



We are proactive and committed to energy saving. Various energy saving measures have been adopted to support the clean-air initiatives and help reduce emissions.



## Clean Air Charter

### Energy Saving in Public Lighting

In 2013, we installed dimmable electronic ballasts for the lighting systems of 15 nos. of footbridges and about 1,000 nos. of road lights to reduce the illumination level. We also replaced the aged fluorescent tubes with lower wattage ones in 10 nos. of footbridges and aged lanterns in 3 nos. of Public Transport Interchanges. Moreover, we installed about 520 nos. of Ceramic Discharge Metal Halide Lamps (CDM) and 47 nos. of LED road lights for trial. Under these measures, annual energy saving of about 432,000 kWh was achieved. The performance, reliability, public acceptance and cost effectiveness of these new products (i.e. LED lights & CDM lamps) are being monitored and evaluated with a view to continuing with finding more energy saving opportunities in public lighting.

With continuous efforts to achieve higher energy efficiency, we were able to contain the increase in the territory-wide public lighting electricity consumption to 0.01% only despite the 1.39% increase in lighting points in 2013. The total consumption in the year was 133,035,493 kWh, being merely 9,171 kWh more than the consumption in 2012. In other words, about 1,840,000 kWh of electricity had been saved and the corresponding indirect emission of 3,517 kg of sulphur dioxide ( $\text{SO}_2$ ), 2,136 kg of nitrogen oxides ( $\text{NO}_x$ ), and 110 kg of respirable suspended particulates (RSP) had been avoided.

### Energy Saving in Office

Electricity consumption in 2013 with corresponding indirect gas emission figures :

Offices <sup>1</sup>	Electricity (kWh)	Indirect gas emissions (kg)		
		$\text{SO}_2$	$\text{NO}_x$	RSP
Ho Man Tin Government Offices	1,089,811	2,081.54	1,264.18	65.39
Nan Fung Commercial Centre	595,917	1,138.20	691.26	35.76
Cheung Sha Wan Plaza	277,660	530.33	322.09	16.66
Skyline Tower	301,554	575.97	349.80	18.09

<sup>1</sup> Only offices of the Highways Department with individual electricity metres installed are included.

The result of our continuous efforts in saving energy in office is demonstrated in the following comparison on electricity consumption for 2012 and 2013 :

Offices	Electricity (kWh)	
	2012	2013
Ho Man Tin Government Offices	1,089,903	1,089,811
Nan Fung Commercial Centre	615,275	595,917
Cheung Sha Wan Plaza	277,264	277,660
Skyline Tower	290,401	301,554
<b>Total</b>	<b>2,271,843</b>	<b>2,264,942</b>

### Energy Saving Measures

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;
- use automatic low flow water taps in toilets; and
- monitor the electricity consumption of different floors by individual meters installed on each floor of HMTGO.

### Indoor Air Quality Certification

The indoor air measurement was conducted by EMSD in August 2013. HMTGO was awarded the "Good Class" Indoor Air Quality Certificate for 2013. The indoor air quality of HMTGO has been fully complying with the Good Class of the Indoor Air Quality Objectives since 2003.

## Environmentally Friendly Vehicles

We have been striving to reduce greenhouse gas 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 2013, we adopted an electrical car which greatly reduced greenhouse gas emission to zero. Together with the earlier introduction of two hybrid vehicles in 2011, the travel distance covered per litre of petrol consumed had increased from 9 km in April 2010 to 17 km in December 2013. Furthermore, following the procurement of the environmentally friendly vehicles approved by the Environmental Protection Department (EPD) for all saloon type contract vehicles for all new major works contracts, we have also started adopting these types of contract cars extensively in our road maintenance term contracts.



Electric Car

## Special Measures to Cope With the Air Quality

A set of precautionary measures for outdoor front-line staff and their supervisors in relation to the air quality was issued 2013. In particular, email reminders would be sent regularly to all staff whenever the Air Quality Health Index (AQHI) reaches or is forecasted to reach the "very high" or "serious" health risk categories. The guidelines cover assessment of risk of outdoor work for workers performing heavy manual works and measures to be taken to reduce outdoor physical exertion and outdoor-staying time, especially in areas with heavy traffic.