

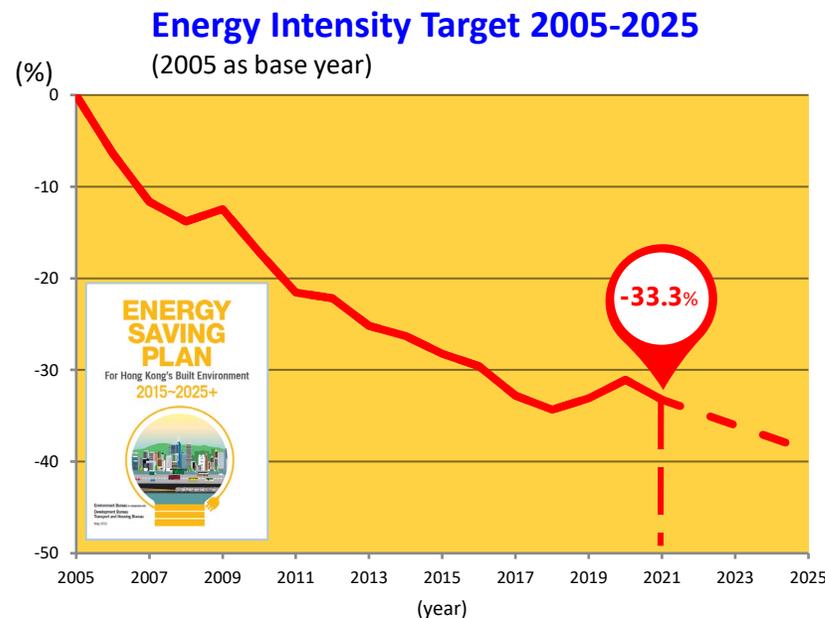
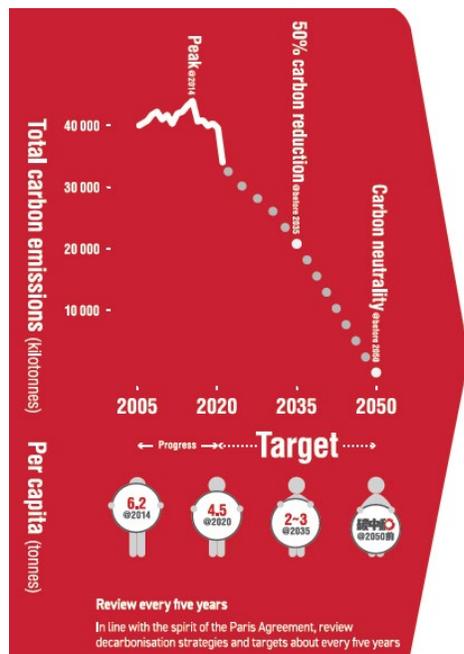
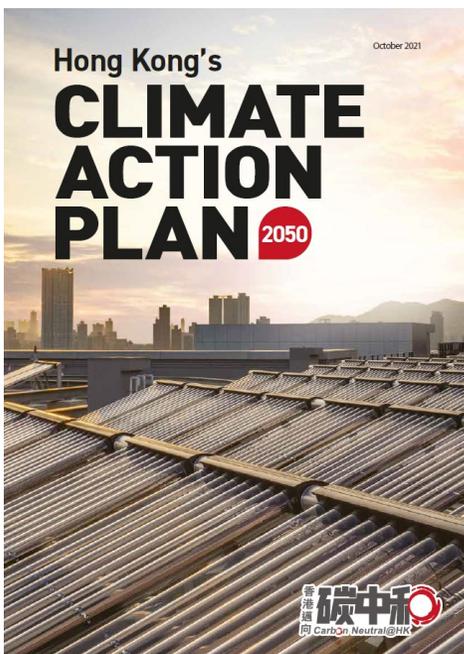
ECONOMY UPDATES

Hong Kong, China

16-18 October 2023

THE 61ST MEETING OF THE APEC EXPERT GROUP ON
ENERGY EFFICIENCY & CONSERVATION

HK will strive to achieve Carbon Neutrality before 2050



Renewable Energy (RE)

Target **2035 7.5-10%**
(increase to 15% subsequently)

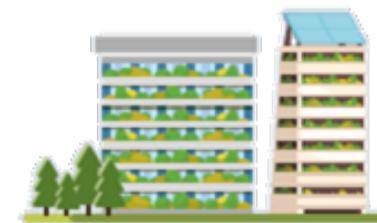


Electricity Saving in Buildings

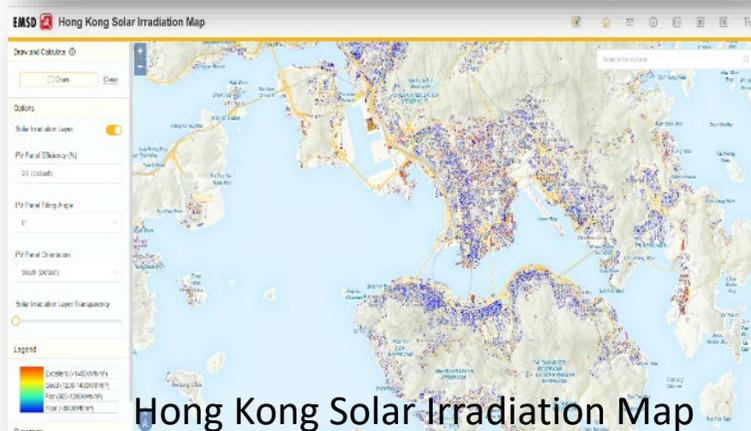
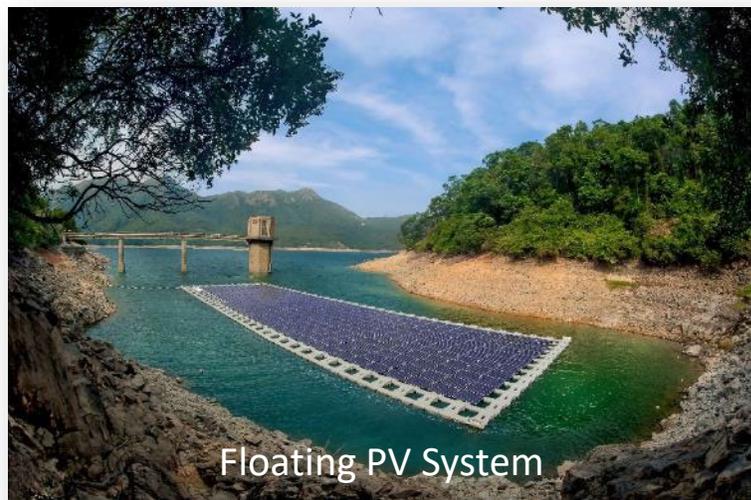
Target

Year	Commercial Buildings	Residential Buildings
2035	15-20% (Reduce by 30-40% subsequently)	10-15% (Reduce by 20-30% subsequently)

Electricity consumption (Compared with 2015)



Implementation of PV system In Hong Kong



Various measures to prompt RE application in Hong Kong

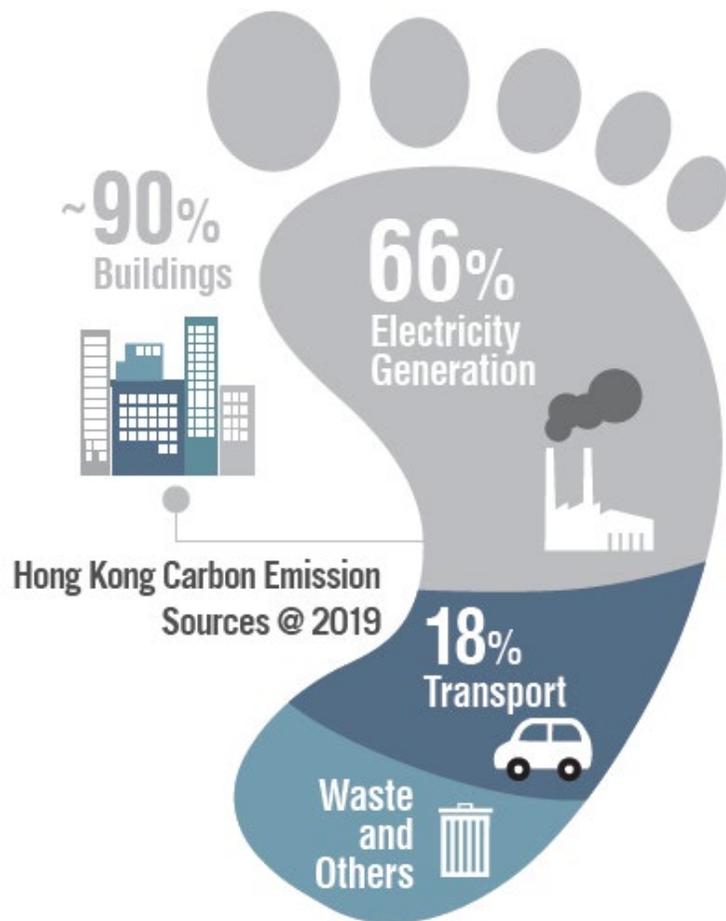
- ✓ Widely adoption of PV panels on reservoirs, open carpark, infrastructures
- ✓ Promoting Feed-in Tariff
- ✓ Launching HK Solar Irradiation Map

FiT Scheme Statistic (as June 2023)

22,000 Approved case

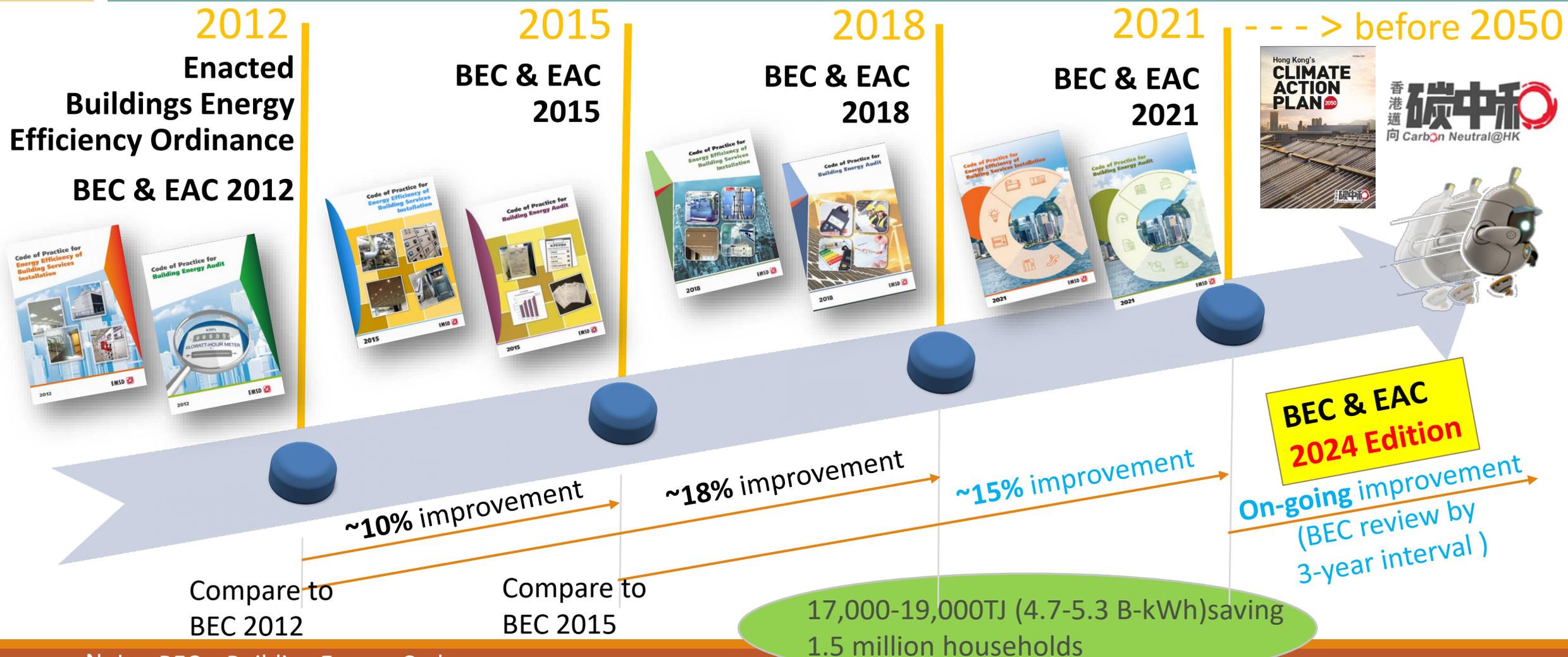
368 MW Installed capacity

Energy Efficiency Enhancement



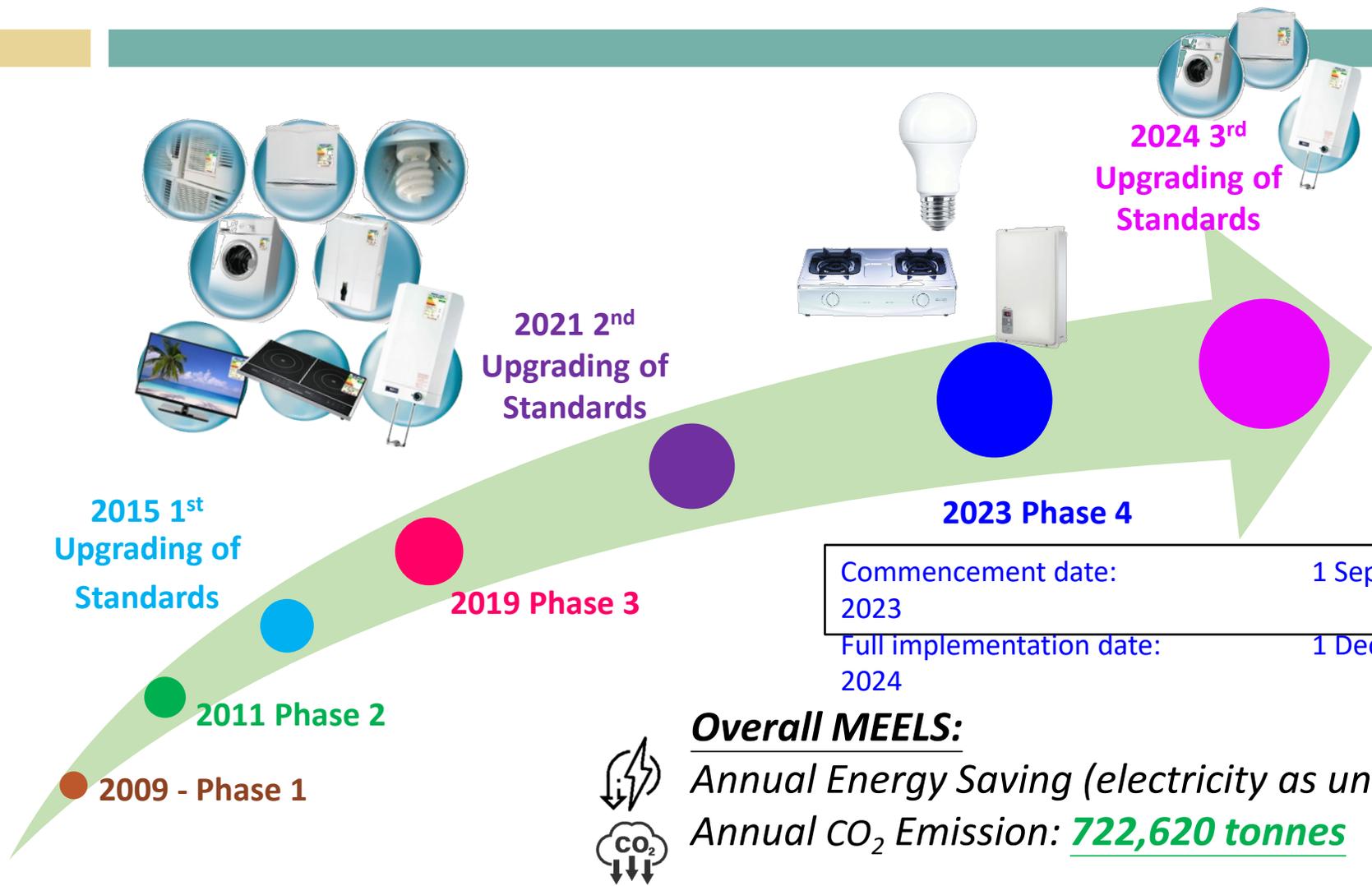
2035	COMMERCIAL BUILDINGS	RESIDENTIAL BUILDINGS
Electricity consumption (Compared with 2015)	15-20%	10-15%
	(Reduce by 30-40% subsequently)	(Reduce by 20-30% subsequently)

Milestone of the Buildings Energy Efficiency Ordinance



Note: BEC = Building Energy Code
EAC = Energy Audit Code

Development of the Mandatory Energy Efficiency Labelling Scheme (MEELS)



MEELS Energy Coverage in Residential Sector

80% (11 products) (Phase 4)

↑

49% (8 products) (in first 3 Phases)

Commencement date: 1 Sep 2023
 Full implementation date: 1 Dec 2024

Overall MEELS:
 Annual Energy Saving (electricity as unit): **1,083 GWh**
 Annual CO₂ Emission: **722,620 tonnes**

Approx. half of the annual electricity consumption in residential sector of HK Island



Development of the District Cooling System (DCS) in Kai Tak

DCS Operation Commenced

2013

⚡ 40 million kWh
 ☁️ CO₂ 28,000 tonnes

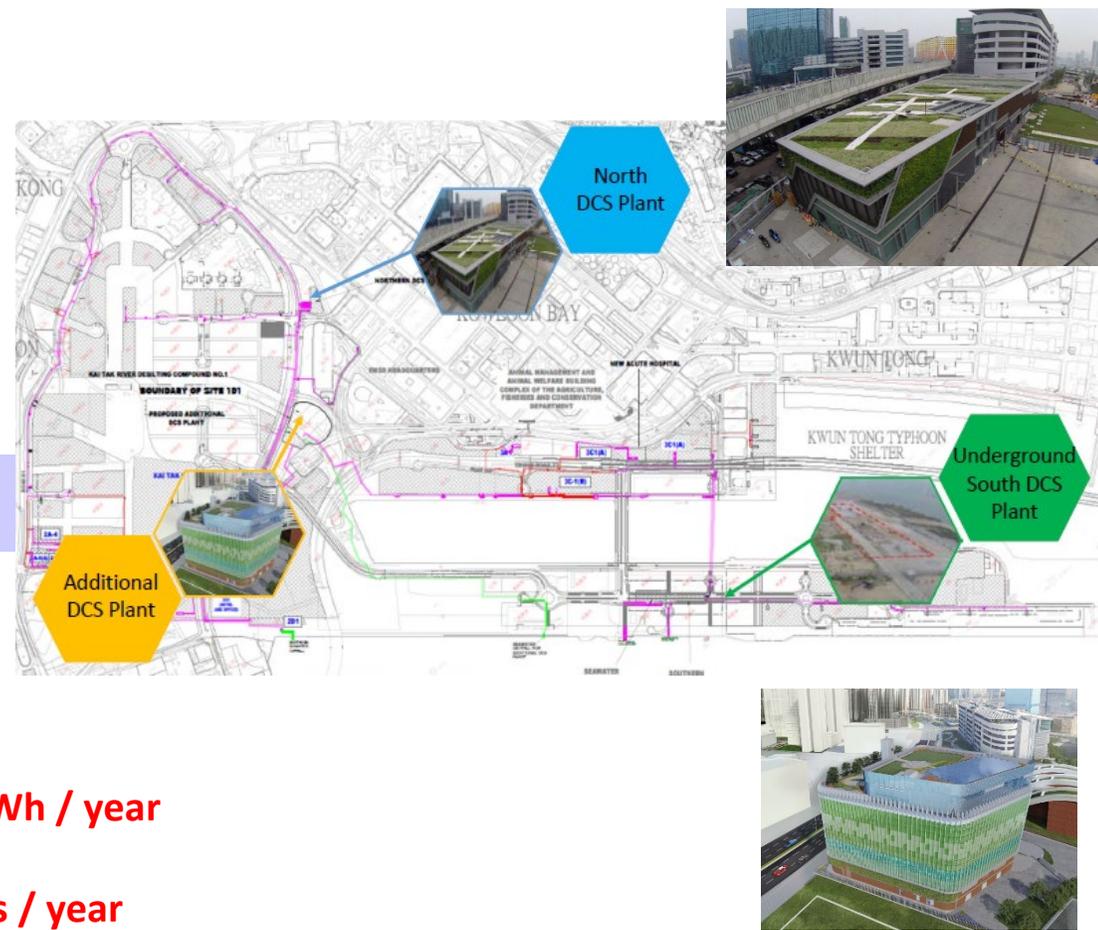
2022

2019

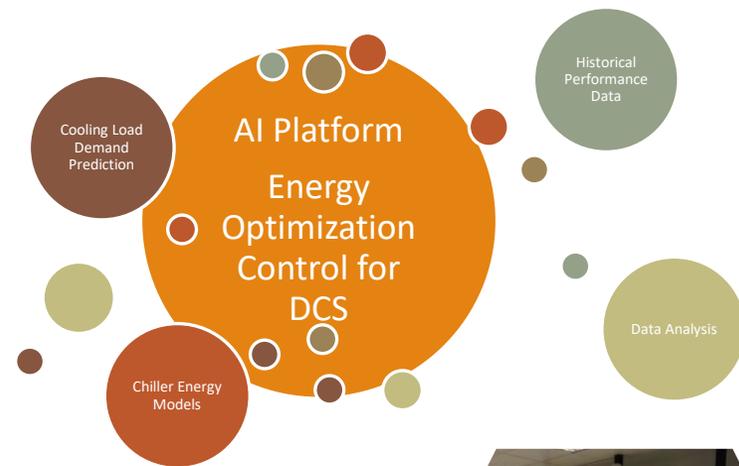
Recognised by the C40 Cities Climate Leadership Group

2028

⚡ 138 million kWh / year
 ☁️ CO₂ 96,500 tonnes / year



Development of the District Cooling Systems (DCS)



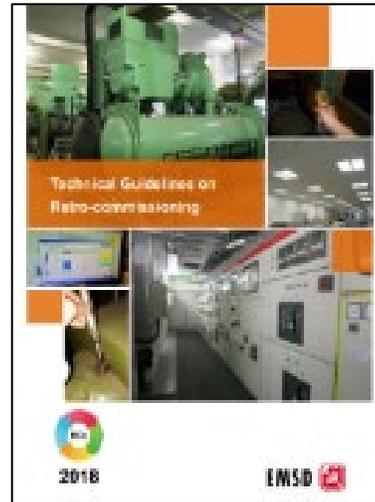
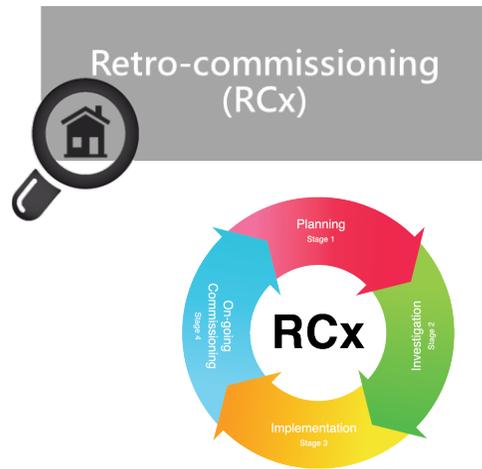
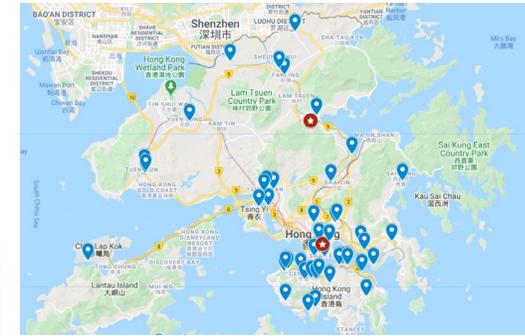
Retro-commissioning (RCx) for major government buildings

Existing buildings are often...



- Equipped with aging equipment
- Outdated building services system control
- High energy consumption
- unsatisfactory performance of systems

Conduct RCx in suitable major government buildings



Wireless data collection of room condition



Smart Sensors



Workstation

RCx Competition and Experience Sharing Session



重新校驗·智析慳電大比拼
WISE SAVE @ RCx COMPETITION

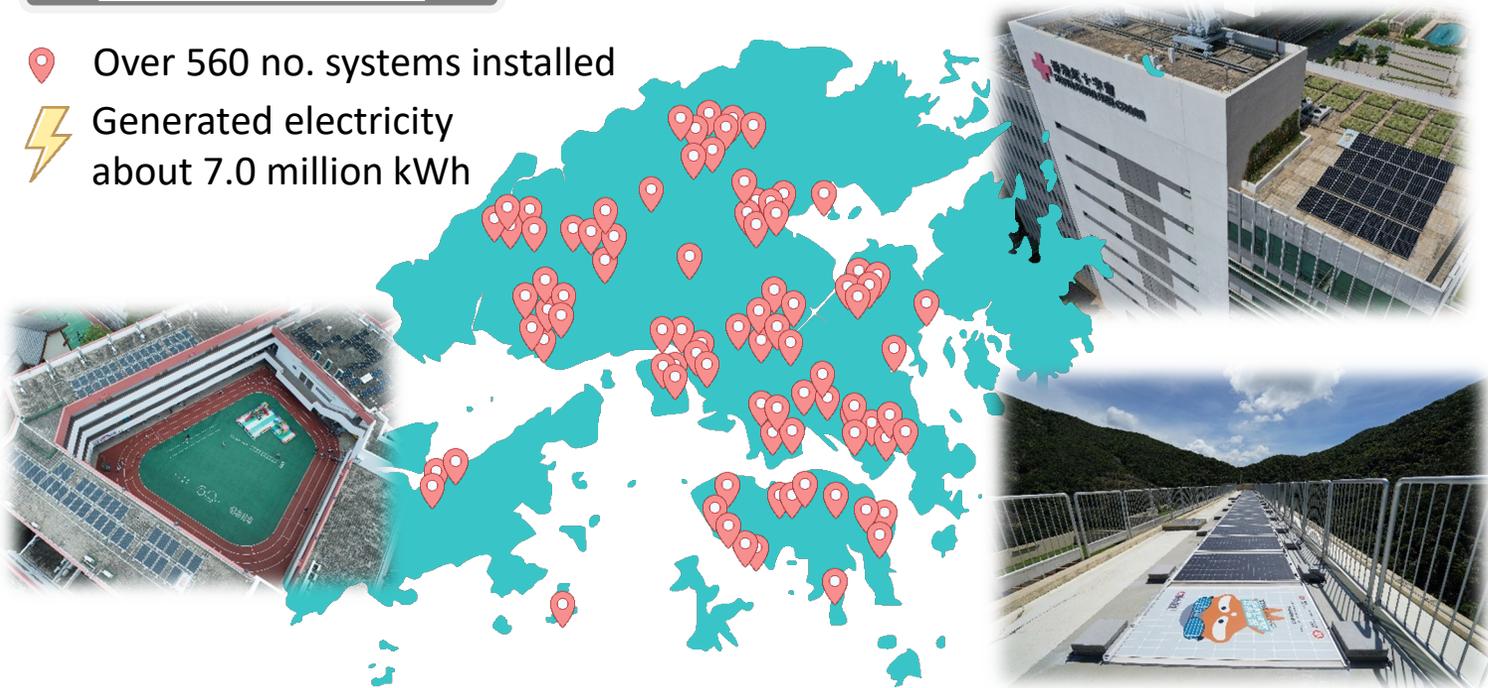
慳神大比拼 — 機構組別
Energy Saving Championship Scheme - Competition for Organisations

“Green Schools 2.0” - Solar Harvest

To provide one-stop service for installation of small-scale solar energy generation system at Non-government schools and Welfare NGOs

As of August 2023

- 📍 Over 560 no. systems installed
- ⚡ Generated electricity about 7.0 million kWh



Educational Kits for Primary and Secondary Schools

- ✔ Promote STEAM education
- ✔ Cultivate renewable energy and climate action awareness among the youngsters
- ✔ Launched in the academic year of 2022/23 and 2023/2024 respectively



“Green Schools 2.0” – Energy Smart

Non Profit-making & Non-Government
Primary & Secondary Schools

「綠色校園2.0」 – 智能慳電
Green Schools 2.0 - Energy Smart

推動節約能源，為合資格學校

- 更換發光二極管(LED)燈**
✓ 壽命長，又慳電
- 更換變頻式冷氣機**
✓ 節能及提供穩定的溫度
- 安裝實時能源監察系統**
✓ 了解用電情況，找出適當的節能空間

EMSD 機電工程署

**Beneficiary: 300 Schools,
over 100,000 students**



Real Time Energy Monitoring System (RTEMs) with “Energy Saving Tips” for education purpose



節能小Tips – 實時能源監察系統

- 能夠簡單清楚學校樓層或個別房間的用電量
- 能使用簡單圖示作個別房間的用電量比對
- 鼓勵老師及同學們共同實踐節能措施
- 平均每一度電所產生的二氧化碳當量排放量為0.7千克CO₂

機電工程署 EMSD

Green Welfare Non-Government Organisations



Energy Audit

機電工程署 EMSD

碳中和 Carbon Neutral@HK

綠色社福機構 GREEN WELFARE NGOs

精明節能 減碳一齊做
Smart Energy Saving Decarbonisation for All

政府推出「綠色社福機構」，資助和協助非政府社福機構在其處所進行以下節能措施：
The Government introduces **Green Welfare NGOs** to subsidise and assist welfare non-governmental organisations to implement the following energy saving measures at their premises:

- 1 進行能源審核 conducting energy audits
- 2 換置變頻式冷氣機 installing variable-speed air-conditioners as replacement
- 3 換置為發光二極管燈 installing with LED lighting fixtures as replacement

申請詳情 Application Details



Beneficiary: 300 Welfare NGO premises



Target to set up common Energy Management Opportunities (EMOs) for various welfare premises

Green Tech Fund



PRIORITY THEME

Net-Zero Electricity Generation

Energy Saving and Green Buildings

Green Transport

Waste Reduction

Green I&T Day

綠色創科日 2023 GREEN I&T DAY

碳中和
Carbon Neutral@HK





Thank You

