EEB(E)026

CONTROLLING OFFICER'S REPLY

(Question Serial No. 3052)

<u>Head</u>: (42) Electrical and Mechanical Services Department

Subhead (No. & title): (-) Not Specified

<u>Programme</u>: (3) Energy Efficiency and Conservation, and Alternative Energy

Controlling Officer: Director of Electrical and Mechanical Services (POON Kwok-ying)

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

Question:

The Government mentioned that a Pilot Scheme on Building-Integrated Photovoltaics would be implemented at the Electrical and Mechanical Services Department Headquarters to explore photovoltaic technology applications on the facades of government buildings. In this regard, please inform this Committee of:

- 1. the current progress and expense of the scheme;
- 2. the estimated completion date of the scheme, the regions where the major materials used are sourced from and the amount of money involved.

<u>Asked by</u>: Hon TSE Wai-chuen, Tony (LegCo internal reference no.: 23) <u>Reply</u>:

1 & 2. The Government is implementing the Pilot Scheme on Building-Integrated Photovoltaics (BIPV) (Pilot Scheme) at the Electrical and Mechanical Services Department (EMSD) Headquarters to explore photovoltaic technology applications on the facades of buildings as well as the supply of renewable energy to buildings. The objective is to assess the effectiveness and feasibility of BIPV from various aspects having regard to the relevant data collected under the scheme, such as the actual power generation efficiency, performance in reducing indoor energy consumption, repair and maintenance requirements and expenditures, as well as the construction and maintenance costs of thin-film photovoltaic glass panels and those of traditional glass for application on the facades, etc., so as to evaluate whether to extend the scheme to other public and private organisations in the future.

The Pilot Scheme is divided into two parts: the first part involves conducting a feasibility study on the project; and the second part involves installing a BIPV system at the EMSD Headquarters. The feasibility study of the project was completed in December 2024, while the relevant works have officially commenced in January 2025. It is expected that the works will be completed by mid-2025.

Afterwards, the EMSD will collect data of one year for subsequent evaluation. The estimated expenditure on the entire Pilot Scheme is \$6.5 million. As the materials to be used under the Pilot Scheme are still at the approval stage, the relevant information is not available.