

LCQ16: Standardising charging interfaces for portable electronic devices

Following is a question by the Hon Yim Kong and a written reply by the Acting Secretary for Environment and Ecology, Miss Diane Wong, in the Legislative Council today (May 24):

Question:

There are views that while the use of portable electronic devices is increasingly popular, the different charging interfaces required for charging devices of different standards cause much inconvenience to users and may likely lead to the generation of electronic waste (e-waste). On the other hand, the European Union (EU) Directive of November 23, 2022, has established the USB Type-C receptacle as the common charging interface in the EU and has mandated the use of the USB Type-C receptacle as the charging interface for all portable electronic devices available on the market in EU with effect from December 28, 2024, with a view to reducing e-waste and ensuring consumer convenience. In this connection, will the Government inform this Council:

(1) of the quantity of e-waste generated in Hong Kong in each of the past five years; the main channels through which such e-waste is disposed of in Hong Kong; and

(2) whether it has considered introducing legislation to mandate the adoption of a common charging interface for portable electronic devices progressively; if not, of the reasons for that; if so, the details, and whether it will, before a common charging interface is adopted, promote the use of environmentally friendly charging devices which are compatible with multiple interfaces, so as to reduce the generation of e-waste and ensure consumer convenience?

Reply:

President,

(1) The Government has all along attached great importance to the recovery and treatment of waste electrical and electronic equipment (WEEE), and has endeavoured to identify suitable recycling outlets for such waste. Apart from introducing by legislation a mandatory Producer Responsibility Scheme on WEEE (WPRS) to reduce waste at source, the Government has also developed local WEEE treatment and recovery facilities to properly treat and recycle waste collected.

Since 2018, the Environmental Protection Department (EPD) has fully implemented the WPRS, which covers air-conditioners, refrigerators, washing

machines, televisions, computers (i.e. desktop computers, notebook computers and tablet computers), printers, scanners and monitors. These eight classes of regulated electrical equipment (REE) account for about 85 per cent of the WEEE generated in Hong Kong. The rest is largely consumer electronics that are often marketable in the second-hand market, and other miscellaneous small-scale household appliances. The WPRS requires that REE sellers must, upon distribution of REE, arrange free removal services for consumers to deliver the old equipment of the same class to licensed WEEE treatment facilities for proper treatment, and must not dispose of such old equipment at landfills.

The WEEE Treatment and Recycling Facility (WEEE·PARK), with a designed capacity of 30 000 tonnes per year, commenced full operation in March 2018 to underpin the WPRS through a series of detoxification, dismantling and recycling processes which turn WEEE into secondary materials of value. As at the end of 2022, more than 100 000 tonnes of waste REE have been processed by WEEE·PARK. At present, there are also EcoPark tenants engaging in the recycling of WEEE, and the major recycling processes include the dismantling of WEEE into useful materials such as metals and plastics.

Taking into account the sales trend in recent years and the projected future market demand, we proposed enhancement to the WPRS in our submission of the Product Eco-responsibility (Amendment) Bill 2023 to the Legislative Council in March this year. It is proposed that the existing scope of REE under the WPRS be expanded to include refrigerators and washing machines with larger capacities and add stand-alone clothes dryers and dehumidifiers. The proposal is expected to be implemented in 2024 at the earliest.

Moreover, other waste electrical appliances or electronic devices, including miscellaneous small-scale household appliances like electric fans, rice cookers, ovens and mobile phones, are collected through the Community Recycling Network established by the EPD for recycling, thereby promoting circular economy and turning waste into resources.

Through the various means of recovery and treatment mentioned above, of the 59 000 tonnes of WEEE generated in Hong Kong in 2021, about 43 800 tonnes were recovered for recycling and turned from waste into resources, representing a recovery rate of over 74 per cent. Statistics on quantities of the WEEE generated, disposed of and recovered in Hong Kong from 2017 to 2021 are tabulated below.

Year	Quantity generated (tonnes)	Quantity disposed of (tonnes)	Quantity recovered (tonnes)	Recovery rate
2017	75 600	26 600	49 000	65%
2018	66 400	24 500	42 000	63%
2019	69 000	21 600	47 400	69%
2020	57 700	16 600	41 100	71%
2021	59 200	15 300	43 800	74%

Note: Compilation of the relevant statistics for 2022 is still in progress.

(2) Regarding the directive made by the European Union (EU) in 2022 to establish USB Type-C receptacle as the standard charging interface, such requirement by the EU, one of the major international markets, will help promote the standardisation of charging interfaces for electronic products. As electronic products available for sale in the local market are mainly manufactured and imported from other places, it is anticipated that the product standards gradually formed internationally will also become increasingly common in the market of Hong Kong. Therefore, we do not see the need to standardise the charging interfaces for electronic products through local regulation.