Legislative Council Public Works Subcommittee meeting on 16 March 2017

186GK – Ancillary facilities block at Tseung Kwan O Area 65C2

Supplementary Information

PURPOSE

At the Legislative Council Public Works Subcommittee meeting on 16 March 2017 when the captioned project was considered (PWSC(2016-17)40 refers), Members requested the following supplementary information –

- (a) maintenance cost of the vertical greening facility in the proposed ancillary facilities block;
- (b) whether it is the Government's policy to provide vertical greening facility in new Government buildings;
- (c) how the energy efficient features mentioned in the Paper will achieve the target of 3% energy savings in the annual energy consumption with a payback period of 8.3 years; and
- (d) relevant technical details of energy efficient features.

GOVERNMENT RESPONSES

- 2. The required information is set out below
 - (a) Self-clinging climber species which are easy to grow and require little maintenance will be chosen for the vertical greening in this project. The at-grade planter provides the necessary planting soils and the vertical frame attached to external wall provides support for the climber's upward

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growth. Required maintenance works include pruning, watering, fertilizing, weeding, pest and fungal control, etc. The annual maintenance cost will be around HK\$ 1,500 to 2,000;

- (b) According to Development Bureau's Technical Circular (Works) No. 3/2012, the Government is committed to promote green buildings for a quality living environment for the community. All new Government buildings are required to achieve the minimum site coverage of greenery according to the area of the site, wherever it is technically feasible. Generally speaking, the new Government building works could, based on design, spatial and objective factors, achieve the required minimum site coverage of greenery by providing at-grade greenery, roof greening, vertical greening or other greenery measures;
- (c) The 8.3 years estimated payback period mentioned in paragraph 25 of the Public Works Subcommittee discussion paper (Paper no: PWSC(2016-17)40), refers to the payback period of the energy efficient features, which include the heat energy reclaim of exhaust air mentioned in paragraph 23(a) and other energy-saving devices, such as light-emitting diode (LED) type light fittings. The estimated additional cost of these energy efficient features is HK\$ 200,000, with targets to achieve 3% annual energy consumption, i.e. about HK\$ 24,000, leading to the estimated payback period of 8.3 years.

The calculation of the above mentioned payback period does not include the renewable energy technologies (photovoltaic system) mentioned in paragraph 23(b), and the greening features and recycling systems mentioned in paragraph 24 of the Paper; and

- (d) The energy efficient features mentioned in paragraph 2(c) above include -
 - (i) heat energy reclaim of exhaust air from the

air-conditioning system;

- (ii) demand control of supply air;
- (iii) LED type light fittings; and
- (iv) LED type exit signs.

Transport and Housing Bureau March 2017