## LCQ12: Promoting use of biodiesel

Following is a question by the Hon Frankie Yick and a written reply by the Secretary for the Environment, Mr Wong Kam-sing, in the Legislative Council today (June 5):

## Question:

Biodiesel is a renewable energy source refined from oil and grease (e.g. used cooking oil). The findings of a study have revealed that the use of biodiesel to replace conventional diesel is conducive to the reduction in the emission of some air pollutants. However, a biodiesel producer has indicated that it came, under the auspices of Invest Hong Kong, to invest in Hong Kong in 2013 by setting up a biodiesel plant, but since then the Government has not actively promoted the use of biodiesel, resulting in a persistently low demand for biodiesel over the years. In this connection, will the Government inform this Council:

- (1) of the respective quantities of biodiesel used in each of the past three years by (i) the various government departments, (ii) the Airport Authority Hong Kong, (iii) the transport sector, (iv) the construction and industrial sectors, and (v) other sectors;
- (2) whether it has plans to increase the use of biodiesel to partially replace diesel in the coming three years; if so, of the details; if not, the reasons for that: and
- (3) of the specific measures put in place to promote the wider use of biodiesel in various sectors, e.g. whether it will provide any economic incentives and incorporate, into the land leases granted and renewed for filling stations, a provision requiring the lessees to provide biodiesel or auto-fuel containing a certain proportion of biodiesel at the stations for motorists to choose?

## Reply:

## President,

Wider use of biodiesel has lots of benefits. Firstly, it facilitates recycling of waste cooking oils (WCO) and converting waste into energy, which support sustainable development of the local recycling industry. Secondly, it helps safeguard public health by channelling WCO to proper recycling outlets thus preventing such waste from getting back into the food chain. Thirdly, replacement of conventional diesel with biodiesel contributes to reducing emission of greenhouse gas (GHG) and some air pollutants. Fourthly, conversion of WCO to biodiesel provides an additional source of renewable energy for Hong Kong. On the other hand, using biodiesel with high biodiesel content by vehicles leads to an increase in emission of nitrogen oxides, and may not be compatible with very limited number of certain old models of vehicles.

In light of the above, to boost users' confidence and help control the environmental impacts of biodiesel, we have amended the Air Pollution Control (Motor Vehicle Fuel) Regulation (Cap. 311L), and with reference to the standard adopted by the European Union, formulated the specifications of motor vehicle biodiesel for Hong Kong, i.e. B5 biodiesel which is a blend of 95 per cent Euro V standard diesel and 5 per cent biodiesel. The amended regulation came into force on July 1, 2010.

In Hong Kong, biodiesel including B5 biodiesel for motor vehicle use is duty-free. This is in line with the practices of many overseas countries and districts which have been promoting use of biodiesel through offering tax incentive.

The biodiesel currently used in Hong Kong is mainly produced from waste cooking oils generated by local restaurants and other food premises. To promote recycling and waste-to-energy, the Environmental Protection Department (EPD) has been proactively encouraging government departments to use B5 biodiesel, so as to set a leading example to promote progressive popularisation of biodiesel in Hong Kong. Since 2012, the EPD has been working with the Government Logistics Department to implement a central procurement scheme of biodiesel. With technical support from the Electrical and Mechanical Services Department, the EPD has been proactively engaging government departments to try out fuelling their vessels, vehicles and equipment (such as boilers, generators and machinery) with biodiesel as a replacement of conventional diesel. The total consumption of biodiesel by government departments has jumped over fivefold from around 2.6 million litres in 2012 to about 14.5 million litres in 2018.

My reply to the question raised by the Hon Frankie Yick is as follows:

(1) (i) Figures on the total consumption of biodiesel in each of the past three years by government departments and the Hospital Authority (HA) are tabulated below.

II V D D r	Total consumption of biodiesel by government departments and the HA (million litres)
2016	12.24
2017	13.75
2018	14.46

- (ii) The Airport Authority Hong Kong (AAHK) has adopted an electrification strategy under which business partners in the airport are encouraged to switch their fleets to electric vehicles; and has not purchased biodiesel in the past three years.
- (iii) to (v) The Government does not maintain statistics on the quantities of biodiesel used by the transport, construction and industrial and other

sectors.

(2) and (3) We envisage continuous growth in the consumption of biodiesel by government departments. To further promote green procurement and the use of biodiesel, the Government has already required, through tendering and contractual arrangements made from March 2016 and January 2017 respectively, the full use of biodiesel by non-road construction machinery in all newly tendered public works projects and public housing projects. Such machinery includes air compressors, generators, excavators, crawler cranes, crane lorries, road rollers, etc. The EPD has also collaborated with the relevant sectors, public organisations and other stakeholders through exchanges and seminars to share the experiences in using biodiesel, thereby promoting its wider use in Hong Kong. Various trades have supported the use of biodiesel. Examples include a construction engineering firm using biodiesel to run its construction site machinery and construction vehicles; property management companies using biodiesel to provide heating, cooling and power for commercial buildings; and a catering group using biodiesel to fuel its vehicle fleet. With the increasing market demand, at present a total of three petrol stations are supplying biodiesel in Hong Kong International Airport, Tai Po and Tsing Yi.

In view of the benefits of using biodiesel, the EPD will continue to explore introducing further measures to promote wider use of biodiesel in various sectors as an alternative fuel.