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CONTROLLING OFFICER'S REPLY

(Question Serial No. 0009)

Head: (42) Electrical and Mechanical Services Department

Subhead (No. & title): Not specified

Programme: (3) Energy Efficiency and Conservation, and Alternative Energy

<u>Controlling Officer</u>: Director of Electrical and Mechanical Services (POON Kwok-ying)

<u>Director of Bureau</u>: Secretary for Environment and Ecology

Question:

Regarding the launch of the Pilot Scheme on Building-Integrated Photovoltaics (BIPV) (Pilot Scheme), the Government will launch the Pilot Scheme at the Electrical and Mechanical Services Department (EMSD) Headquarters to explore photovoltaic technology applications on the facades of government buildings. In this connection, would the Government inform this Committee of:

- 1. the timetable and roadmap for the Pilot Scheme, as well as the estimated expenditure and manpower involved;
- 2. whether the selection of the EMSD Headquarters for the installation of BIPV on its facades has taken into account its structural compatibility and sunlight conditions with a view to achieving optimal energy generation efficiency; and
- 3. the Government's specific objectives of promoting the Pilot Scheme, as well as the expected outcomes of energy efficiency and environmental improvement through the scheme?

Asked by: Hon LO Wai-kwok (LegCo internal reference no.: 4)

Reply:

- 1. Through multi-disciplinary and inter-departmental collaboration (including the Electrical and Mechanical Services Department (EMSD), Buildings Department, Architectural Services Department and Fire Services Department), the Government will launch the Pilot Scheme on Building-Integrated Photovoltaics (BIPV) (Pilot Scheme) at the EMSD Headquarters to explore photovoltaic technology applications on the facades of buildings as well as the supply of renewable energy (RE) to buildings. The project is currently under planning. We will announce the details in due course.
- 2. To formulate an appropriate proposal for the Pilot Scheme, the inter-departmental team will comprehensively take into consideration various factors of the existing EMSD Headquarters, including structural compatibility, appearance, insolation conditions at different facades of the building, operational situations, as well as repair and maintenance requirements, etc.

3. Apart from supplying RE to the building, the Pilot Scheme can provide actual data for reference and evaluation. Based on the relevant data collected, the Government will assess the effectiveness and feasibility of BIPV from various aspects, such as the actual power generation efficiency, performance in reducing indoor energy consumption as well as repair and maintenance requirements and expenditures, etc., so as to evaluate whether to extend the Pilot Scheme to other public and private organisations in the future.