

## Chapter 3

# Clean Air Charter

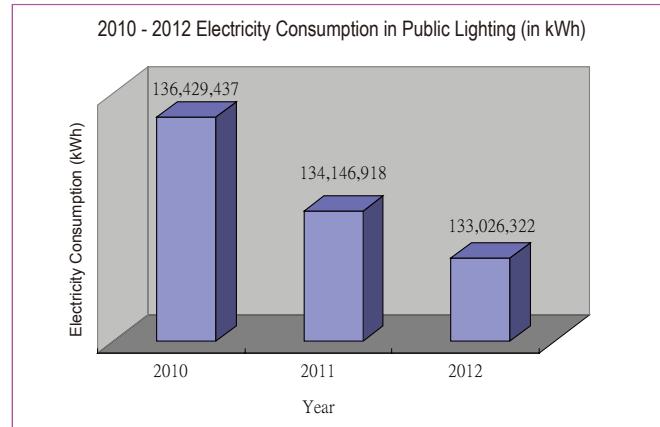
The Government has signed the Clean Air Charter launched by the Hong Kong General Chamber of Commerce and the Business Coalition. The Highways Department is committed to improving air quality by adopting energy saving and emission reducing measures for implementation of the Charter.

## Energy Saving Measures

In our operations, most of the energy is consumed in public lighting and office activities. To take forward our commitments under the Charter, we have implemented energy saving measures in order to help reduce the emission of pollutant from energy generation.

### Energy Saving in Public Lighting

The territory-wide public lighting electricity consumption decreased to 133,026,322 kWh in 2012, being 1,120,596 kWh (0.8%) less than the consumption in 2011. The corresponding reduction in indirect emission was 2,140 kg of sulphur dioxide ( $\text{SO}_2$ ), 1,300 kg of nitrogen dioxide ( $\text{NO}_x$ ) and 67 kg of respirable suspended particulates (RSP).



Continuous electricity reduction in public lighting from 2010 to 2012

We are looking for further enhancement opportunities through conducting trials on the uses of:

- ◆ Non-illuminated Retro-reflective Traffic Bollards;
- ◆ Ceramic Discharge Metal Halide (CDM) lamps; and
- ◆ LED lanterns for low and medium intensity road lights and LED light tubes.

Various trials of the above energy saving measures are expected to complete progressively in the coming year.



Road lighting

## Energy Saving in Office

The electricity consumption in some of our offices in 2012 are presented below.

Offices of Highways Department with individual electricity metre installed	Electricity	
	(kWh)	(%)
Ho Man Tin Government Offices (HMTGO)	1,088,903	48
Nan Fung Commercial Centre	615,275	27
Cheung Sha Wan Plaza	277,264	12
Skyline Tower	290,401	13
<b>TOTAL</b>	<b>2,271,843</b>	<b>100</b>

The following measures have been promulgated to enhance energy saving in offices:

- ◆ Appoint Energy Wardens in every office/division to monitor the usage of light and to keep the illumination level to the acceptable minimum level.
- ◆ Review the illumination level arising from the change of room use.
- ◆ Maintain air-conditioning not lower than 25.5°C in hot seasons.
- ◆ Switch off lights during lunch and when staff are away for long hours.
- ◆ Switch off computer equipment and electric appliances when not in use.
- ◆ Encourage the use of staircase for inter-floor traffic.
- ◆ Monitor the electricity consumption of different floors by individual meters installed on each floor of HMTGO.

## Emission Reducing Measures

### Environmentally-friendly Vehicle

We have been striving to reduce air emission of vehicles through the use of environmentally-friendly vehicles and promulgation of internal guidelines to remind motor drivers of the green driving habits. In 2012, we replaced one of our medium saloon cars by an electric car. We have also adopted environmentally-friendly contract vehicles approved by the Environmental Protection Department (EPD) extensively in our term contracts. Furthermore, procurement of this type of car for all saloon type contract vehicles have been made as a requirement for all new major works contracts commenced from 2011.



### Carbon Audit



Two carbon audits were conducted for HMTGO by the Building Management Office (BMO) in 2012 to monitor the effectiveness of Green House Gas reduction efforts. The relevant data are being studied by the BMO.



### Indoor Air Quality Certification

The indoor air quality of HMTGO has fully complied with the Good Class of the Indoor Air Quality Objectives since 2003.