

Policy and Measures Respond to Climate Change in Hong Kong

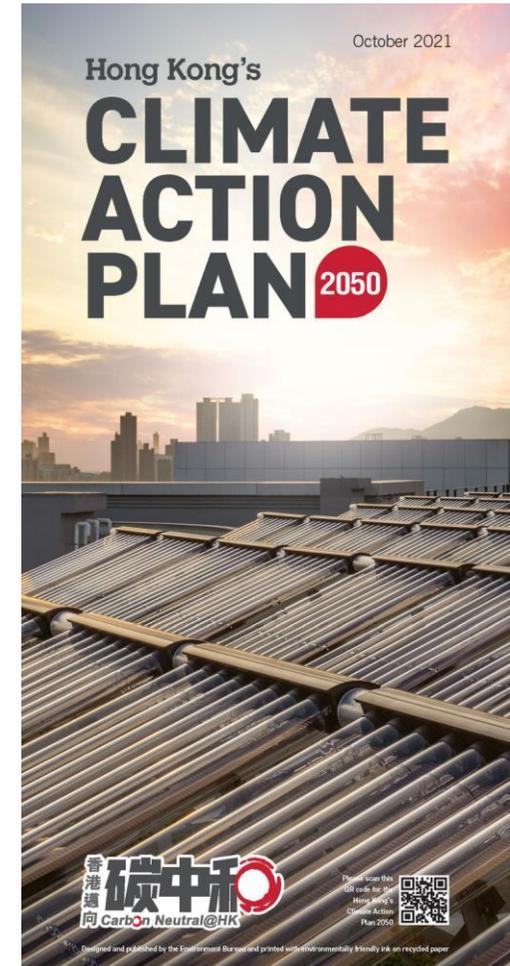
Mr. Felix Lam,
Head of sustainability,
Green Council,
GPN China Hongkong



Hong Kong's Climate Action Plan 2050

- **In 2020, the Chief Executive of HKSAR committed 2 objectives:**
 1. Achieve carbon neutrality before 2050
 2. Reduce Hong Kong's carbon emissions by 50% before 2035 as compared to 2005 level

- **In policy address, set up 4 major decarbonization strategies:**
 - ⇒ Net-zero electricity generation
 - ⇒ Energy saving and green buildings
 - ⇒ Green transport
 - ⇒ Waste reduction



1. Net-zero electricity generation



Fossil fuels (natural gas and coal) account for over 70% of Hong Kong's fuel mix for electricity generation

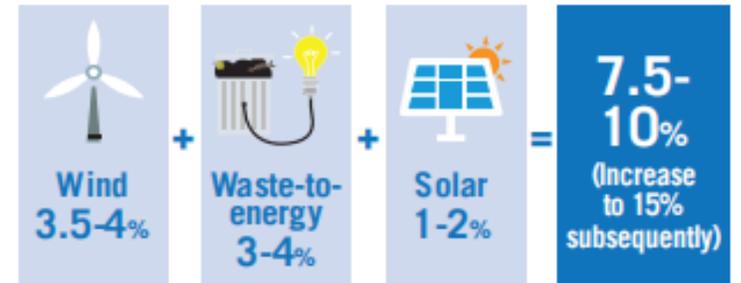
- **Target**

- ⇒ Increase the share of Renewable Energy in the fuel mix from the existing less than 1% to 7.5% by 2035 and further to 15% before 2050
- ⇒ Phase out coal for electricity generation by 2035

- **Feed-in Tariff (FiT) Scheme**

- ⇒ Promote the society to install of solar PV panels and wind energy generation systems
- ⇒ Power company will purchase the RE at a rate 100-200% higher than the normal electricity

RE Potential (Until 2035)



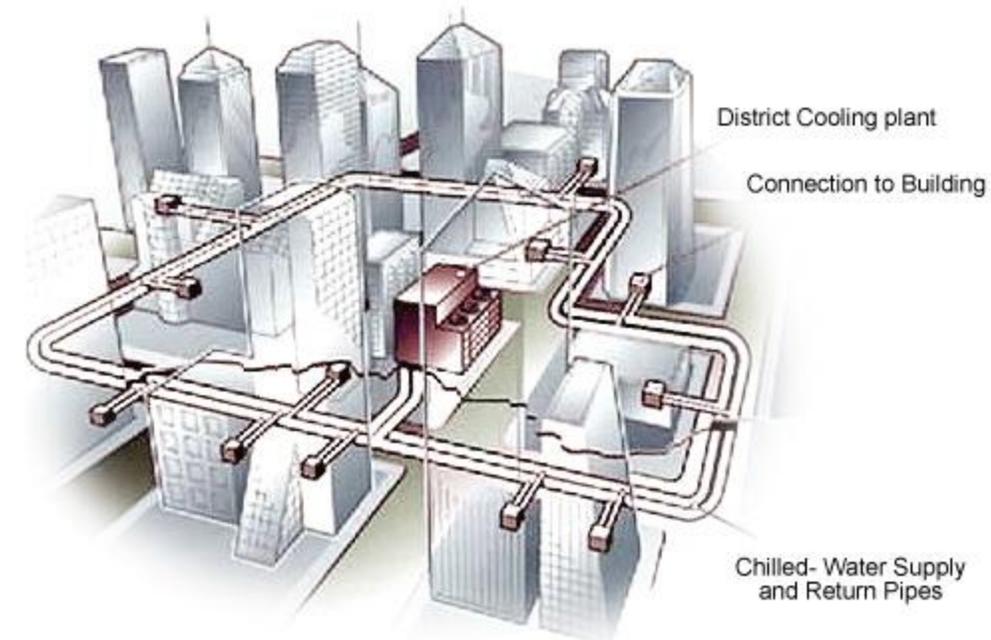
Training Course for Certified Professionals for Grid Connected Renewable Energy Power Generation Systems



2. Energy saving and green buildings

Buildings account for about **90%** of Hong Kong's total electricity consumption, that generating electricity for buildings account for over **60%** of carbon emissions

- **Target:**
 - ⇒ Reduce the electricity consumption of new and existing commercial buildings by 15% to 20%, that of residential buildings by 10% to 15% by 2035 (compared with 2015)
- **Enhance energy performance of buildings**
 - ⇒ **District Cooling System** e.g. at Kai Tak Development can save upto 35% electricity consumption in contrast to the central air conditioning system
 - ⇒ Strengthen the promotion of **energy audits and retro-commissioning**



Cont'd

- Mandatory Energy Efficiency Labelling Scheme (MEELS)

⇒ Energy labels are required to be shown on the appliances below for supply in Hong Kong to inform purchasers of their energy efficiency performance.

8 types of products:

- Room air conditioners
- Refrigerating appliances
- Compact fluorescent lamps (CFLs)
- Washing machines
- Dehumidifiers
- Televisions
- Storage type electric water heaters
- Induction cookers

⇒ Explore setting a min. energy efficiency requirement



3. Green transport

Transportation makes up of about 18% of carbon emissions in Hong Kong.

Private cars account for the largest percentage of carbon release and types of registered cars

- **Test out hydrogen fuel cell electric buses and heavy vehicles**
 - ⇒ Collaborate with the franchised bus companies and other stakeholders
- **Stop the new registration of fuel-propelled and hybrid private cars in 2035**

Figure 7 Carbon emissions of vehicles in Hong Kong in 2018

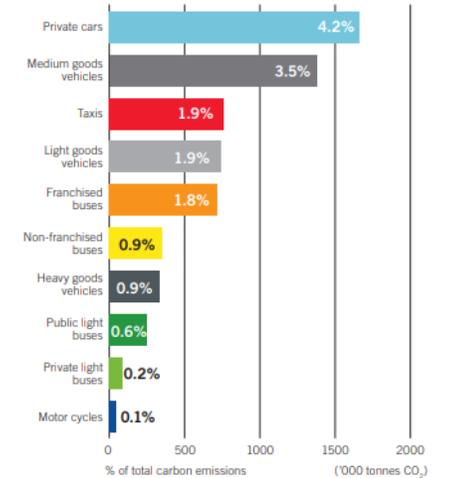
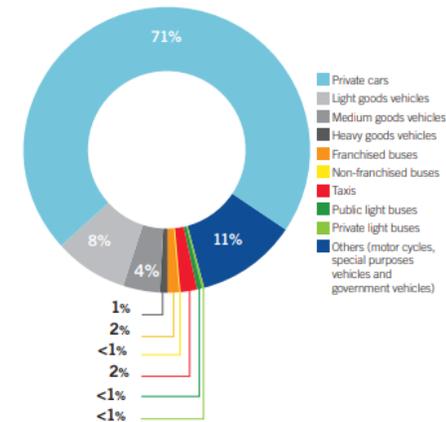


Figure 6 Types and numbers of registered vehicles in Hong Kong



Cont'd

- **Popularization of EV**

1. **"One-for-One Replacement" Scheme**

⇒ First Registration Tax for eligible private car owners EV can be waived up to HK\$97,500

2. **"The EV-charging at Home Subsidy Scheme"**

⇒ To provide subsidy to housing estates to establish 60,000 charging stations in car parks

Currently, there is one EV for every 5 newly registered private new cars



4. Waste reduction

Waste contributes to about 7% of carbon emissions in Hong Kong, with the bulk of them being the Greenhouse Gas generated from decomposition of waste in landfills.

- **Government set up the Waste Blueprint with 4 visions:**

1. Waste Reduction
2. Resources Circulation
3. Zero Landfill
4. Municipal Solid Waste (MSW) Charging Scheme



Cont'd



- **Waste Reduction**

- ⇒ Plastics take up about 20% of the total amount of MSW disposed of at landfills

- ⇒ Government will go for “Plastic-free”:

- Regulate disposable plastic tableware in phases from 2025 onwards, including expanded polystyrene (EPS) tableware, straws, cutlery, etc

- **Resources Circulation**

- ⇒ Green specifications:

- Government departments are required to adopt green specifications for products and services and to prepare annual report on green products and services purchase

- ⇒ Green Council also introduced Type II recycled contents certification for products with recycled contents to support the growth of recycling industry after the launch of waste charge scheme.



Cont'd

- **Municipal Solid Waste (MSW) Charging Scheme**

⇒ The charges are based on the quantity of waste generated

⇒ Create incentives to reduce the quantity of waste

- Payment of garbage bags
- Penalty tickets of \$1500

- **Zero Landfill**

⇒ GREEN@COMMUNITY located in different regions in Hong Kong

⇒ Accept at least 8 common types of recyclables:

Paper, metals plastics, glass bottles, regulated electrical equipment, small electrical appliances, fluorescent lamps and tubes, and rechargeable batteries, etc.

Price at \$0.11 per litre

9 sizes, t-shirt and flat-top designs



GREEN@HAPPY VALLEY is one of the stores which operated by Green Council

Implement Overview

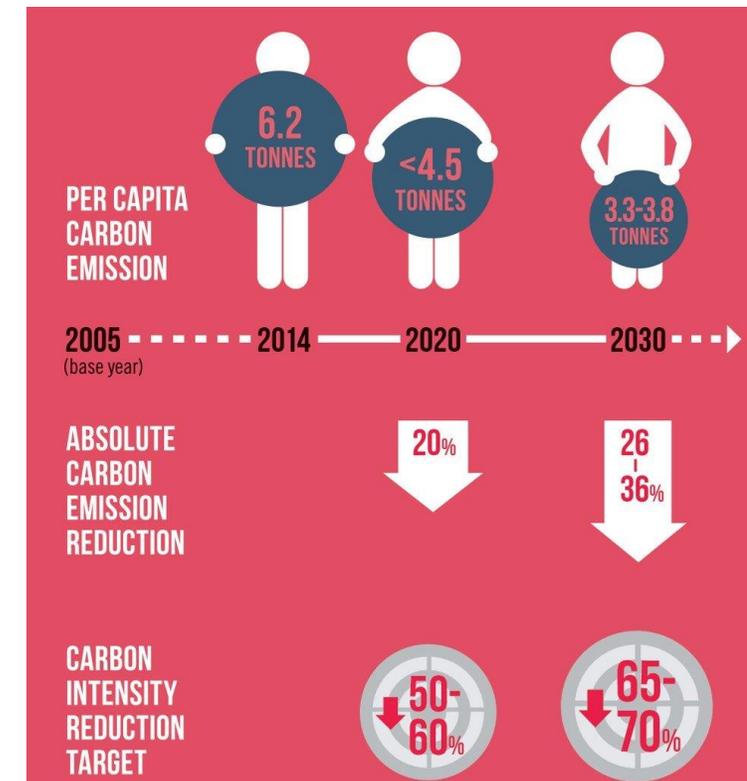
- **A Steering Committee on Climate Change and Carbon Neutrality**
 - Formulate the overall strategy at the highest level and oversee implementation and coordination
- **Office of Climate Change and Carbon Neutrality**
 - Ensure effective implementation of measures and follow-up actions
 - Strengthen coordination and promote deep decarbonization
 - Experts from inter-departmental Carbon Neutrality Task Force will explore forward-looking decarbonization policies
- **Budget allocation for decarbonization strategies**
 - HK\$240 billion in the next 15 to 20 years from the government

Output & Result

- **Hong Kong is moving steadily towards the decarbonization target**

⇒ Carbon intensity in 2019 was about 35% lower than that in 2005

⇒ The per capita carbon emissions would be reduced from the peak level of 6.2 tons in 2014 to about 4.5 tons in 2020



Challenge Faced

- Cost of Decarbonisation
- Space Constraint
- Technology Breakthrough
- Extreme Weather
- Demand for Talent
- Participations for All

*"Achieving carbon neutrality before 2050 is extremely challenging and requires **the participation of the whole community**. The public can contribute by **practicing a low-carbon lifestyle** through energy saving and waste reduction and recycling etc., in their daily lives. I hope that **various sectors of the community will join hands** with the Government to build a bright future together in a bid to strive towards the goal of carbon neutrality, with a view to achieving the vision of 'Zero-carbon Emissions: Livable City - Sustainable Development'."*

former Secretary for the Environment, Mr. WONG Kam-sing





What's next?

Temperature and natural disasters are increasing under climate change. The human-made GHG has to be stopped and reduced. There is only one earth for all present and future generations. The sustainability of the earth for the quality living of future generations will depend on the way of present living.

Organisations should be “responsible” instead of “business-as-usual” for the impact generated due to their money spent on their purchasing and other activities!



GREEN COUNCIL
環保促進會

Thank for your listening!