

Briefing Session on the Buildings Energy Efficiency Ordinance (Cap. 610) for Registered Energy Assessors

Energy Efficiency Office,
Electrical and Mechanical Services Department



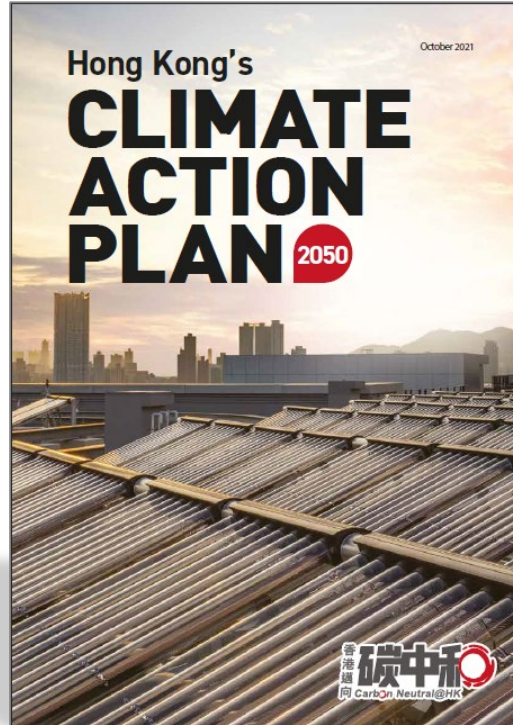
Climate Action Plan 2050



The Hong Kong Special Administrative Region of the People's Republic of China
The Chief Executive's 2021 Policy Address



https://www.policyaddress.gov.hk/2021/eng/pdf/supplement_6.pdf



https://www.climateready.gov.hk/files/pdf/CAP2050_booklet_en.pdf

Four decarbonisation strategies

- Net-zero Electricity Generation**: Represented by a water drop icon with a crossed-out plug and a wind turbine.
- Energy Saving and Green Buildings**: Represented by a building icon with a leaf.
- Green Transport**: Represented by icons for a person walking, a bicycle, and a green car.
- Waste Reduction**: Represented by icons for recycling bins and a trash can.

Before 2035

Before 2050

Total carbon emissions
Compared with 2005 level

50%

香港邁向 Carbon Neutral@HK

2035

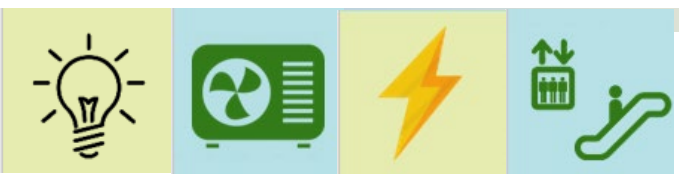
Electricity consumption (Compared with 2015)

COMMERCIAL BUILDINGS
15-20%

RESIDENTIAL BUILDINGS
10-15%

(Reduce by 30-40% subsequently)

(Reduce by 20-30% subsequently)



Hong Kong Situation



8,000+
Government
Buildings/ Facilities



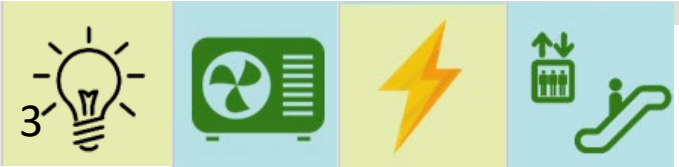
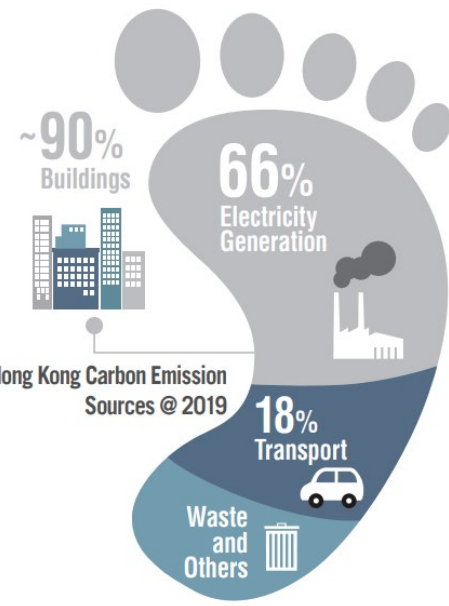
42,000+
Buildings in
Private Sector



500+
New Buildings
per year

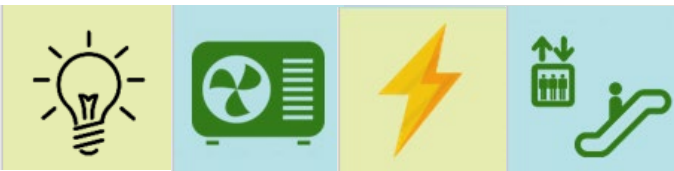
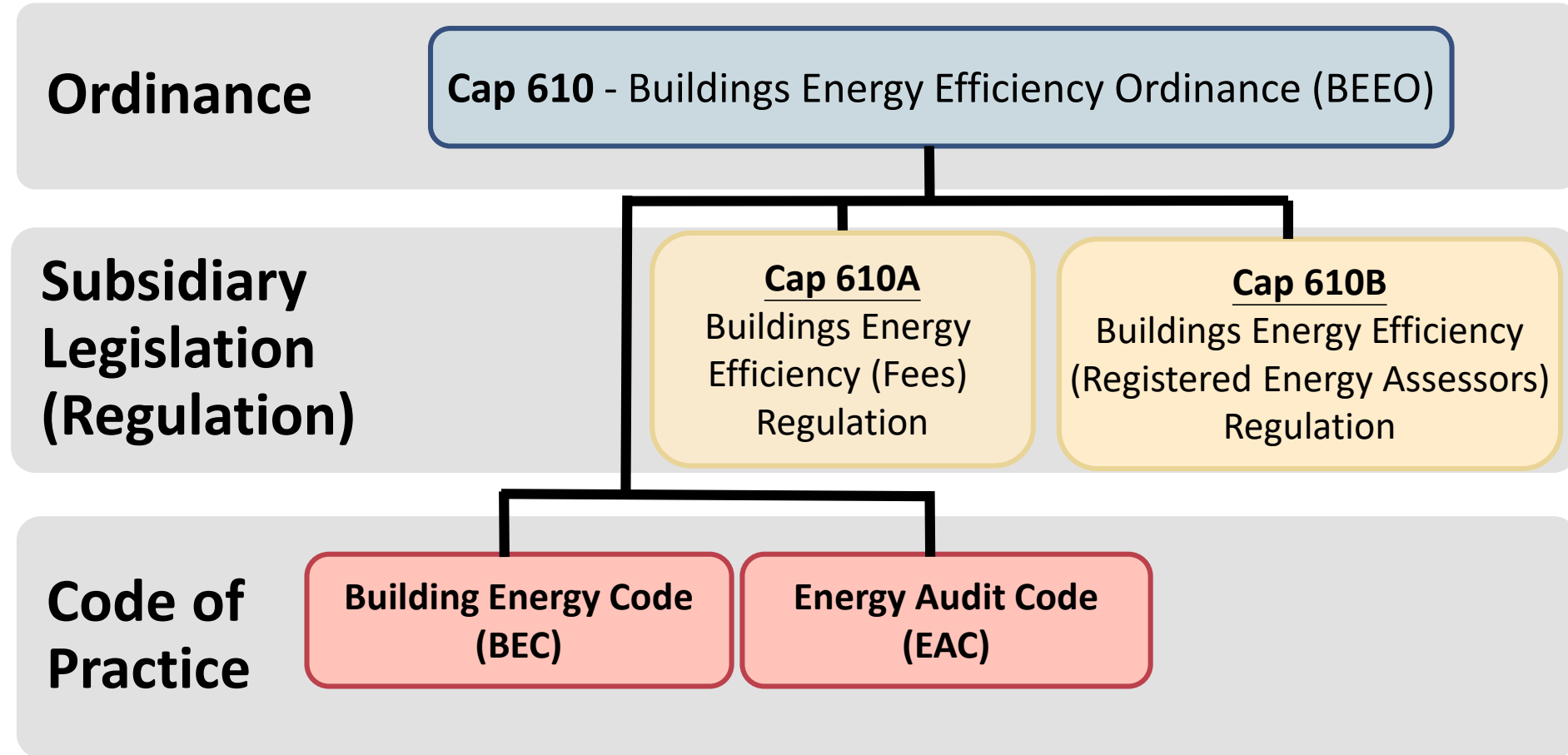


7.4 millions
Population



Source:
1. Building Department, HKSAR
2. Development Bureau, HKSARG
3. Census and Statistics Department, HKSARG
4. Climate Action Plan 2050, HKSARG

BEEO - Legislative Framework



BEEO - Legislative Framework



✓ Full Implementation on 21 September 2012

4 types of Central Building Services Installation (CBSI)

EMSD Buildings Energy Efficiency Ordinance (Cap. 610)

BUILDINGS ENERGY EFFICIENCY ORDINANCE (CAP. 610)
《建築物能源效益條例》第610章

空調裝置
Air-conditioning installation

照明裝置
Lighting installation

電力裝置
Electrical installation

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

English 繁體中文 簡體中文

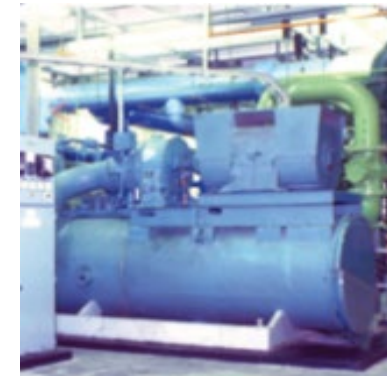
<http://www.emsd.gov.hk/beeo>



Lighting



Electrical



Air-conditioning



Lift & Escalator



BEEO - Legislative Framework



Cap 610 Schedule 1 & 2 COCR & FOC

- Hotel & guesthouse
- Educational building
- Community building (Social Service, Elderly Centers)
- Municipal services (Library, Indoor Game Hall, Market etc.)
- Hospital & clinic
- Government 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
- Airport passenger building

Cap 610 Schedule 3 Major Retrofitting Works

Works involving addition or replacement of a building services installation specified with
✓ Works area $\geq 500 \text{ m}^2$

and/or

Addition or replacement of a main component of a central building services installation (CBSI)
✓ Electrical Circuit $\geq 400\text{A}$
✓ A/C $\geq 350\text{kW}$
✓ **Motor drive & Mechanical drive** of a lift/ escalator/ passenger conveyor

Cap 610 Schedule 4 & 5 Energy Audit

- Commercial building
- Composite building (commercial portion)



BEEO – The 3 Major Requirement



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



(1) Newly Constructed Buildings



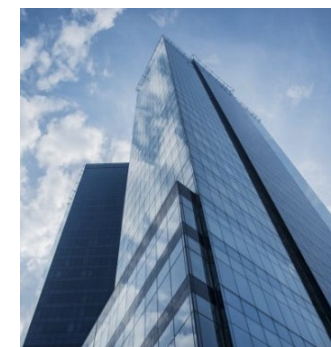
Stage One Declaration

- Developer engage **Registered Energy Assessor (REA)** to submit declaration **2 months after** obtaining Consent to commencement of building works (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 **4 months after** the Occupation Permit (佔用許可證) 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)

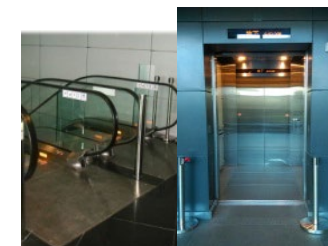
Addition/replacement of **main component**:



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



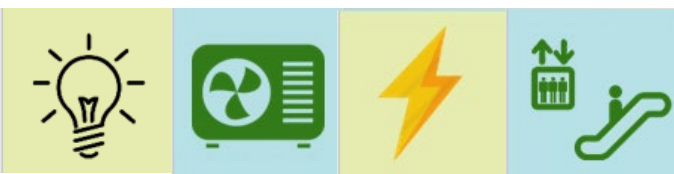
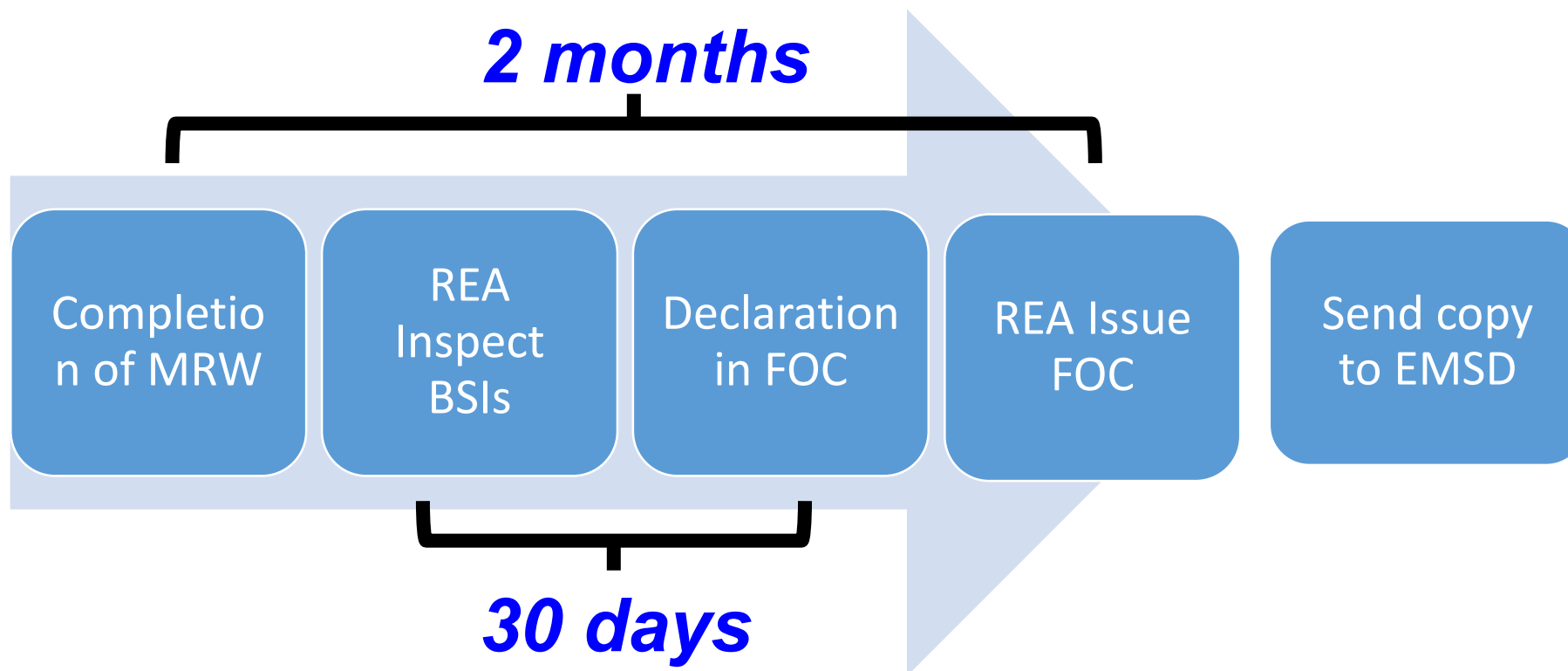
A/C installation
 $\geq 350\text{kW}$



motor drive +
mechanical
drive



(2) Major Retrofitting Works in Existing Buildings



香港力爭2050年前實現碳中和

HK will strive to achieve carbon neutrality before 2050

