

**CONTROLLING OFFICER'S REPLY TO
INITIAL WRITTEN QUESTION**

THB(T)050

Question Serial No.

0453

Head: 60 - Highways Department Subhead 000 Operational
(No. & title): Expenses

Programme: (4) Technical Services

Controlling Officer: Director of Highways

Director of Bureau: Secretary for Transport and Housing

Question:

Will the government inform this Committee:

- (a) whether it has any plan to replace traditional footpath lighting with LED? If yes, what is the estimated number of footpath lighting and expenditure involved?
- (b) how to assess whether intensity of the footpath lighting is adequate, yet not too bright and at the same time striking a balance against electricity cost? What is the standard intensity level?

Asked by: Hon. LAM Kin-fung, Jeffrey

Reply:

- (a) As the efficacy of LED product is on the rise and more choices of LED road lights have become available in the market, Highways Department (HyD) is conducting trial schemes for LED road light. We have installed four LED road lights in both Selkirk Road and Moray Road in Kowloon Tong. We have planned larger scale trial schemes to install about 100 LED road lights in different districts in 2010. The cost estimate for the schemes is around \$1 million.

At present, the efficacy of LED light is generally not higher than that of prevailing high pressure sodium lamps used for road lighting, and that LED road light has lower wattage range and hence light output. As such, our trial sites are all on roads which are narrow and have relatively lower traffic flow. The performance and cost effectiveness of the lights will be reviewed after the trial. We have no plan to replace the existing footpath lighting with LED light.

- (b) The road lighting standards in Hong Kong are comparable to international standards such as European Standards and British Standards. The recommended lighting levels and requirements are important to the safety of drivers and pedestrians. For footpath lighting, the average illuminance is in the range of 3 to 15 lux. For energy saving, energy-efficient discharge lamps are used. Photo sensors have been installed for automatic control so that they will be switched on when the ambient lighting level falls below an acceptable limit. HyD will continue to review the public lighting design standard with a view to achieving higher energy saving target.

Signature _____

Name in block letters WAI CHI SING

Post Title Director of Highways

Date 18.3.2010