

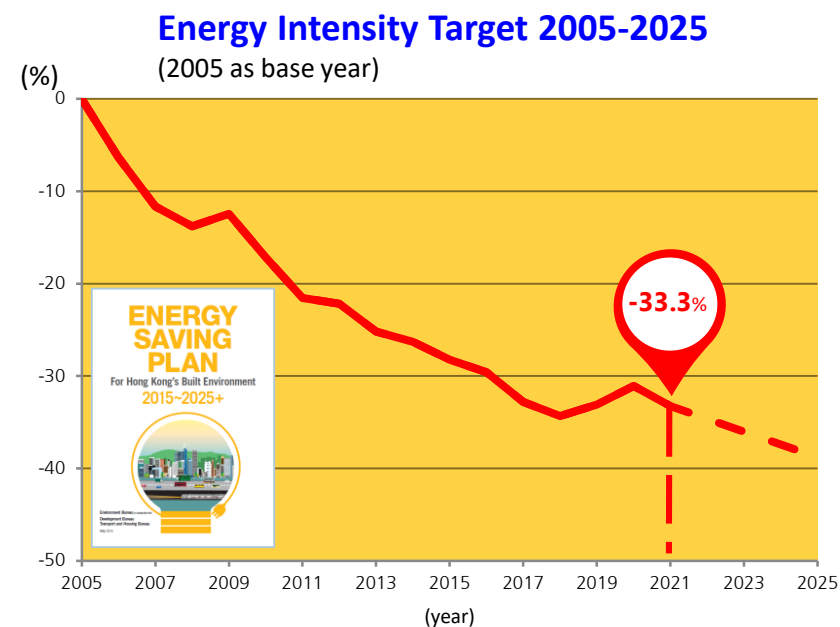
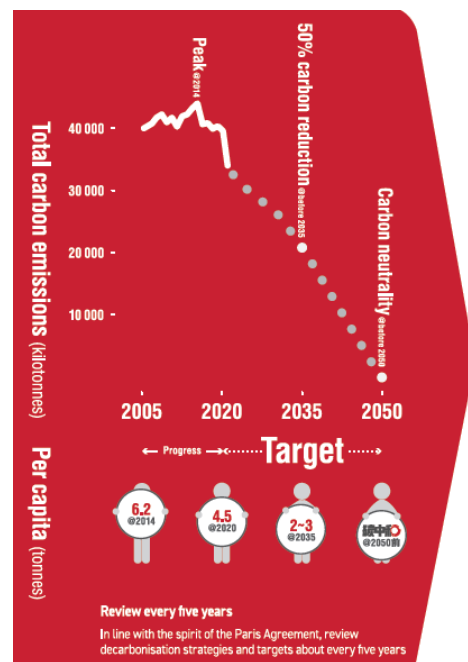
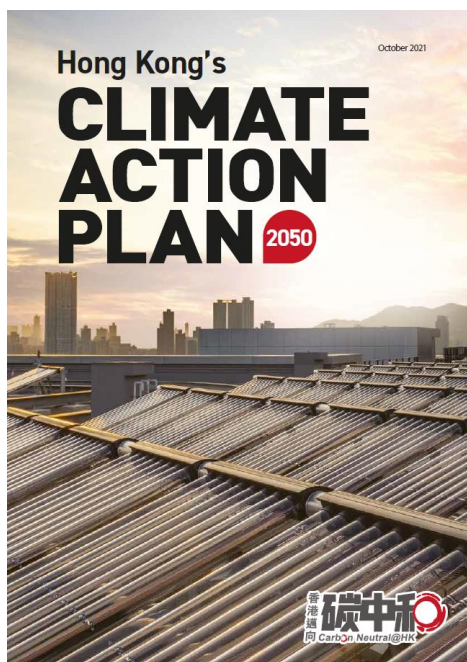
ECONOMY UPDATES

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%	10-15%

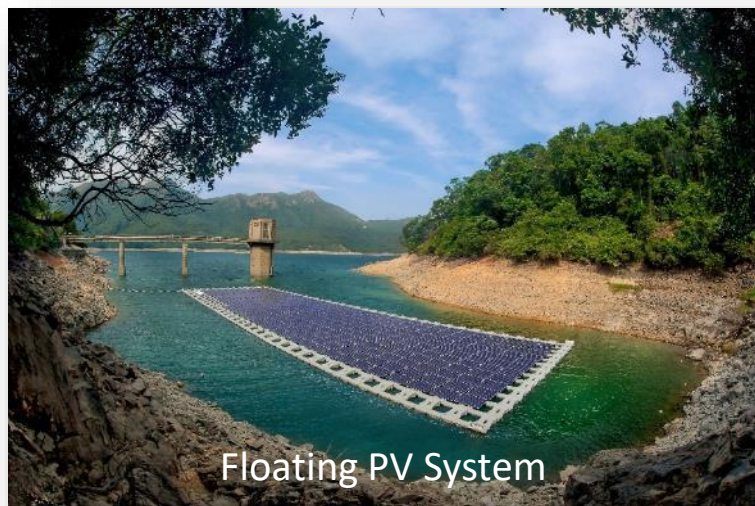
Electricity consumption (Compared with 2015)

(Reduce by 30-40% subsequently)

(Reduce by 20-30% subsequently)



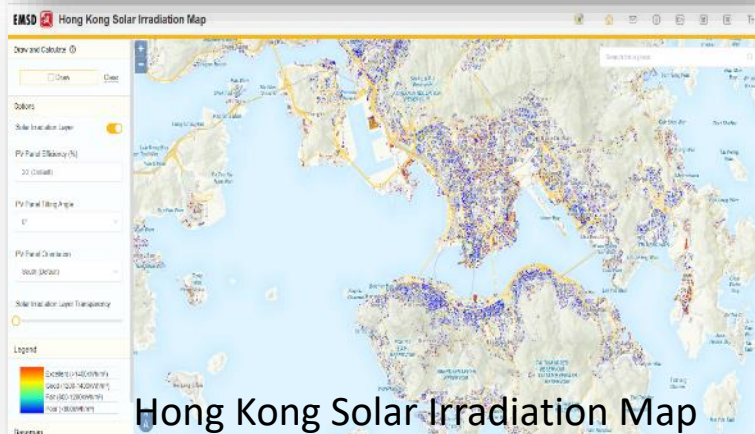
Implementation of PV system In Hong Kong



Floating PV System



Feed-in Tariff Promotion



Hong Kong Solar Irradiation Map



PV System at infrastructure

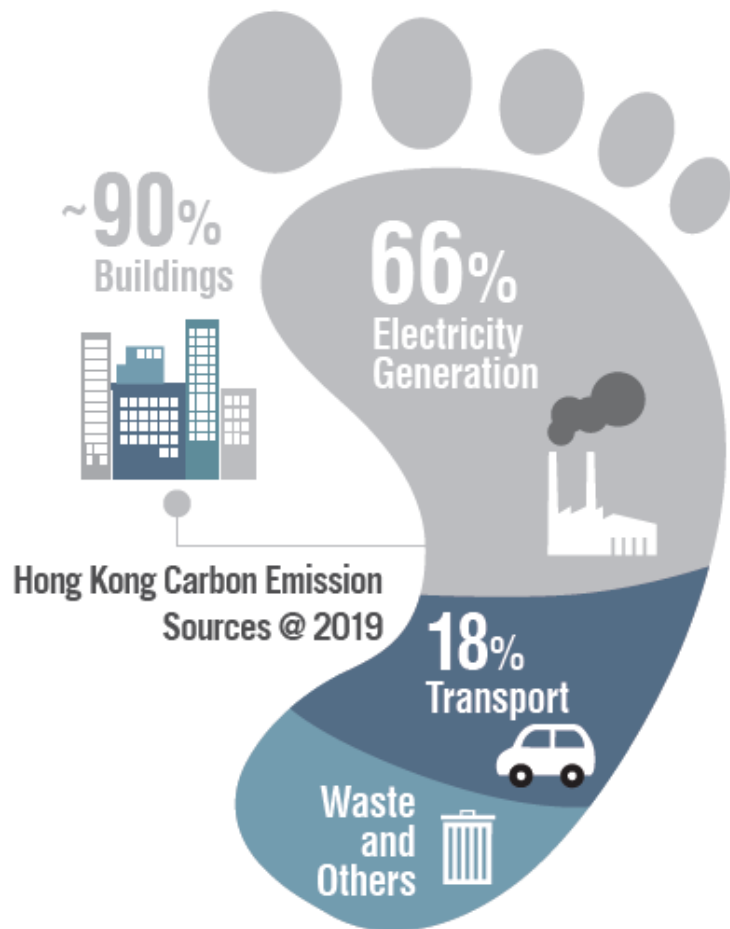
Various measures to prompt RE application in Hong Kong

- ✓ 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)

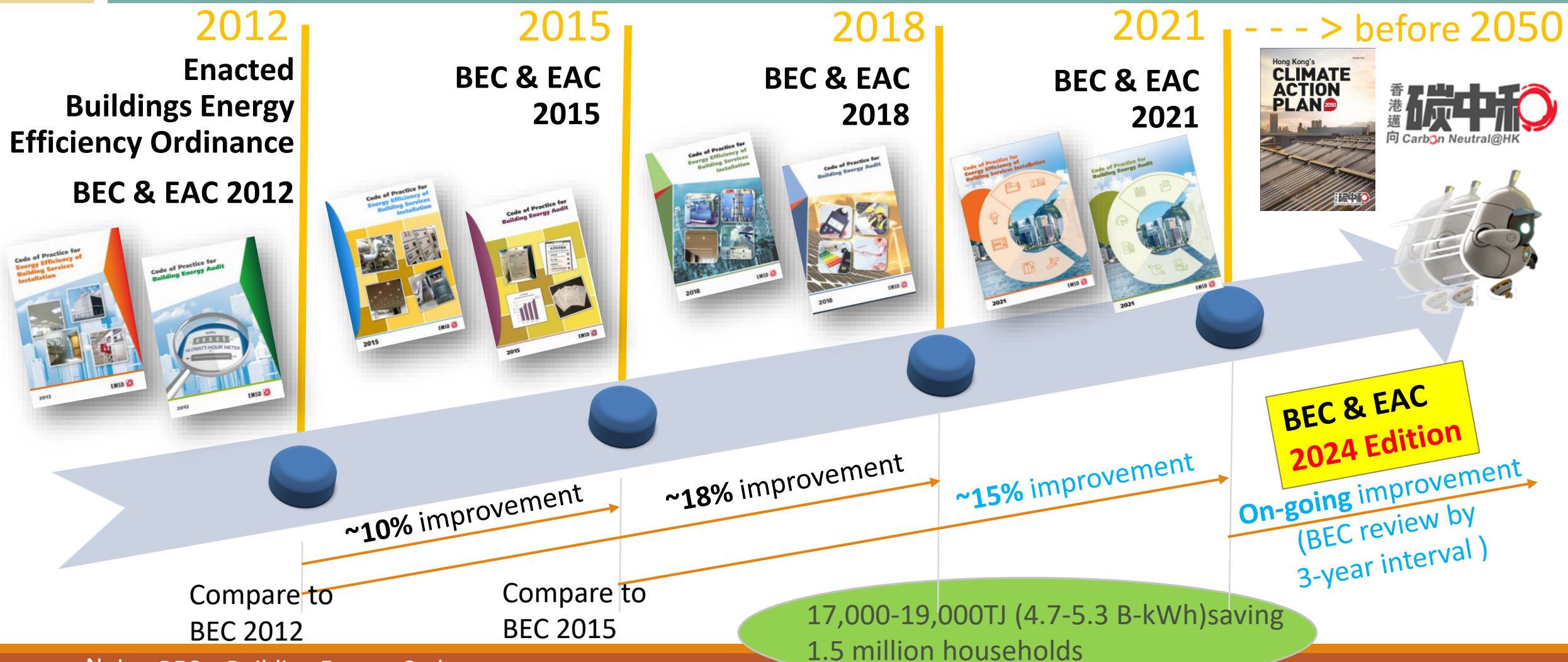
22,000 Approved case
368 MW Installed capacity

Energy Efficiency Enhancement



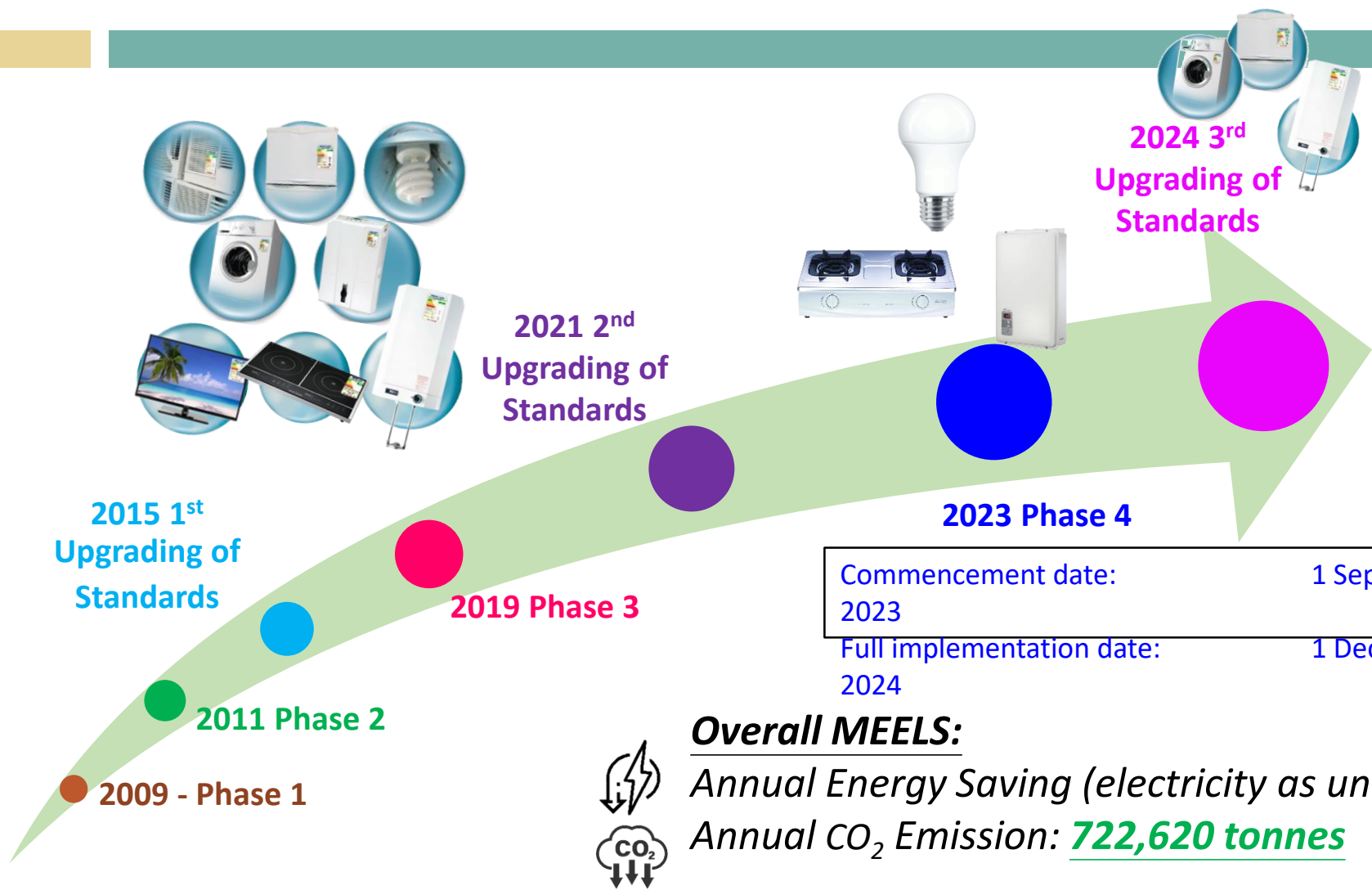
<p>2035</p>	<p>COMMERCIAL BUILDINGS</p> <p>15-20%</p>	<p>RESIDENTIAL BUILDINGS</p> <p>10-15%</p>
<p>Electricity consumption (Compared with 2015)</p>	<p>(Reduce by 30-40% subsequently)</p>	<p>(Reduce by 20-30% subsequently)</p>

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)

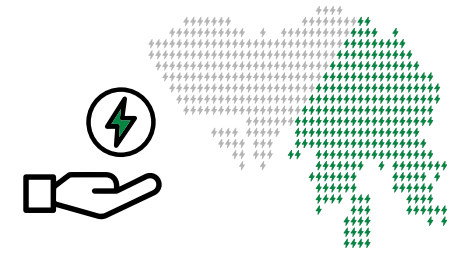
↑

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

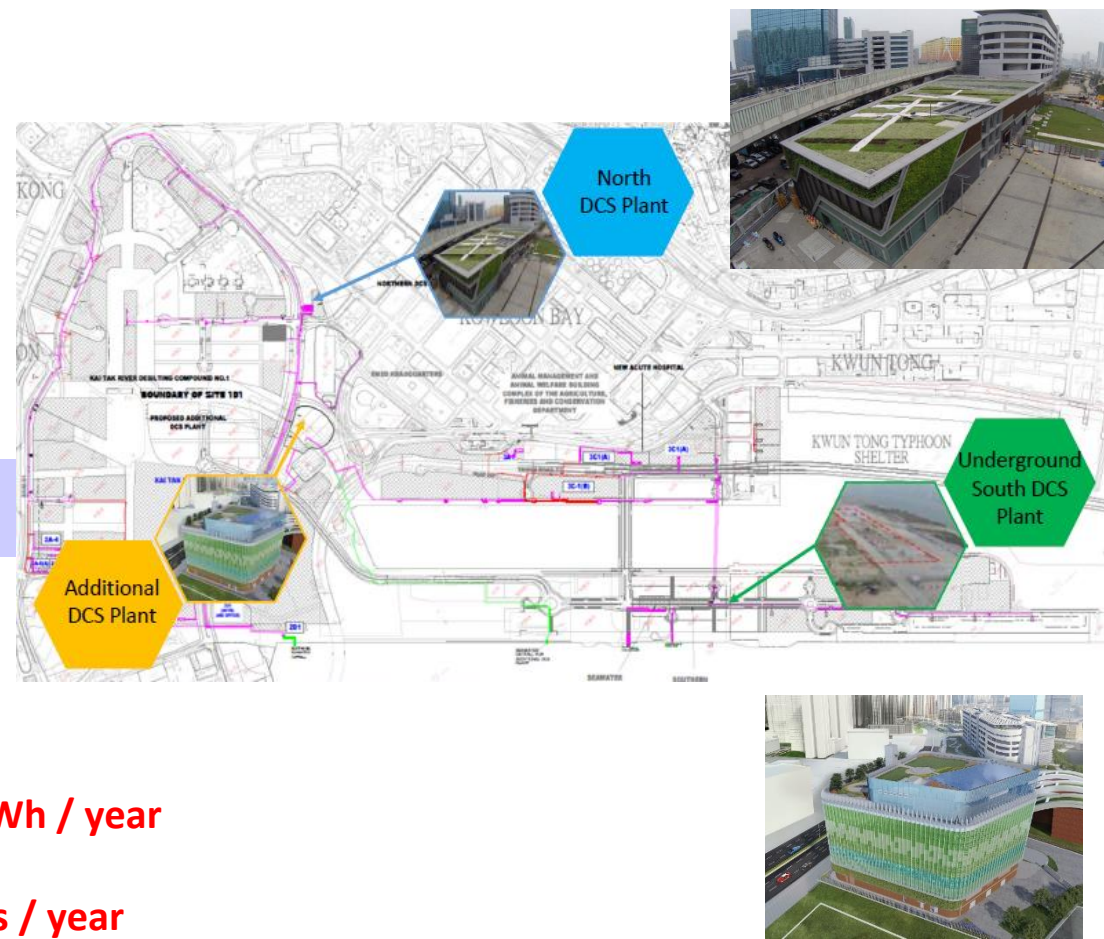
2022

2019

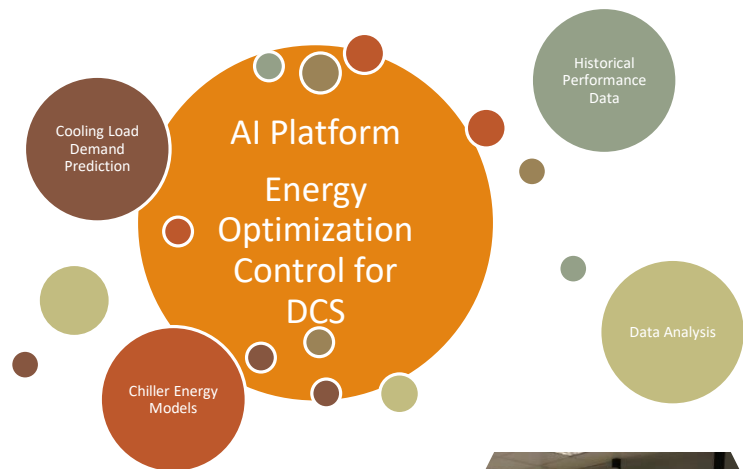
Recognised by the C40 Cities Climate Leadership Group

2028

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



Development of the District Cooling Systems (DCS)



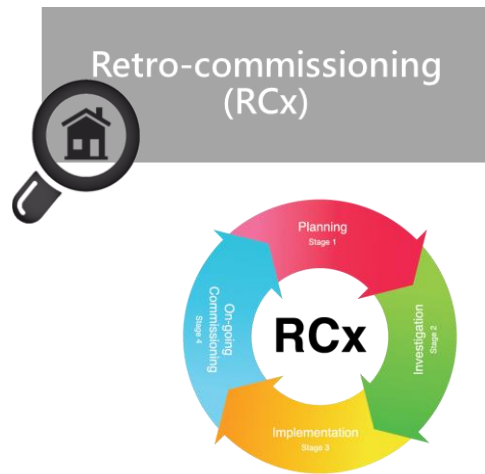
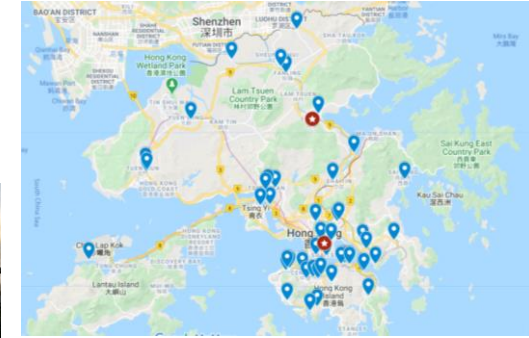
Retro-commissioning (RCx) for major government buildings

Existing buildings are often...

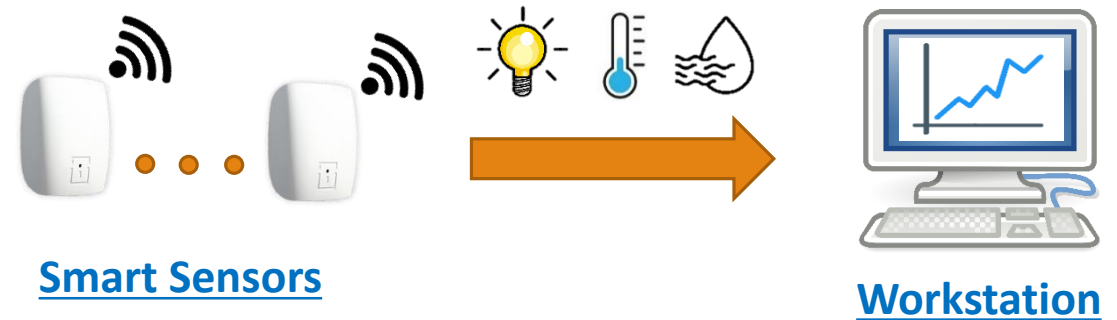


- Equipped with aging equipment
- Outdated building services system control
- High energy consumption
- unsatisfactory performance of systems

Conduct RCx in suitable major government buildings



Wireless data collection of room condition



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

機電工程署 EMSD

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

