

CONTROLLING OFFICER'S REPLY

THB(T)037

(Question Serial No. 0146)

Head: (60) Highways Department

Subhead (No. & title): (-) Not Specified

Programme: (4) Technical Services

Controlling Officer: Director of Highways (K K LAU)

Director of Bureau: Secretary for Transport and Housing

Question:

Regarding road lighting, is the Highways Department (HyD) currently exploring the utilisation of light emitting diode (LED) road lights to replace the original lighting system so as to reduce electricity expenditure and carbon emission? If yes, what are the staff establishment for the study and the annual expenses?

Asked by: Dr Hon LAU Wong-fat (Member Question No. 8)

Reply:

It was noted that LED road lights should have better colour rendering and higher reliability than high pressure sodium lamps (which are now widely adopted in Hong Kong), but their cost-effectiveness was low as the prices of LED road lights meeting the necessary certification (such as lighting test, safety and protection certification) were very high. Nonetheless, the HyD commenced a trial scheme in 2009 and has been closely monitoring the performance of a total of 171 LED road lights installed under the trial scheme in seven districts (i.e. the Eastern, Wan Chai, Kowloon City, Kwun Tong, North, Sai Kung and Sha Tin Districts). The findings of the trial so far have confirmed the same.

Under the latest market situation, the prices of low- and medium-wattage LED lights have dropped significantly, but are still higher than those of low- and medium-wattage high pressure sodium lamps. Despite the merits of energy saving due to better colour rendering, the cost-effectiveness of low- and medium-wattage LED lights is not significant enough to justify utilisation on a large scale at the moment.

On the other hand, only a few models of high-wattage LED lights are available in the market, and they are far more expensive than high-wattage high pressure sodium lamps. Utilisation of high-wattage LED lights is therefore not considered justifiable at the moment.

The HyD will continue to replace the aged lighting by installing more low- and medium-wattage LED lights as appropriate under the trial scheme with a view to further

assessing the performance and cost-effectiveness of LED lights.

- End -