

CONTROLLING OFFICER'S REPLY

THB(T)037

(Question Serial No. 1405)

Head: (60) Highways Department
Subhead (No. & title): (272) Electricity for public lighting
Programme: (4) Technical Services
Controlling Officer: Director of Highways (K K LAU)
Director of Bureau: Secretary for Transport and Housing

Question:

The Highways Department (HyD) pledged to implement a trial scheme in all districts across the territory to assess the performance and cost-effectiveness of light emitting diode (LED) lights and that it would monitor and review the trial results by early 2014 to determine the extent of the utilisation of LED road lights in future. What were the results of the trial scheme? In 2015, will the Government replace road lights with low voltage LED road lights as appropriate?

Asked by: Hon FAN Kwok-wai, Gary (Member Question No. 35)

Reply:

It was noted that light emitting diode (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 160 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 road 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 road 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 road lights are available in the market, and they are far more expensive than high-wattage high pressure sodium lamps. Utilisation of high-wattage LED road lights is therefore not considered justifiable at the moment.

We will continue to install more low- and medium-wattage LED road lights as appropriate under our trial scheme this year with a view to further assessing the performance and cost-effectiveness of LED road lights.

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