

LCQ7: Handling of styrofoam waste

Following is a question by the Hon Lam So-wai and a written reply by the Secretary for Environment and Ecology, Mr Tse Chin-wan, in the Legislative Council today (May 8):

Question:

Regarding the handling of styrofoam waste, will the Government inform this Council:

- (1) of the current daily amount of styrofoam waste being sent to landfills;
- (2) as it is learnt that styrofoam is widely used as a packaging material for some household electrical appliances (e.g. air-conditioners, refrigerators, washing machines and televisions), whether the Government has compiled statistics on the amount of styrofoam waste generated from the packaging materials of household electrical appliances in each of the past three years and, among such waste, the amount that was sent to landfills;
- (3) as there are views that the economic benefits of styrofoam recycling are relatively low, how the Government assists the recycling industry in handling large volumes of styrofoam waste when alternatives that can completely replace styrofoam have not yet emerged;
- (4) whether it has assessed if the problem of styrofoam waste can be fully resolved when I·PARK1, a modern waste-to-energy incinerator for treating municipal solid waste, becomes operational in 2025; and
- (5) whether the Government currently has plans to fully resolve the problem of styrofoam waste?

Reply:

President,

Given styrofoam being lightweight but bulky in volume, even when a large amount of styrofoam is recovered and processed, only a small amount of raw plastics will be produced. The costs on transportation and recycling are high. Coupled with the fact that most of the waste styrofoam is either contaminated or mixed with impurities, the recycling efficiency of styrofoam is comparatively low. Hence, the Government has put forward various strategies on handling styrofoam waste: (i) reducing use at source, such as banning the sale or supply of styrofoam tableware, and encouraging electrical appliances suppliers to reduce the use of styrofoam packaging materials; (ii) encouraging reuse, such as styrofoam boxes used for storage of vegetables and fruits; and (iii) providing outlets for recycling, such as recycling of styrofoam products at the GREEN@COMMUNITY facilities. As regards styrofoam that cannot be reused or recycled, to reduce the amount of such waste to be

transferred to landfills for handling, the Government is constructing the Integrated Waste Management Facilities Phase 1 (I-PARK1), with a view to transforming waste into energy with advanced technology.

The consolidated reply to various parts of the question raised by the Hon Lam So-wai is as follows:

The Environmental Protection Department (EPD) has not compiled the breakdown of statistics on the quantity of waste styrofoam generated and disposed of.

As mentioned in the Government's overall strategies in the preamble, in respect of styrofoam tableware, the Government has implemented the new regulation on disposable plastic tableware and other plastic products on April 22 this year. Restaurants and retail stores are not allowed to sell or supply all styrofoam tableware (including plates, food containers and cups), thereby directly and significantly reducing the use of styrofoam at source.

In respect of packaging materials for household electrical appliances, the EPD conducted a survey on packaging materials for the trade of electrical and electronic appliances suppliers in 2022 and encouraged them to reduce the amount of styrofoam packaging materials as much as possible. Among the replies from electrical appliances suppliers, more than 50 respondents (about 60 per cent) stated that they had actively reduced the use of styrofoam in the packaging of electrical and electronic products, and, when practicable, even ceased using styrofoam altogether. According to the responses of these electrical appliances suppliers, the use of styrofoam for packaging in most of their small household appliances have been reduced or ceased. To commend companies with outstanding performance, the EPD presented awards to several electrical and electronic appliances suppliers who have reduced the use of styrofoam packaging in at least 60 per cent of their products, including Gilman Group Limited, Arçelik Hitachi Home Appliances Sales Hong Kong Limited, Shun Hing Electric Works and Engineering Company Limited, Midea Electric (Hong Kong) Limited and German Pool (Hong Kong) Limited, at the opening ceremony of the "GREEN@COMMUNITY Recycling Month" in November 2022. Through this event, we had also appealed to more suppliers of different products to reduce the use of packaging material (including styrofoam). In addition, the EPD published the "Practical Guides on Packaging Reduction and Management" (Guides) for the electrical and electronic appliances sector on May 2 this year and issued letters to electrical appliances suppliers to encourage them to make reference to the Guides and use recyclable packaging materials in place of styrofoam.

To facilitate different sectors in kick-starting their journey on packaging reduction and management, apart from the electrical and electronic appliances sector, the EPD is also developing a set of Guides for specific sectors to provide practical tips and experience sharing on how to avoid and reduce packaging consumption (including styrofoam containers) so as to achieve sustainable packaging management in their daily operations. For details about the Guides, please visit the following website:
www.wastereduction.gov.hk/en-hk/resources-centre/packaging-reduction-tips-dif

[ferent-sectors](#).

In respect of styrofoam boxes used for vegetables and fruits, those used for transporting vegetables and fruits supplied to Hong Kong from the Mainland are mainly returned to the Mainland for reuse. With the resumption of normal travel between the Mainland and Hong Kong since January 2023, the arrangement has been running smoothly. In addition, the Food and Environmental Hygiene Department, the Agriculture, Fisheries and Conservation Department, and the Fish Marketing Organisation have installed cold-press machines in the overhauled markets and wholesale markets respectively and arranged local recyclers to recover and recycle styrofoam boxes that cannot be reused due to damage or other reasons on the spot.

From the perspective of environmental benefits, reusing styrofoam boxes is better than recycling. However, styrofoam also has unfavourable characteristics, such as poor strength, brittleness and low degradability. Balancing the cost-effectiveness and the long-term development of the industries, we will continue to maintain dialogue with the food and recycling industries, encourage the food industry to switch to stackable, durable and easy-to-clean plastic boxes for transportation of goods in the long-run as far as practicable.

In terms of recycling styrofoam, all GREEN@COMMUNITY facilities accept styrofoam items generated from households for passing on to downstream recyclers approved by the EPD for proper treatment and turning them into resources. Each Recycling Stations and Recycling Stores under GREEN@COMMUNITY has a workshop for temporary storage of recyclables. If members of the public need to hand over styrofoam that is relatively bulky in size to GREEN@COMMUNITY, they are advised to contact the relevant facility to make prior arrangements.

Meanwhile, the EPD is working at full steam on constructing I·PARK1 near Shek Kwu Chau, which is the first modern waste-to-energy incineration project in Hong Kong, with an expected handling capacity of 3 000 tonnes of municipal solid waste (MSW) per day. I·PARK1 will mainly receive MSW, including styrofoam waste, transported by sea from the West Kowloon Transfer Station and turn the waste into energy.