

# LCQ21: Use, disposal and recycling of styrofoam

Following is a question by the Hon Chan Hak-kan and a written reply by the Secretary for the Environment, Mr Wong Kam-sing, in the Legislative Council today (May 8):

Question:

It has been reported that since styrofoam takes as long as 10 000 years to decompose and has a huge impact on the environment, quite a number of countries have started to control the use of disposable styrofoam utensils. Regarding the use, disposal and recycling of styrofoam in Hong Kong, will the Government inform this Council:

- (1) of the major sources of the styrofoam disposed of at landfills;
- (2) of the locations of the existing styrofoam collection points;
- (3) of (i) the quantities of styrofoam disposed of and recovered, as well as (ii) the quantities of styrofoam collected from the sea and beaches, in the past five years;
- (4) of the new measures to reduce local usage of styrofoam;
- (5) given that the Environmental Protection Department is commencing a study on the feasibility, scope and mechanism of controlling or banning disposable plastic tableware, whether the study will cover styrofoam tableware; if so, of the details; if not, the reasons for that;
- (6) whether it will examine the formulation of an implementation timetable for banning styrofoam tableware; and
- (7) whether it will allocate funding from the Recycling Fund to support styrofoam recycling; if so, of the details; if not, the reasons for that?

Reply:

President,

Styrofoam is lightweight but the volume is large. A large amount of styrofoam recovered and processed will only produce small amount of plastic raw materials. The logistics and recycling costs are high. Coupled with the fact that most of the waste styrofoam is contaminated or contains impurities, the recycling efficiency of styrofoam is thus comparatively low. That said, styrofoam stays afloat for a long time once entering the marine environment and may affect marine ecology. Hence, the Government has been encouraging reduction of styrofoam at source.

My reply to the question raised by the Hon Chan Hak-kan is as follows:

(1) According to the reports on "Monitoring of Solid Waste in Hong Kong" compiled by the Environmental Protection Department (EPD), about 30 400 tonnes of waste styrofoam were disposed of at landfills in 2017, among which some 47 per cent were styrofoam tableware, with the rest being styrofoam packaging materials like protective containers for electrical appliances and fresh meat, mesh wrap for fruit, etc. Analysed by waste category, about half of the waste styrofoam was domestic waste and the remaining half was commercial and industrial (C&I) waste.

(2) For the reasons stated in the introduction, there is currently no large-scale commercial operation on styrofoam recycling in Hong Kong. Since 2015-16, we have supported a styrofoam recycling project under the Environment and Conservation Fund (ECF) with a view to trying out recycling of styrofoam. Commenced in June 2016, the project covers not only collection of styrofoam from the C&I sectors and educational institutions, but also collaboration with various community groups and certain ECF-funded Community Recycling Centres to set up collection points across the territory for the public to recycle styrofoam.

(3) The EPD does not compile statistics on the amount of styrofoam found in daily marine refuse collection. The quantities of styrofoam disposed of at landfills between 2014 and 2017 are tabulated below.

Year	Quantity of styrofoam disposed of at landfills (tonnes)
2014	32 100
2015	41 000
2016	33 700
2017	30 400

The relevant statistics for 2018 are still under compilation.

The EPD does not have any statistics on the volume of styrofoam recovered locally. Nonetheless, for the styrofoam recycling project funded by the ECF as mentioned above, the total quantity of styrofoam recovered by the end of December 2018 was approximately 100 tonnes.

(4) With various publicity and education efforts, the EPD has been striving to encourage the public and different sectors to reduce the use of single-use plastic items, especially styrofoam products, and promote the use of more environment-friendly substitutes. In the summer of 2018, the EPD organised the "Plastic Free Beach, Tableware First" campaign at public beaches across the territory. More than 50 restaurants and kiosks participated and used bamboo sticks, paper straws and paper bags in place of disposable plastic (including styrofoam) tableware to promote the "plastic-free" culture to the public. The Environmental Campaign Committee has also launched the Reusable

Tableware Lending Programme for Large-scale Events which offers one-stop delivery, collection and cleaning services of tableware to event organisers for free.

The Government has also been encouraging the catering sector to provide reusable tableware and food containers. Under the Sustainable Development Fund, the Government supports the catering sector to formulate guidelines on green procurement for the trade, including their use of reusable or plant-fibre tableware instead of disposable plastic ones. Through the annual Hong Kong Awards for Environmental Excellence, the EPD also commends organisations that have excelled in environmental management, including restaurants committed to waste reduction at source (such as taking measures to encourage customers not to ask for disposable tableware).

Starting from January 2019, the Government has taken the lead in banning plastic straws and styrofoam tableware in premises and canteens mainly serving government staff. Relevant departments, when inviting tenders for new contracts and renewing existing contracts, will also require restaurant operators in suitable government venues to avoid using disposable plastic tableware. Besides, the ECF also sponsors local non-profit making organisations to explore environment-friendly and durable alternatives for foam boxes commonly used in the fish markets.

The Government actively preparing for the implementation of the municipal solid waste charging scheme, under which financial incentives are provided to further encourage the public and the C&I sectors to reduce waste at source, such as using less plastic products and materials including styrofoam.

(5) and (6) The EPD is conducting a study on the feasibility, scope and mechanism of controlling or banning the use of disposable plastic (including styrofoam) tableware to confirm whether there is a need for such control and, if needed, the scope and means of control and applicable substitutes, etc. The EPD will also draw reference from approaches and specific situations worldwide on the control of disposable plastic tableware and their means of implementation, and consult the relevant trades and stakeholders. Based on the findings of our study and analysis, the EPD will draw up a proposal that is suitable for implementation in Hong Kong in the long run. The study is scheduled for completion in 2020.

(7) The Government launched the \$1 billion Recycling Fund in October 2015 to assist in upgrading the operational capabilities and efficiency of the recycling industry, thereby promoting waste recovery and recycling as well as reducing waste disposal at landfills. Under the Fund, the Enterprise Support Programme (ESP) provides funding support on a matching basis, and supports individual enterprises to enhance and expand their local waste recycling business. The Fund has earmarked \$50 million for the Standard Projects under the ESP to assist recyclers to procure different recycling equipment such as hot-melting machines and cold compactors for processing styrofoam, as well as air filtering equipment, etc. The Fund has earmarked another \$50 million to encourage recyclers to use compactor trucks for the transportation of

recyclables (including styrofoam), with a view to enhancing operational efficiency and reducing transportation cost.

Furthermore, the EPD plans to roll out a two-year Pilot Scheme on Collection and Recycling Services of Waste Plastics (the Pilot Scheme) in three different districts (i.e. Eastern District, Kwun Tong and Sha Tin) to provide free collection services for waste plastics (all types including styrofoam) from non-C&I sources in these districts, such as public and private housing estates, schools and public organisations. The waste plastics so collected will be further treated and recycled for producing recycled raw materials or products. The practical experience gained from the Pilot Scheme will benefit future expansion of the services across the whole territory. The tender of the waste plastics collection service contract for the Eastern District was closed on April 26, 2019. The EPD is conducting tender assessment with a view to rolling out the service this year. Later on, the EPD will also invite tenders for waste plastics collection services in Kwun Tong and then Sha Tin.