

LCQ3: Pilot scheme on electric ferries

Following is a question by the Hon Wilson Or and a reply by the Secretary for the Environment, Mr Wong Kam-sing, in the Legislative Council today (July 7):

Question:

To reduce air pollutant emissions from ferries, the Government earmarked \$350 million in the last financial year for implementing a pilot scheme on electric ferries (the pilot scheme) and exploring the feasibility of replacing traditional ferries with new energy ones in the long run. Four ferry service operators will conduct trials respectively with one electric ferry on one of their in-harbour routes. In this connection, will the Government inform this Council:

(1) of the latest progress of the pilot scheme and set out, in respect of each relevant route, the origin and destination, name of the operator, as well as the commencement date of the trial; and

(2) whether, according to the Government's assessment, the use of electric ferries will help reduce the operating costs of the operators; if the assessment outcome is in the affirmative, which of the in-harbour routes that have been discontinued due to financial unviability (e.g. the routes plying between Tuen Mun or Kwun Tong and Central) will become financially viable upon using electric ferries, and whether the Government will invite tenders to re-commission those routes, so as to provide the residents in the relevant districts with more options on public transport modes?

Reply:

President,

As regards the question raised by the Hon Wilson Or, having consulted the Transport and Housing Bureau, my response is as follows:

(1) In end June 2021, the Government announced the new Clean Air Plan for Hong Kong 2035 (the Plan), setting out clearly the long-term goals and concrete policies to continuously improve the air quality from now to 2035. A number of decarbonisation strategies have also been integrated in the Plan to facilitate the attainment of carbon neutrality while sustainably improving Hong Kong's air quality. Among which, promoting the use of new energy transportation is one of the key measures.

The Government has been encouraging the transportation industry to test and use green innovative transport technologies to improve air quality and enhance other environmental benefits. Under the New Energy Transport Fund (previously named Pilot Green Transport Fund), the Government has subsidised the trials of green technologies for ferries, including the conversion of three existing ferries from using conventional diesel-engine propulsion systems to diesel-electric propulsion systems and the installation of a

seawater scrubber in a ferry.

To further promote the use of green transportation technologies in ferries, a consultancy study on green ferry technologies commissioned by the Environmental Protection Department (EPD) in 2017 concluded that electric ferries are applicable to in-harbour ferry routes operating at shorter sailing distance and lower speed.

Given the limited application of electric ferries globally at the moment and the high capital cost for constructing a new electric ferry, the Government has earmarked \$350 million in the last fiscal year to launch a pilot scheme for electric ferries (Pilot Scheme). The Government is preparing for testing the operation of electric ferries in four in-harbour ferry routes and will fully subsidise the relevant ferry operators for the construction of electric ferries and the associated charging facilities, as well as the operational, maintenance and repair expenditures incurred by the operation of the electric ferries during the 24-month trial period. Four ferry operators have planned to participate in the Pilot Scheme in the following four in-harbour ferry routes:

1. Ferry route plying Central and Tsim Sha Tsui by The "Star" Ferry Company, Limited;
2. Ferry route plying North Point and Hung Hom by the Sun Ferry Services Company Limited;
3. Ferry route plying Sai Wan Ho and Kwun Tong by the Coral Sea Ferry Service Company Limited; and
4. The "Water Taxi" plying Kai Tak, Hung Hom, Tsim Sha Tsui, Central and West Kowloon by the Fortune Ferry Company Limited.

The Government has established an inter-departmental working group (IWG) to work out the details of the Pilot Scheme, oversee its progress and evaluate the performance of the electric ferries. The EPD has also engaged a consultant to design the electric ferries and the associated charging facilities, and assist the ferry operators to prepare technical specifications for issuing open tenders for the construction of electric ferries. In addition, the Government has set up an expert panel comprising a local naval architect and academics as well as the IWG members to assess the design proposals of electric ferries.

The EPD and the consultant have been proactively discussing the details of the Pilot Scheme with ferry operators to understand their operational needs and requirements of the new electric ferries, and study the charging arrangements. So far, the consultant has worked out the conceptual designs of electric ferries and submitted them for discussion at the expert panel. Regarding the installation of charging facilities at existing ferry piers, given that the existing electricity supply at the ferry piers is not sufficient to meet the charging needs of the electric ferries, additional power supply and upgrading of the electrical systems at the piers are required. The power companies have proactively assisted and have agreed to increase the power supply to cater for the trial. We have, on the other hand, engaged an engineering consultant to work with the power companies and relevant government departments to prepare the engineering design of the

charging facilities. Upon the completion of the design, the Government will invite tenders for the construction of charging facilities at the ferry piers to support the operation of the electric ferries in the future.

Based on the current progress, we anticipate that the design proposals for the electric ferries and associated charging facilities would be completed within this year. The ferry operators and the Government will be able to issue open tenders for the construction of electric ferries and the associated charging facilities respectively later this year. Taking into account the lead time to construct the electric ferries and the associated charging facilities, we anticipate that the Pilot Scheme would commence in 2023 tentatively.

(2) During the 24-month trial operation, each ferry operator is required to commission a ship surveyor or maritime professional to collect the operational, environmental and financial data of the electric ferry and submit an assessment report to the expert panel after the completion of the trial. The expert panel will then examine the assessment report and evaluate the performance of the electric ferry in terms of environmental benefits, technical performance and cost effectiveness. Upon the satisfactory completion of the trial, we will encourage the ferry operators to continue deploying the electric ferries to their ferry routes.

If the Pilot Scheme is successful, it will provide ferry operators an additional choice of green technologies for ferries. The Government welcomes interested party to apply for the operation of new ferry services. When assessing applications for new ferry services, the Government will consider all the factors, including the provision of existing public transport services, passenger demand, applicability of green technologies in ferries, availability of piers and supporting facilities, as well as the financial and operational viability.

Thank you, President.