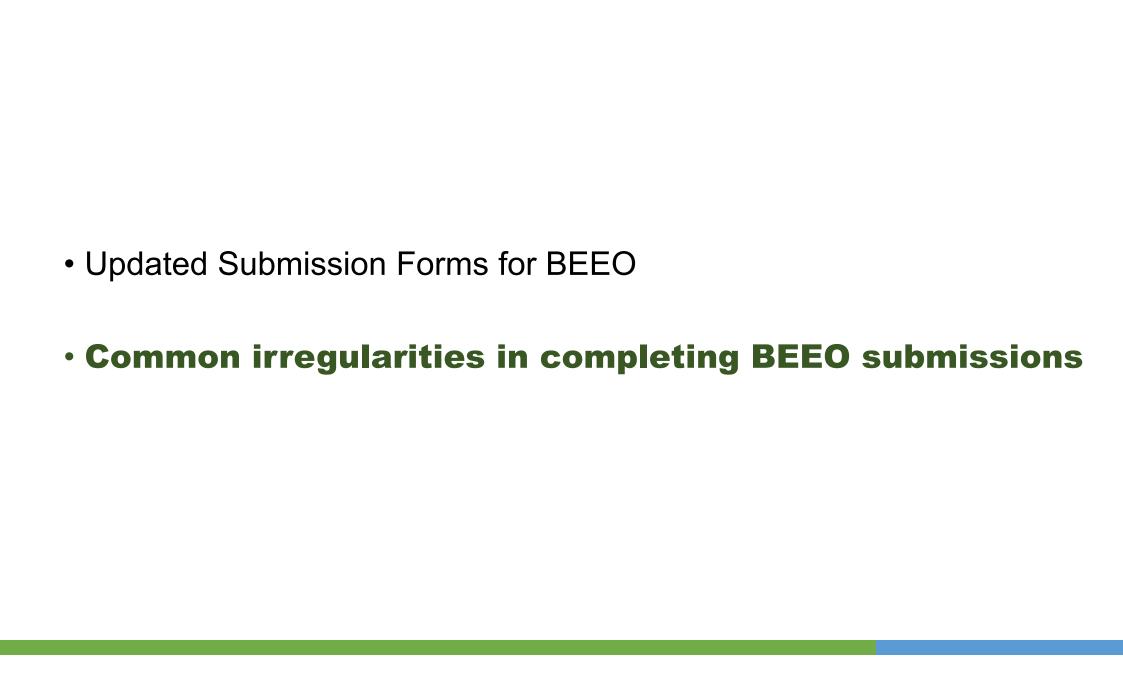
REA is free to choose at the moment,

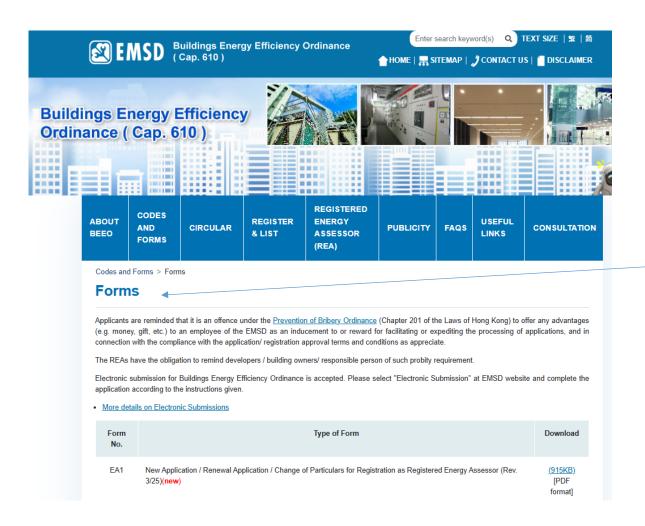
(a) using past versions of forms:

EE2(rev 08/22) + EE-SU(rev 06/23) + EE-CH(V.3) and technical forms (EE-LG, EE-AC, EE-EL, EE-LE);

(b) using new revision of forms:

EE2(rev 03/25) and technical form (EE-TECH 2024 (V.0)) BUT follow applicable version of BEC requirements)





- 1. Download the latest version of the standard forms / check if your standard forms in hand is up-to-date.
- 2. Submit the originals of the standard forms.
- 3. When re-submission is necessary, the signed date should be the same as in your first submission

# Section B 乙部: Ground for the extension 延長期限的理由 Brief description of the ground for the extension: 簡並延長期限的理由: (Insert additional paper if necessary) (如有需要,請另加附頁) Delete as appropriate (删除不適用者) EMSD/EE-ET (Rev 06/23) Apply for extension to: 申請延期至:

For completing Form EE-ET,

- 1. The ground for extension must demonstrate the no. of days for extension is justifiable.
- 2. Document proofs such as site work photos, shipping record, work programme, emails by the client, etc.

Please tick in the appropriate

box(s) 請在適用

\* Delete as appropriate (删除不適用者) 2/11 EMSD/EE/EA1 (Rev. 03/25)

#### Section C 丙部: Relevant Practical Experience 有關實務經驗

(Please read the attached "Notes to Complete this Form" item No.2 ) (請參閱於阿頁的「填寫本表格的懶註」第2項

From (DD/MM/YY) 由	To (DD/MM/YY) 至	standards and r	equirements in building ser	relating to energy efficiency in buildings (e.g. applied energy efficiency vices installations, Energy Audit and etc.) 例如:應用能源效益標準及要求於屋宇裝備裝置、能源審核等)
(日/月/年)	(日/月/年)	Position 職位	Company Name 公司名稱	Description 描述

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

(i) Lattach documentary proof of relevant practical experience.

本人隨申請表附上相關實務經驗證明。

(ii) Lattach 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。

(iii) Lattach 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)

For completing Form EA1, examples of practical experience are:

- design, installation, testing and commissioning of air-conditioning, electrical, lighting or lift & escalators installation;
- 2. application of the HKEERSB; or
- 3. conduction of energy audit in building

Other typical problems would include:

- 1. The submitted Form EE5 for energy audit should be a coloured copy and not too blurred;
- 2. For Energy Audit, information of Owner of Building/Representative of Owner of Building is incomplete; &
- 3. For FOC submissions, the location of works are unclear and the scale of drawing layout is too small or even unreadable;

# Thank You

