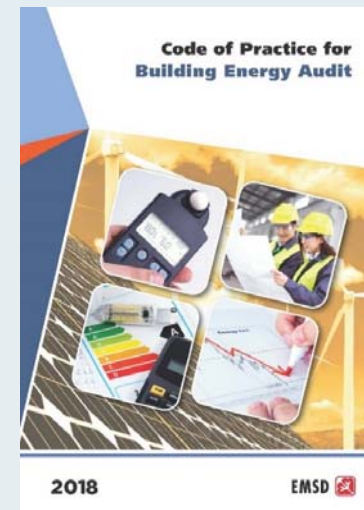
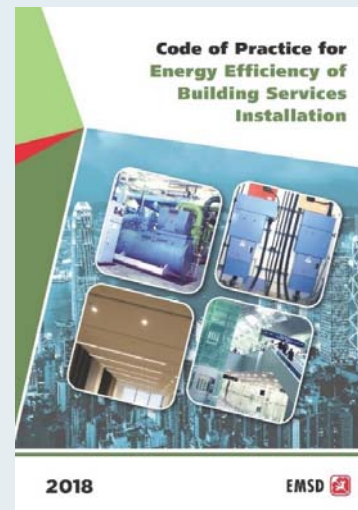




REA Briefing on BEC 2018 & EAC 2018 Edition under the Buildings Energy Efficiency Ordinance (Cap 610)

25 Feb. 2019
28 Feb. 2019
01 Mar. 2019



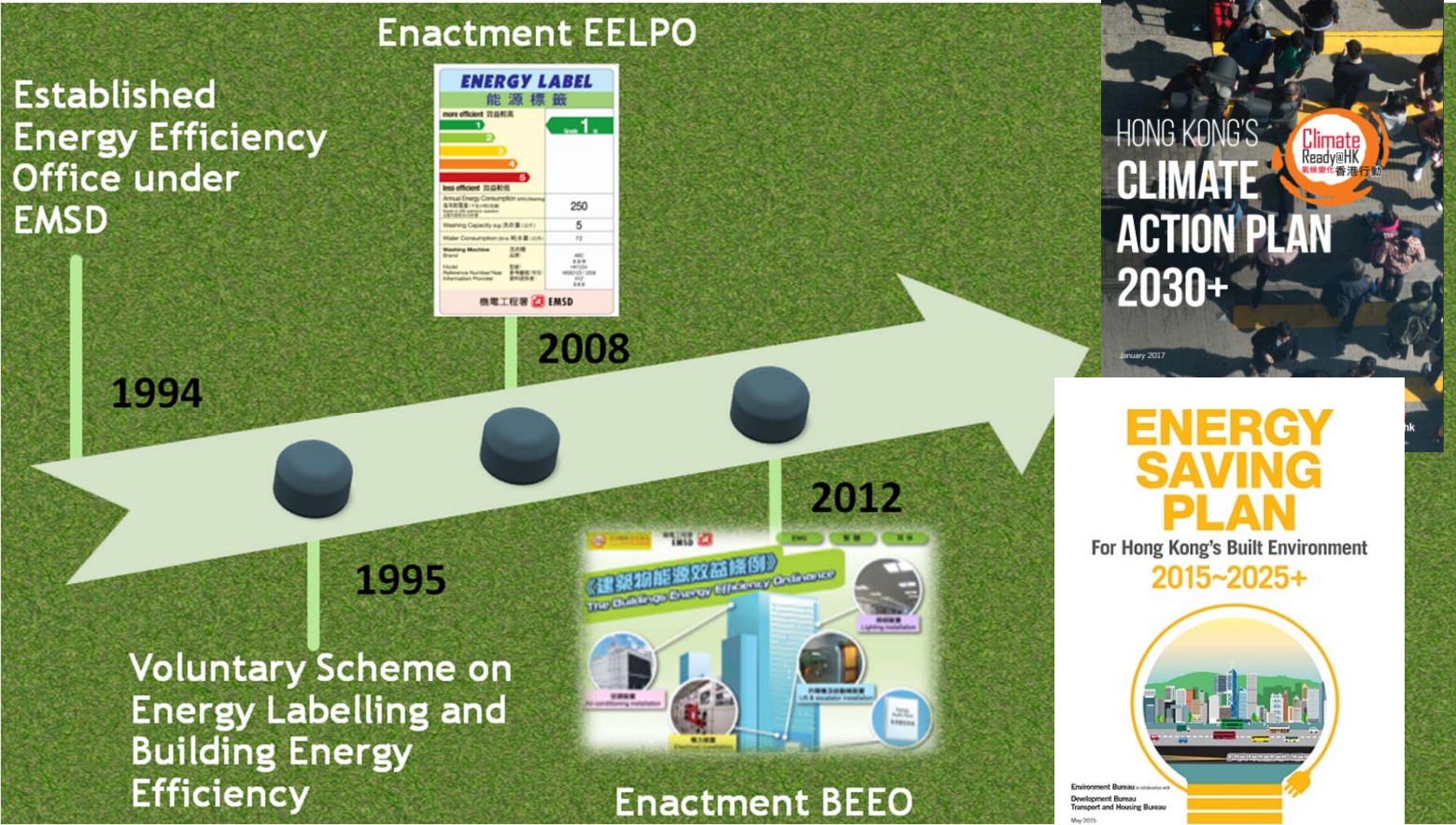
Energy Efficiency Office



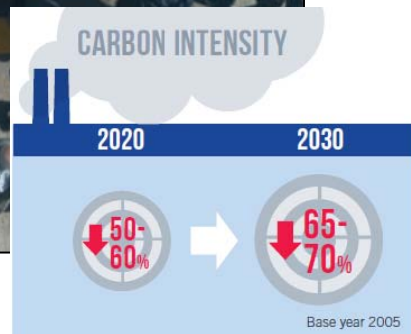
Topics

- Background
- Summary of Changes in BEC 2018 & EAC 2018
- Common Non-compliance and Irregularities
- Summary of Changes in TG-RCx 2018

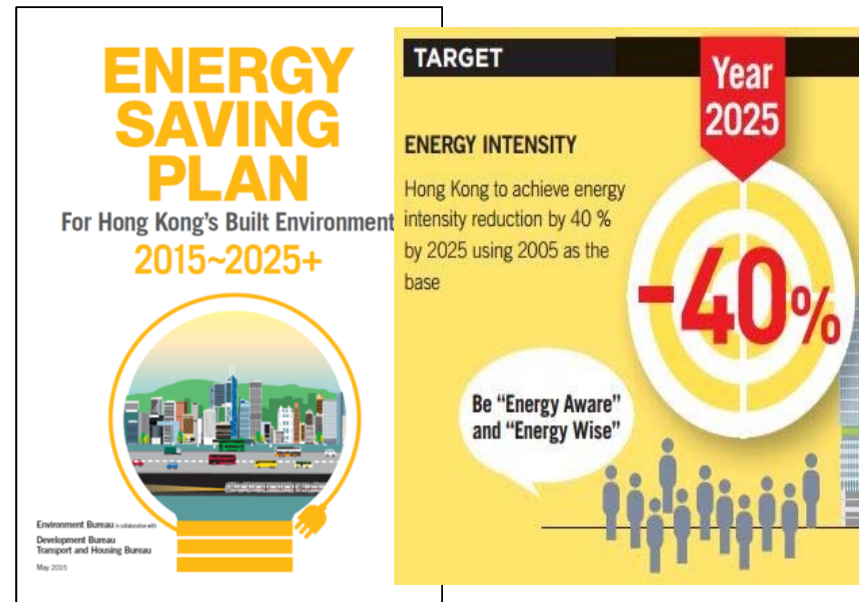
Road Map on Energy Efficiency



Migration Action in HK

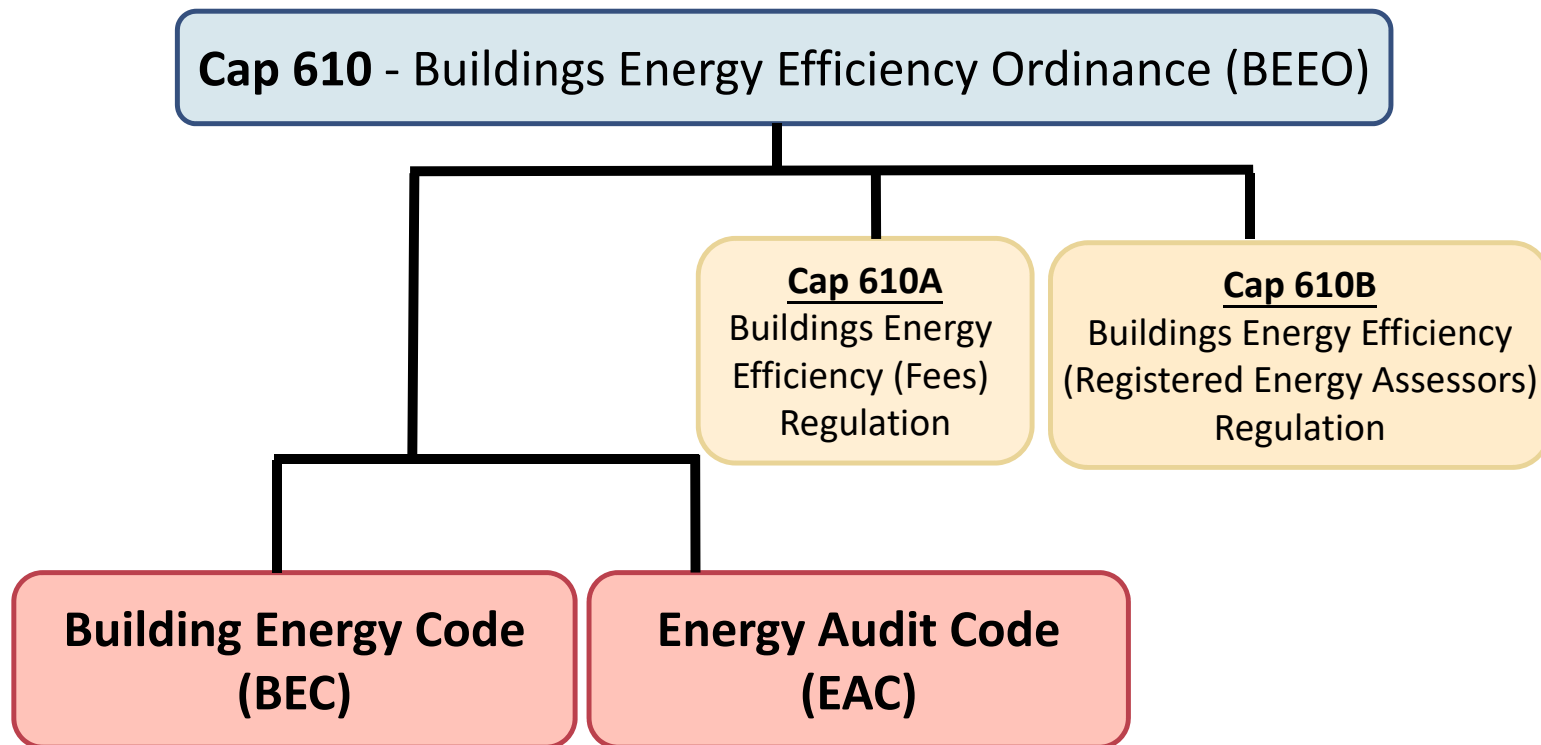


- BEC review every 3 years
- Retro-commissioning on existing buildings

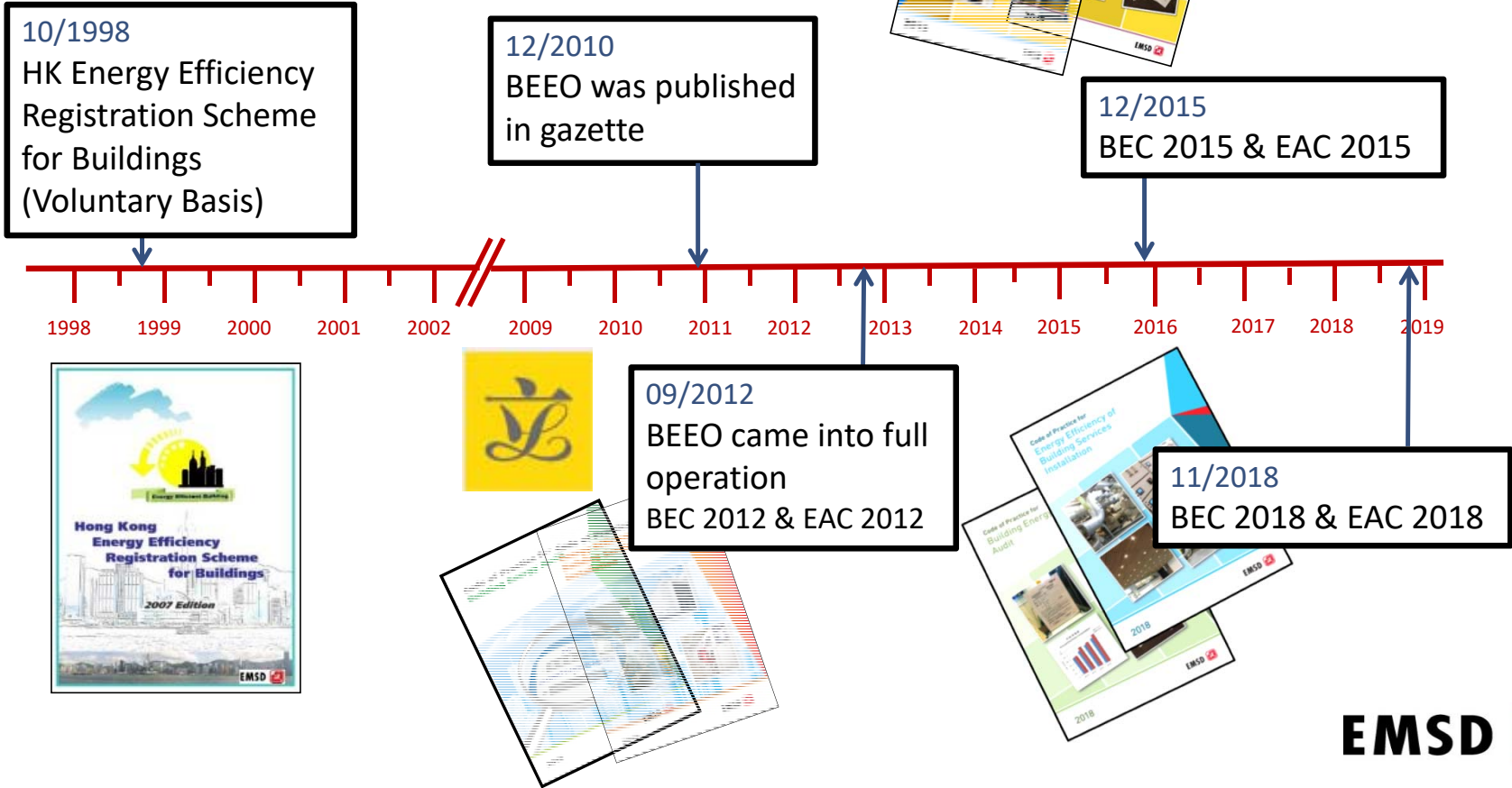


Environmental Bureau of HKSAR

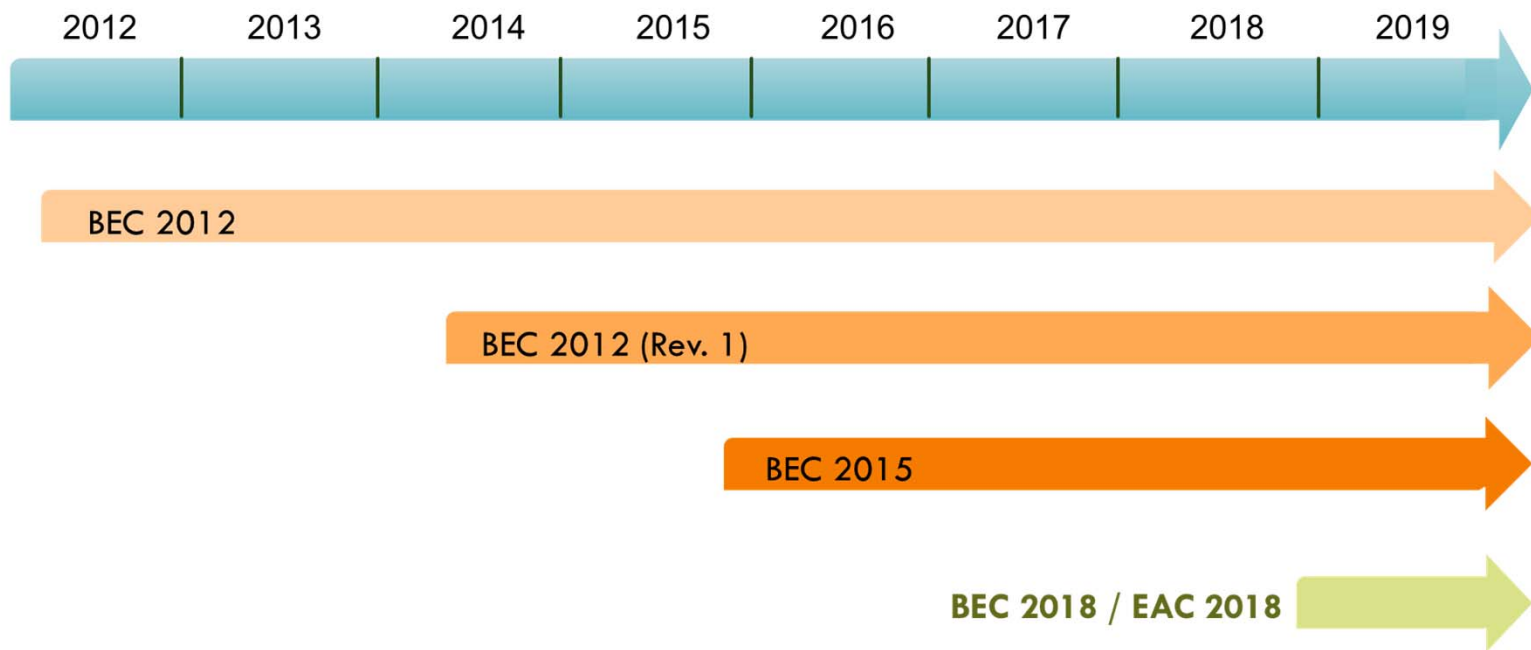
BEEO Legislative Framework



Milestone of the BEEO



Review of the Codes



Review of the Codes

By the **Technical Taskforce** and its **6 Working Groups** consists of **34** representative organizations:

➤ 13 Professional Institutions including green groups	ASHRAE, HKIE, CIBSE, CIE, IET, BEAM Society, etc.
➤ 14 Trade associations, Consultant / contractor associations	HKACRA, ACE, FEMC, LECA, BSOMES etc.
➤ 3 University Academia	HKPU, HKUST & HKU
➤ 2 Utility Companies	HKE, CLP
➤ 2 Government departments	ArchSD, Housing Dept.

BEEO Legislative Framework

Energy Efficiency Standards

- Hotel & guesthouse
- Educational building
- Community building (Social Service, Elderly Centers)
- Municipal services (Library, Indoor Game Hall, Market etc.)
- Hospital & clinic
- Government building
- Airport passenger building
- Railway station
- Commercial building
- Industrial building – common area
- Residential building – **common area**
- Composite building –
 - (schedule 1) prescribed portion
 - **common area** of residential portion or industrial portion

Energy Audit

- Commercial building
- Composite building – commercial portion



Building Energy Code: Energy Efficiency of Building Services Installations

Lighting Installation (Section 5)



Air-conditioning Installation (Section 6)



Electrical Installation (Section 7)



Lift and Escalator Installation (Section 8)



BEEO – The 3 Major Requirements

	Responsible party	Applicability	Code Compliance	Legal Obligation
Newly Constructed Building (Pt. 2)	Developer	4 key types of BSIs	BEC (Full)	Apply for COCR
Existing Building (Pt. 3)	Responsible person; Owner of installation(s)	Major Retrofitting Works (MRW)	BEC (Partial)	Obtain FOC
Comm. Bldg. or Comm. Portion of Composite Bldg (Pt. 4)	Building owner	Energy Audit	EAC – Energy Audit Code	Obtain EA Form and EA Report

(1) Newly Constructed Buildings

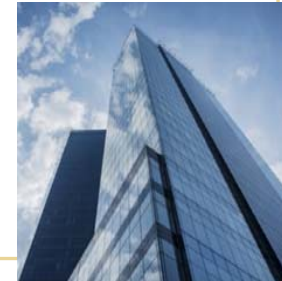
Stage One Declaration

- Developer engage **Registered Energy Assessor (REA)** to submit declaration **2 months after** obtaining consent to commencement of building works (開工紙)
- Declare the design of building services installations to comply with the BEC



Stage Two Declaration

- Developer engage **REA** to submits declaration **4 months after** the Occupation Permit (完工紙) is issued.
- Confirm **designed, installed and completed** BSIs complying with BEC
- 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



Lighting – 3kW
Chiller, U-AC, AHU – 60kW
L & E – motor drive & mechanical drive

Central BS installation (CBSI)

Addition/replacement of **main component**:



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

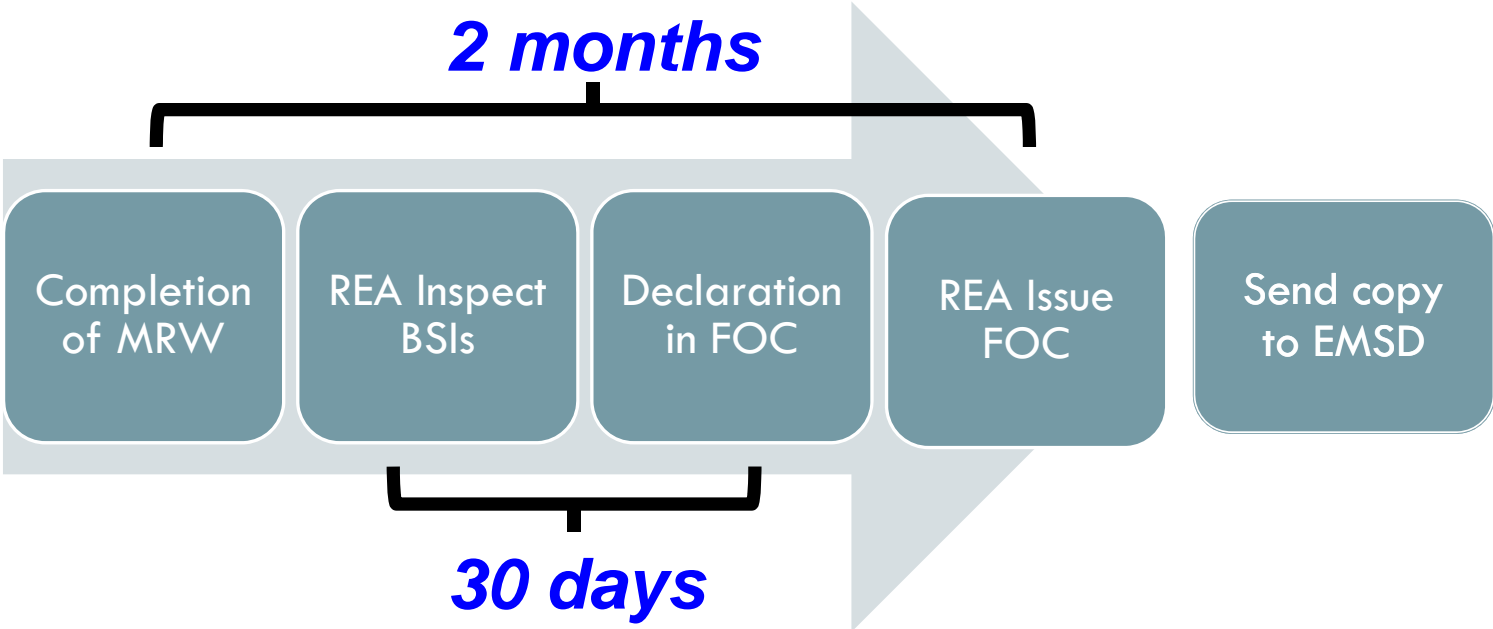


A/C installation
 $\geq 350\text{kW}$



motor drive +
mechanical
drive

(2) Major retrofitting works in existing buildings



Grace Period

BEC 2018

COCR - 6 months from gazette (16 May 2019)

FOC - 9 months from gazette (16 Aug 2019)

EAC 2018

9 months from gazette (16 Aug 2019)

Way Forward and Publicity Plan

Q1 2019	<ul style="list-style-type: none">➤ Conduction of briefings to different stakeholders (40 briefings/year upon gazette of BEC & EAC 2018)➤ New/update of publicity materials (Leaflets, posters)
Q2 2019	<ul style="list-style-type: none">➤ Technical Guidelines for BEC & EAC 2018➤ New Technical Forms for BEC & EAC 2018

Information Source

<http://www.emsd.gov.hk/bceo>

機電工程署
EMSD

ENG 繁體 简体

《建築物能源效益條例》
The Buildings Energy Efficiency Ordinance

空調裝置
Air-conditioning installation

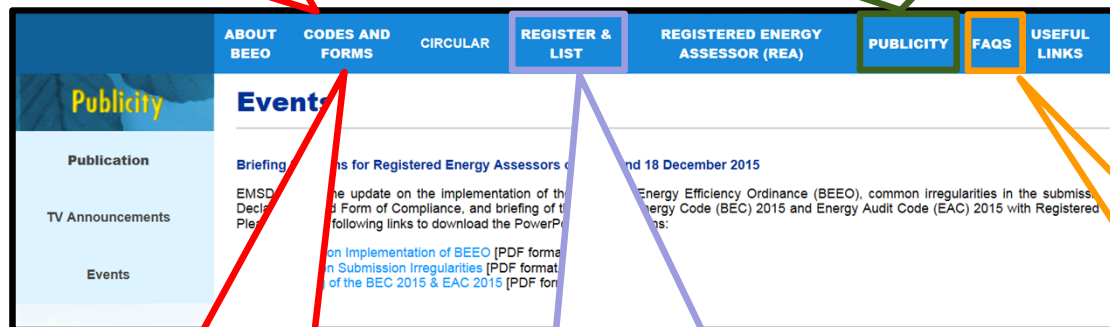
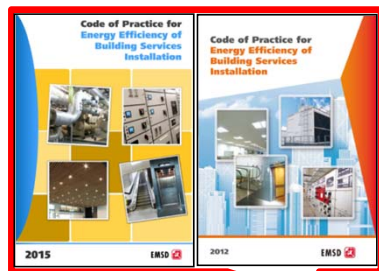
電力裝置
Electrical installation

升降機及自動梯裝置
Lift & escalator installation

照明裝置
Lighting installation

Energy Audit Form
能源審核表格

Information Source



- 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

