

LCQ20: Reverse Vending Machine Pilot Scheme

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 (June 23):

Question:

The Environmental Protection Department (EPD) rolled out a one-year Reverse Vending Machine Pilot Scheme (the Pilot Scheme) in the first quarter of this year. Under the Pilot Scheme, the EPD has installed 60 reverse vending machines (RVMs) at locations such as public places or government facilities with suitable foot traffic, and provides an instant rebate (\$0.1 per plastic beverage container (container)) via e-payment platforms to encourage the public to return used containers. Members of the public may return a daily maximum of 30 containers and redeem the rebate for each Octopus card or Alipay (Hong Kong) account held. They may also choose to donate the rebate to designated charities. In this connection, will the Government inform this Council:

(1) of (i) the quantity of containers recovered each month, and (ii) the average number of containers recovered from each RVM user, by each RVM since the implementation of the Pilot Scheme, with a breakdown by volume of containers;

(2) of the usual frequency, or the percentage of the containers recovered in the design capacity of a RVM having been reached, at which the contractor collects the containers recovered by RVMs; whether there were instances of RVMs suspending the recovery of containers because they were full of containers; if so, of the details;

(3) whether EPD has considered relocating RVMs from locations with low utilisation rates to locations with high utilisation rates, in order to recover more containers; if so, of the details; if not, the reasons for that;

(4) of the number of user-times of RVMs since the implementation of the Pilot Scheme, with a breakdown by the way in which the rebate was handled (i.e. (i) redemption of the rebate through Octopus cards, (ii) redemption of the rebate through Alipay (Hong Kong) accounts, and (iii) donation of the rebate to designated charities);

(5) as some members of the public have relayed that when they feed in more than one container at one time, the RVM concerned only counts them as one, of the number of requests for assistance and reports about this problem received by the EPD; whether the EPD has considered improving the container counting function of RVMs to facilitate members of the public to feed in several containers at one time; if so, of the details; if not, the reasons for that, and whether the EPD will display, on conspicuous positions of RVMs and on the

relevant webpage, instructions on the proper way of feeding in containers;
and

(6) of the number of complaints or requests for assistance involving the Pilot Scheme received by the EPD in each month since the implementation of the Scheme, with a breakdown by type of issues involved?

Reply:

President,

To pave way for future implementation of the producer responsibility scheme on plastic beverage containers (PPRS), the Environmental Protection Department rolled out a one-year Reverse Vending Machine (RVM) Pilot Scheme in the first quarter of 2021. A total of 60 RVMs were set up in batches on January 25, February 22 and March 25, and public responses have been positive so far.

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

(1) As at June 13, around 3.4 million plastic beverage containers (PBCs) were collected under the Pilot Scheme. Currently, some 46 000 PBCs were collected daily. Figures on the PBCs recovered by each RVM and the average numbers of PBCs recovered on each transaction are set out in the Annex.

(2) According to the contract, the contractor is required to collect PBCs regularly from RVMs for no less than twice a week, or within four hours whenever an RVM reaches its storage threshold, to ensure the smooth operation and service of RVMs. Besides, a real-time monitoring system is provided in each RVM so that when its storage reaches 95 per cent of the threshold, the system will automatically alert the contractor to arrange for collection of PBCs from the RVM.

(3) The Pilot Scheme aims to test out the on-site application and performance of RVMs at different venues. We have been closely monitoring the relevant data (including utilisation rates) collected from RVMs since the launch of the Pilot Scheme and will adjust their locations where necessary.

(4) Since the launch of the Pilot Scheme, members of the public have redeemed their rebates mainly through Octopus cards, accounting for 92 per cent of the overall amount of payments, while Alipay (Hong Kong) and donation to charities each accounts for about 4 per cent.

(5) When using RVMs, members of the public should insert PBCs one by one. The RVM will first scan the barcode on each PBC and check its size and weight against the relevant information kept in the database. The verified PBC will then be accepted by the RVM and the quantity of PBC(s) accepted will be shown on the display screen of the RVM. Clear guidelines are given on the interactive display screen of RVM to introduce the procedures for recovering the PBCs. Members of the public may also make reference to the demonstration video available at the designated website of the Pilot Scheme. Moreover,

ambassadors have been arranged under the Pilot Scheme to assist the public in using RVMs properly. For enquiries about the RVM operation or the counting of PBCs recovered, the public may call the Pilot Scheme Hotline at 9488 0277. We will keep abreast of the technology developments relating to RVMs to prepare for the future implementation of the PPRS.

(6) Since the launch of the Pilot Scheme on January 25 till June 13 this year, the contractor received a total of 3 773 enquiries concerning mainly the operation and functions of RVMs, acceptable PBCs, redemption of rebates and donation to charities, etc. A breakdown of the relevant figures is tabulated below:

	January	February	March	April	May	June	Total
Operation and functions of RVMs	12	54	237	557	1 311	538	2 709
Acceptable PBCs	2	82	66	78	77	5	310
Redemption of rebates or donation to charities	11	20	47	56	69	17	220
Status of RVMs	0	1	9	24	78	33	145
Locations and operation hours of RVMs	7	27	27	16	31	6	114
Time of collecting PBCs from RVMs	0	0	14	7	20	11	52
Others	2	26	53	53	74	15	223
Total	34	210	453	791	1 660	625	3 773

Remarks: "Others" includes invitations on collaboration in setting up RVMs, enquiries about the downstream recycling and treatment of PBCs, views on the website of the Pilot Scheme or other matters, etc.