

LCQ2: Waste lead-acid storage batteries

Following is a question by the Hon Frankie Yick and a reply by the Secretary for the Environment, Mr Wong Kam-sing, in the Legislative Council today (August 25):

Question:

If waste lead-acid storage batteries (waste batteries) are not disposed of properly, the hazardous substances therein may threaten human health and contaminate the environment. As such, the collection, transportation, disposal as well as import and export of waste batteries are regulated by the law. It has been reported that in 2018, the quantities of waste batteries generated in and exported from Hong Kong were 38 000 and 2 100 tonnes respectively. On the other hand, the only waste battery recycling centre in Hong Kong, which commenced operation in September 2019, recovered less than 1 000 tonnes of waste batteries each year. Such figures have aroused the concern that the majority of waste batteries might have been disposed of illegally. In this connection, will the Government inform this Council:

(1) of the quantity of waste batteries generated in Hong Kong in each of the past three years, with a breakdown by their disposal methods;

(2) of the respective numbers of persons prosecuted in each of the past three years for illegal collection, disposal and export of waste batteries, as well as the penalties imposed on those convicted; the measures in place to step up efforts in combating such offences; and

(3) given that the reuse rate of waste batteries may exceed 80 per cent, of the Government's new measures to encourage the relevant trades to send waste batteries to the recycling centre for reuse?

Reply:

President,

Handling of waste lead-acid batteries is strictly controlled under the Waste Disposal Ordinance (the Ordinance), and the Waste Disposal (Chemical Waste) (General) Regulation (the Regulation) including registration as chemical waste producers, applications for chemical waste collection and disposal licences, and furnishing the amounts of waste lead-acid batteries produced, collected and disposed of. The transboundary movements of waste lead-acid batteries are controlled according to the Basel Convention.

The export from Hong Kong of any such batteries for their recycling requires an export permit issued by the Environmental Protection Department (EPD). The EPD has to obtain, prior to its issuance of the export permit, a

written consent from the competent authority of the concerned place of import, ensuring that waste lead-acid batteries will be transported to an approved recycling facility in that place for recycling in an environmentally sound manner.

In Hong Kong, there are about 4 400 main producers of waste lead-acid batteries. All registered with the EPD, they include local transportation and bus companies, automobile repairers and major data centres. Currently, we have 26 licensed collectors and 8 licensed disposal facilities of such batteries. The businesses of these facilities include separation, insulation, packaging and other preliminary treatment of waste lead-acid batteries for export to advanced facilities in Korea; and mechanical breaking of waste lead-acid batteries, melting lead plates into lead bullions and exporting them overseas for further processing and refining.

When reviewing the figures on waste lead-acid batteries in 2017, the EPD spotted a discrepancy between the registered export volume and the estimated production volume, suggesting the existence of illegal export activities. Therefore, the EPD stepped up its publicity, monitoring and enforcement efforts in respect of the production, collection and transportation of waste lead-acid batteries, with a view to combating illegal collection and export activities of such batteries. Subsequently, the export volume of waste lead-acid batteries controlled under the Ordinance increased gradually from 1 200 tonnes in 2017 to 7 000 tonnes in 2020 and, together with about 700 tonnes of those batteries that were disposed of locally, the total amount was comparable to the estimated annual production volume in Hong Kong.

My reply to the Hon Yick's question is as follows:

(1) There are approximately 800 000 vehicles in Hong Kong, amounting to about 14 000 tonnes of lead-acid batteries, and around 4 000 tonnes of waste lead-acid vehicle batteries would be produced each year. Besides, it is estimated that other purposes such as uninterruptible power supply for data centres and emergency lighting may produce some 3 000 to 4 000 tonnes of waste lead-acid batteries annually. Thus a total of nearly 7 000 to 8 000 tonnes of waste lead-acid batteries are produced across the territory every year.

Figures on waste lead-acid batteries locally disposed of in the past three years are as follows: 2 100, 4 400 and 7 000 tonnes were preliminarily treated and then exported to overseas advanced facilities for recycling in 2018, 2019 and 2020 respectively; 150 and 700 tonnes were recycled locally in 2019 and 2020 respectively; and 460 and 120 tonnes were landfilled in 2018 and 2019 respectively. To further encourage the recycling of waste batteries in related industries, the EPD has banned the disposal of waste lead-acid batteries at landfill since 2020.

(2) In the past three years, there were a total of 74 successful prosecutions on illegal acts related to waste lead-acid batteries, with fines amounted to about \$320,000. Among these successful prosecutions, the numbers of cases involving illegal collection or transportation were 7 in 2018, 12 in 2019 and 4 in 2020, while those relating to illegal disposal were 23 in 2018, 18 in 2019 and 9 in 2020. Also, there was one case of illegal export in 2018.

All along, the EPD has worked closely with the Customs and Excise Department to conduct inspections, at various sea, land and air control points and based on risk assessment and intelligence, of import/export containers that are suspected to be carrying waste lead-acid batteries or other harmful waste. In the past three years, over 2 600 import/export containers were inspected, and a total of 162 prosecutions on illegal import/export of waste were completed, with only one case involving illegal export of waste lead-acid batteries. Over the same period, we also received neither report on illegal import nor notification of return shipment of such batteries from any overseas competent authorities. We thus believe that there is currently no serious case of illegal export of waste lead-acid batteries in Hong Kong.

(3) The EPD has banned the disposal of waste lead-acid batteries at landfills since 2020. The Government launched the \$1 billion Recycling Fund (the Fund) in October 2015 to facilitate the recycling industry to upgrade its operational capabilities and efficiency to support its sustainable development. An additional funding of \$1 billion was injected to the Fund in April 2021, and the application period of the Fund was extended to 2027 to cater for the latest needs of both the local and non-local markets and to achieve re-industrialisation. Moreover, the EcoPark in Tuen Mun provides long-term land at affordable rent to the recycling sectors, and is equipped with infrastructures like land and marine access, power and water supply, sewerage and telecommunication connections, etc. Tenants can also enjoy various common facilities in the EcoPark, including a road network, standard berthing piers and a weighbridge, as well as the meeting room, seminar room and conference room in the Administration Building. This will help tenants reduce their infrastructural expenditure and thus encourage them to invest in more advanced technologies and treatment processes. Currently, there are two recycling companies in the EcoPark that are licensed to treat waste lead-acid batteries. Furthermore, the Fund also subsidises different local waste lead-acid batteries recyclers in their operation and purchase of equipment to enhance their productivity, and the total amount of funding granted is about \$8.6 million.

Thank you, President.