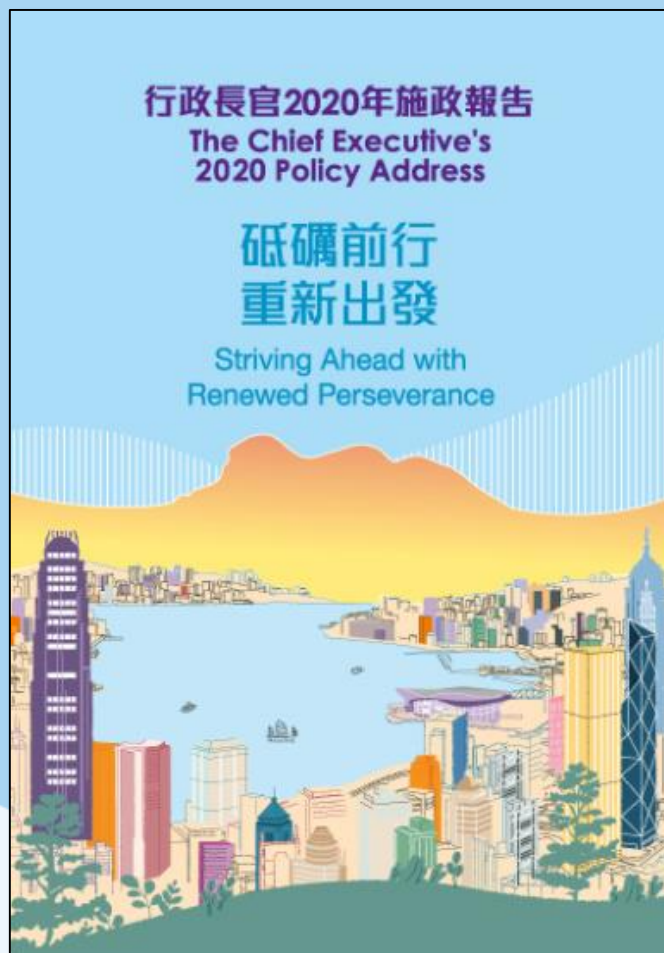




Energy Saving Charter and 4T Charter

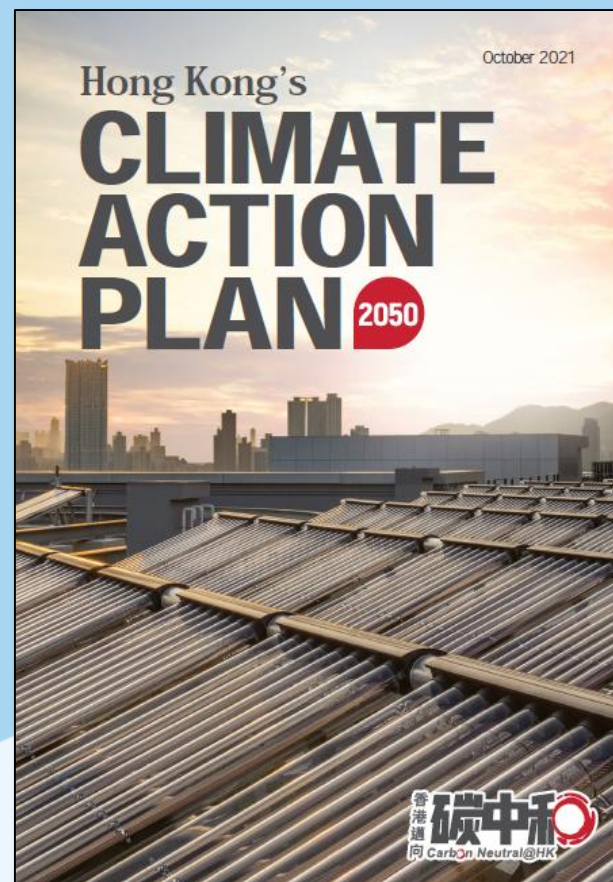
February 2025



行政長官2020年施政報告
The Chief Executive's
2020 Policy Address

砥礪前行
重新出發

Striving Ahead with
Renewed Perseverance



Hong Kong's
**CLIMATE
ACTION
PLAN** 2050

October 2021

香港邁向 **碳中和**
Carbon Neutral@HK

Climate Action Plan 2050 (CAP2050)



香港邁向 **碳中和**
Carbon Neutral@HK

機電工程署
EMSD

Striving towards Carbon Neutrality before 2050

Climate Action Plan 2050 (CAP2050)

Medium-to-long-term decarbonisation targets

Before
2035



Total carbon
emissions
Compared with
2005 level

Before
2050



Four decarbonisation strategies



Net-zero
Electricity Generation
淨零發電



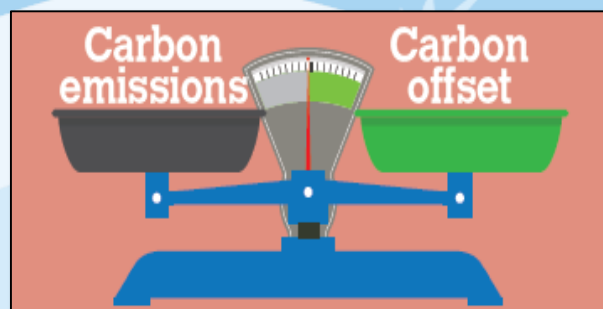
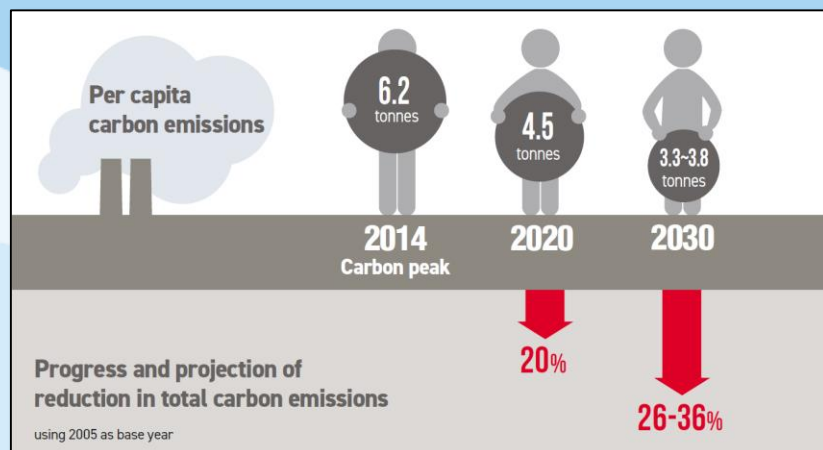
Energy Saving and
Green Buildings
節能綠建



Green Transport
綠色運輸

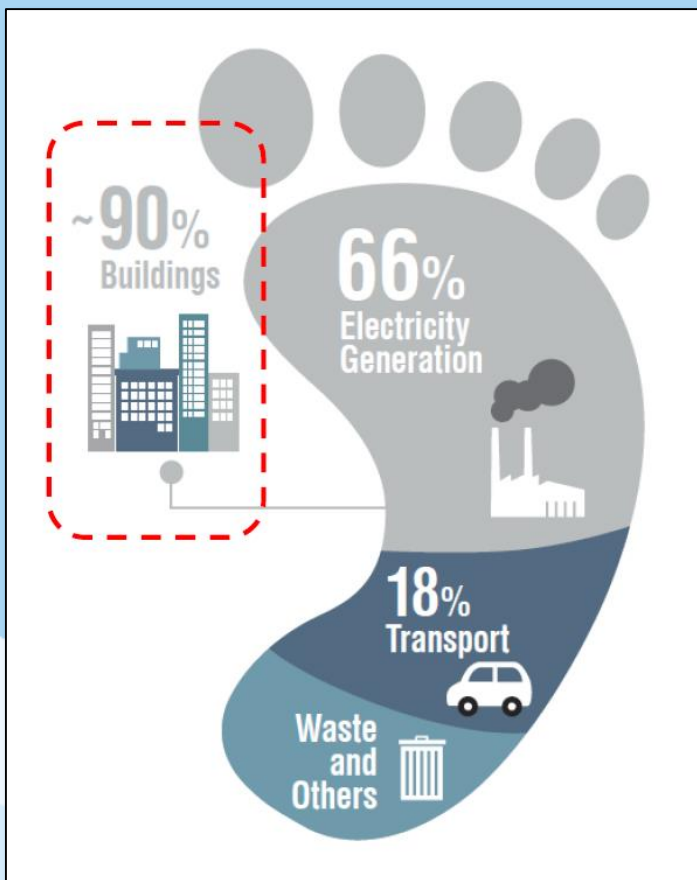


Waste Reduction
全民減廢



CAP2050 – Electricity consumption of Buildings

Decarbonisation comes at a price. Buildings account for about 90% of Hong Kong's total electricity consumption. Promoting energy conservation and improving energy efficiency can help reduce the cost of electricity consumption.



Building sector:

~ **90%** electricity
~ **60%** carbon
emission

Electricity Saving in Buildings



Electricity
consumption
(Compared
with 2015)

COMMERCIAL
BUILDINGS

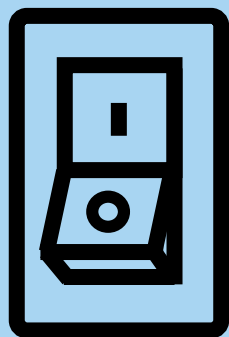
15-20%

(Reduce by 30-40%
subsequently)

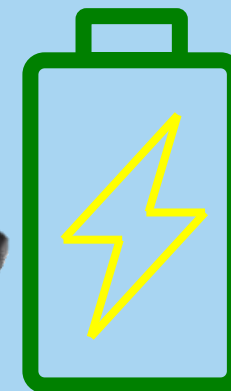
RESIDENTIAL
BUILDINGS

10-15%

(Reduce by 20-30%
subsequently)



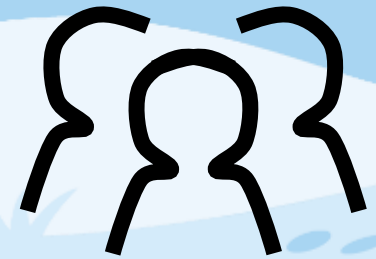
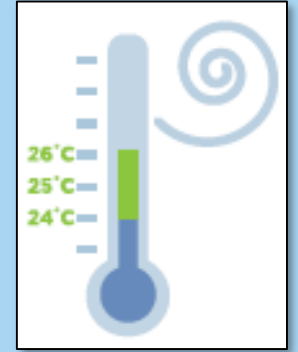
Energy Saving Charter 2025



Energy Saving Charter - Pledges

EMSD launched Energy Saving Charter since 2012, aims to encourage business and community organisations to save energy. Participants are pledged to: -

- Maintain average indoor temperature at 24-26°C during summer (June to September 2025);
- Switch off electrical appliances & systems when not in use and procure energy efficient appliances (such as with Grade 1 energy labels) and systems;
- Promote energy data transparency, and share energy saving measures and achievements;
- Promoting the use of renewable energy; and
- Engage staff/students/tenants to adopt the above practices together.



Energy Saving Charter



Sample Leaflet for Energy Saving Charter 2025

Details: <https://www.energysaving.gov.hk/esc2025/en/charter/index.html>



Energy Saving Charter - Coverage

With continuous efforts, we have extended the coverage of participants from Shopping Mall to now **10 categories**:

- | | |
|--|--|
| 1) Shopping Mall | 7) Schools (Kindergarten / Primary & Secondary Schools / Post-Secondary Education Institution) |
| 2) Office Building / Commercial Building / Industrial Building | 8) Hotel |
| 3) Residential Building / Housing Estate | 9) Hospital |
| 4) Office | 10) Others (not covered in the above categories, such as piers) |
| 5) Shop | |
| 6) Non-governmental Organization / Community Facilities | |

Shopping mall is the first category, and 100+ premises have signed up the Energy Saving Charter 2012

Energy Saving Charter - Recognition

- 1) Participating certificates for signatories
✓ With recognition for premises signed up the Charter (e.g. since 2012)
- 2) Uploading names participating premises to event website

Signatories of Energy Saving Charter increased gradually over years and 3,300+ premises have signed up the Energy Saving Charter 2024



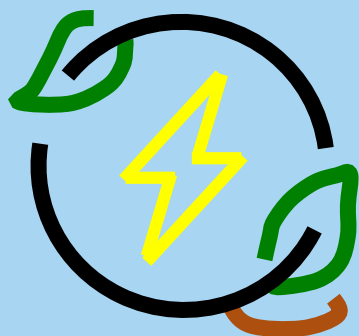
Sample Certificate for Energy Saving Charter 2024

Energy Saving Charter - Recognition

- 3) Actively Supporting Organizations (recruit shops/offices) – recognition by appreciation certificates



Sample Certificate for Actively Supporting Organisations



4T Charter



4T Charter – Scope

4T Charter



Pledging to

- set energy saving **target** with a **timeline**;
- ensure **transparency** on energy saving results and building energy data; and
- encourage inhabitants (including staff / students / occupants / tenants) to **work together** on the above energy saving target.

Optional additional pledge

set targets and timelines for the reduction of carbon emissions.



4T Charter – Target & Timeline

Setting energy saving **target** with **timeline**:-

Example

(i)	基準年份 Base Year	2020	年份 Year
(ii)	目標年份 Target Year	2028	年份 Year
(iii)	與基準年份相比，目標年份能源節省的百份比 Percentage of Energy Reduction by Target Year when compare with Base Year	6	%
(iv)	基準年份的總能源消耗 ¹ Total Energy Consumption of Base Year (12 months)	1,234,567	兆焦耳 (MJ)

Energy saving plan of
6% over 8 years

Note ¹: 1 kWh is equivalent to 3.6 Mega Joules (MJ)

Total energy consumption including electricity in kWh x 3.6 MJ + gas consumption in MJ

4T Charter – Transparency

How to announce/publish energy saving targets and results?

Reports	Newsletters or Notices	Websites (internet)	Others (intranet, internal emails, etc.)
Over 30%	Over 30%	Over 20%	About 20%

About **80%** of total participants



4T Charter – Together

How to engage stakeholders (including staff, students, occupants, tenants) to work together on energy saving plan?

1. Involve inhabitants in planning and implementation of energy saving programme	Over 60%
2. Communicate regularly with inhabitants on energy saving programme	Over 60%
3. Provide briefing or supportive coaching for inhabitants on energy saving	About 40%



4T Charter – Recognition

- 1) Participating certificates for signatories
- 2) Uploading names participating premises to event website

Signatories of 4T Charter increased gradually over years since 2017 and 780+ premises have signed up the 4T Charter in 2024

The screenshot displays the 'PARTICIPANTS' section of the 4T Charter website. On the left, a sidebar lists various building types: Shopping Mall, Office Building / Commercial Building / Industrial Building (highlighted), Housing Estate / Residential Building, Office, Shop, Non-governmental Organisation / Community Facility, School (Kindergarten / Primary & Secondary Schools / Post-Secondary Education Institution), Hotel, Hospital, and Others. Below this list is a cartoon character of a bear wearing a hard hat. The main content area shows a list of participants under the 'Office Building / Commercial Building / Industrial Building' category, including Asia Airfreight Terminal Company Limited, Bright Future Pharmacy, Cheung Kong Center, Chissay (Property Management), and K Wah Centre. To the right, two sample 4T Charter certificates are shown. Each certificate features the EMSD logo, the title '4T Charter', and a commitment to energy saving and carbon reduction. The certificates include a pledge to set energy saving targets with a timeline, ensure transparency in energy saving results, and encourage inhabitants to work together. The bottom right corner of the screenshot shows the EMSD logo and the text '機電工程署 EMSD'.

Sample Certificates for 4T Charter

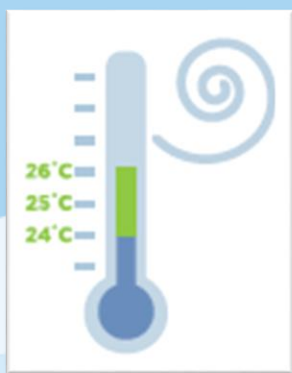


Energy Saving Tips

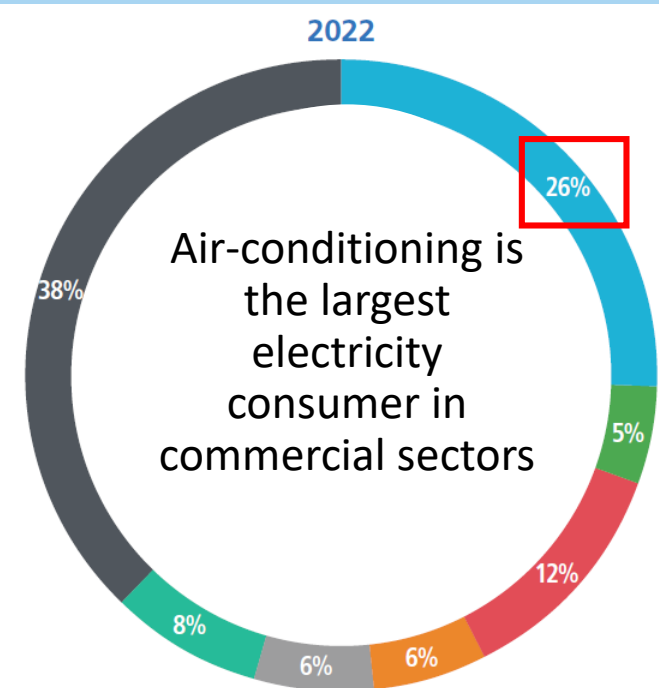


Energy Saving Tips

- 1) Maintain average indoor room temperature at 24-26°C during summer (June to September)



- 空氣調節
Air Conditioning
- 煮食
Cooking
- 照明
Lighting
- 辦公室設備
Office Equipment
- 熱水及冷凍
Hot Water & Refrigeration
- 垂直運輸
Vertical Transport
- 其他
Others



Energy Saving Tips

1) Maintain indoor room temperature at 24-26°C during summer

- Conduct air temperature measurement regularly
- Keep all the windows and doors close when air-conditioner is running
- Consider using an electric fan in conjunction with AC to spread cooled air more effectively
- Set an indoor AC unit to low fan speed as the normal setting. Use a high fan speed first rather than lowering the temperature setting to cater for an increased cooling demand
- Carry out regular maintenance on office equipment for optimal energy efficiency performance



Energy Saving Tips

2) Switch off appliances and systems when not in use;

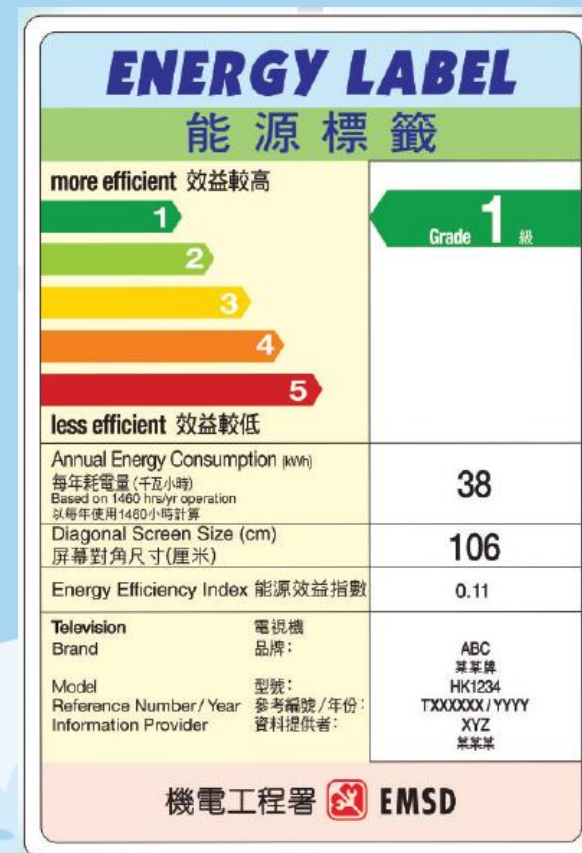


- Lights, air-conditioners should be switched off in areas that are unoccupied
- Part of lift and escalator can be idled during non-peak hour
- Use appliances with timer control or automatically switch-off control functions to avoid leaving appliances in standby mode for a long period
- Switch off the computer screen can save more energy instead of letting the "screen saver" run
- Arrange for the last-man-out to check and switch off the power source when leaving office



Energy Saving Tips

- 2) And procure energy efficient appliances and systems, such as appliances with **Grade 1 energy label**



Energy Saving Tips

- 3) Promote energy data transparency, and share energy saving measures and achievements
- 4) Promote the use of renewable energy

Example:

- Solar photovoltaic (PV) system installation



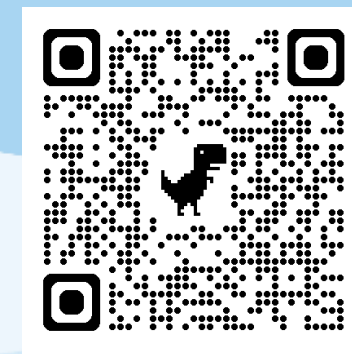
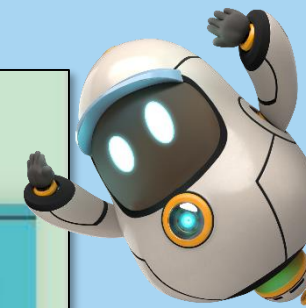
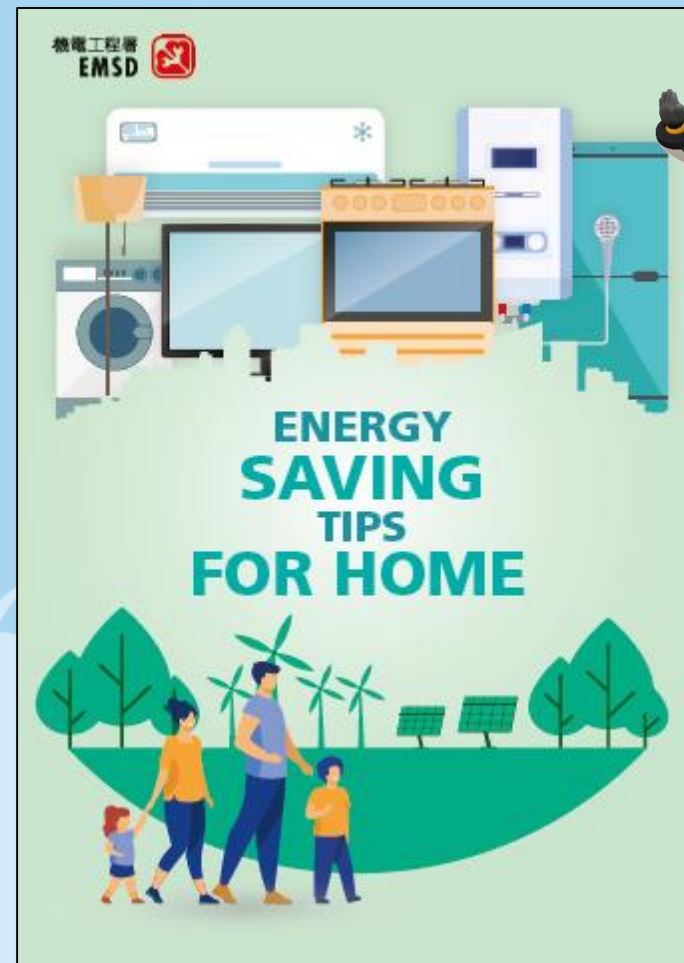
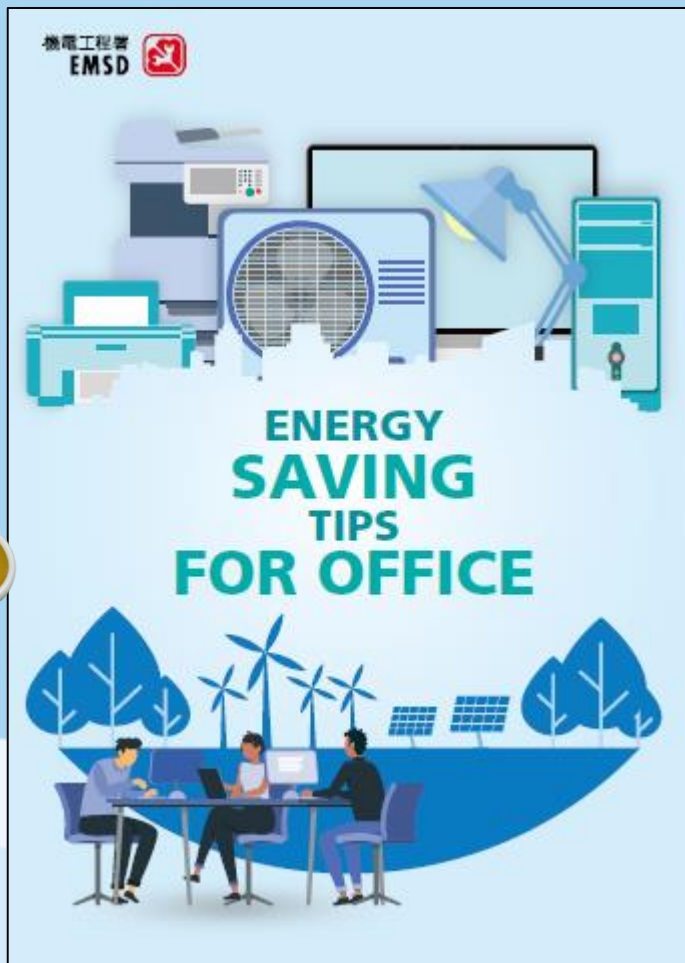
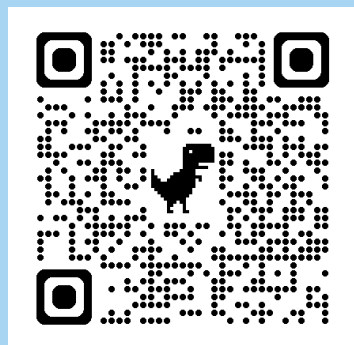
Energy Saving Tips

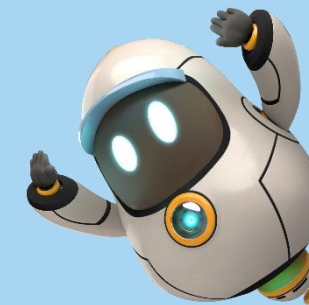
5) Engage staff / students/ tenants to adopt the above energy saving practices together

- Involve staff / students/ tenants in planning and implementation of energy saving practices
- Set goals and provide feedback to staff / students / tenants on progress / results of energy saving practices
- Provide briefing / seminar / workshops to staff / students / tenants
- Communicate regularly with staff / students / tenants on energy saving practices
- Create opportunities for sharing of goals and accomplishments



Energy Saving Tips





Event website:

Enquiries

Phone: 3155 3977

Email : esc2025@emsd.gov.hk



機電工程署
EMSD



Details: <https://www.energysaving.gov.hk/esc2025/en/charter/index.html>