# 立法會 Legislative Council

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#### **Panel on Transport**

#### **Meeting on 25 March 2014**

### **Background brief on public lighting in Hong Kong**

#### **Purpose**

This paper provides background information on public lighting in Hong Kong and summarizes the major views and concerns of Legislative Council ("LegCo") Members.

#### **Background**

2. There are currently about 133 000 street lights in the territory installed by Highways Department ("HyD"). The majority of them are column lights along roads. A small number of street lights have to be mounted to walls and structures of buildings ("wall lights") due to the site conditions. There are about 1 100 wall lights mounted to the walls of residential structures. Most of them were installed before the 1980s. Since the 1980s, due to the continuous improvement in town and road planning, HyD has largely been able to avoid mounting wall lights. Only when column lights cannot be placed due to environmental constraints will installing wall lights be considered.

### **Concerns of LegCo Members**

#### Nuisance caused by wall lights

3. In response to questions raised at the Council meeting on 7 January 2009 and the Special Finance Committee meeting on 11 April 2013, the Administration advised that HyD had been taking measures to reduce the impact of wall lights on residential units. When wall lights needed to be installed close to the windows of residential units, HyD would make use of cut-off lanterns when practicable to reduce nuisance from the diffusion of light from source. Taking into consideration the location and actual need, light

shields would also be installed to avoid the diffusion of light from source to the walls of buildings. In addition, the luminance level and direction of street lights would also be carefully adjusted to avoid light rays intruding into nearby residential flats.

#### Energy efficiency of street lights

- 4. Some Members suggested that the Administration should consider replacing public lighting with light emitting diode ("LED") to reduce the demand for electricity.
- 5. In this respect, the Administration advised that it had been the target of HyD to optimize the use of electricity in public lighting. The majority of the street lights being used, in particular those of the high-power range, were already amongst the most cost-effective and energy efficient in the market. The performance of LED lights, which could achieve only about 80 to 90 lumen per watt, was not as energy-efficient as that of high-power street lights currently used in Hong Kong, which could achieve about 130 lumen per watt. HyD was conducting trials to test the performance of LED street lights to evaluate their suitability for low to medium-power applications in Hong Kong.

#### Latest development

- 6. The Administration plans to introduce to members the public lighting system in Hong Kong, including the design standards, operation, maintenance, beautification and energy saving measures at the meeting of the Panel on Transport to be held on 21 March 2014.
- 7. The hyperlinks to relevant papers, together with relevant questions raised at the meetings of the Council and Finance Committee, and the Administration's responses, are given in the **Appendix**.

Council Business Division 1
<u>Legislative Council Secretariat</u>
18 March 2014

## Appendix

# **Public lighting in Hong Kong**

## List of relevant papers

Date of meeting	Meeting	Minutes/Paper	LC Paper No.
7.1.09	Council meeting	Hon IP Kwok-him raised a question on external lighting and light pollution	
21.4.10	Council meeting	Hon Jeffrey LAM raised a question on trial schemes for Light Emitting Diode road lights	
11.4.13	Finance Committee	Administration's replies to Members' initial written questions of the Estimates of Expenditure 2013-14	http://www.legco.gov.hk/yr12-13/eng lish/fc/fc/w_q/thb-t-e.pdf

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