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168 - 200 Connaught Road Central
Hong Kong

By email (complaints@ombudsman.hk) and by Mail

Attn: **Ms. Winnie CHIU Wai-yin**

30th December 2020

Dear Ms. Chu,

Opinion Paper on the Effectiveness of "Three-Colour Recycling Bins"

Thank you for your open invitation on 30th November 2020, inviting members of the public in submitting information and views on the captioned recycling programme. The **Hong Kong Waste Management Association** (HKWMA) is pleased to provide our written views and suggestions on the effectiveness of the captioned recycling programme, managed by the Environment Bureau, the Environmental Protection Department (EPD) and other governmental departments.

Established in 1994, HKWMA is a not-for-profit professional organisation representing professionals in Hong Kong's solid waste management and environmental industries. For the past 25+ years, we take an active interest in all areas represented by our membership and topics of our ambit.

The "Three-Colour Recycling Bins" programme has been in place for over two decades. As indicated in your open invitation, the effectiveness of the programme is largely in doubt. These bins are often seen over-flowing with wastes rather than the target recyclables. Worse still, the majority of the general public perceives their recycling efforts pointless, as the collected mixed and / or contaminated recyclables will not undergo proper treatment or separation but be disposed of altogether at landfills.

Citizens' recycling behaviour is in essence discouraged. This is obviously in stark contrast against the Government's original intention of this programme. Furthermore, the public resources and funding allocated and devoted are also poorly utilised.

In response to your invitation, the Executive Committee of HKWMA has formed a dedicated task force to prepare our responses on this important issue. We sincerely hope that our comments and suggestions will put the programme back on its right track for the betterment of the society on the long-run. These comments and suggestions are provided below.

1. Single Accountable Government Department on Recycling

HKWMA opines that there are currently too many government departments involved in the programme (i.e. EPD, LCSD, FEHD, HA, etc.). While HKWMA agrees that this shall be a joint and inter-governmental effort to tackle the problem, but regretfully not all these departments share the same priority on recycling. Recycling bins are sometimes seen located at remote and inconvenient locations, which may be perceived as an attempt to reduce the workload on emptying them.

HKWMA opines that there should be a single government department responsible and held accountable for the entire recycling programme, sensibly EPD. EPD shall take overall charge and delegated with appropriate powers, and coordinate amongst different related government departments for a concerted recycling effort. In case of coordination issues on departmental level, a higher authority shall step in to resolve. HKWMA believes that the Policy Innovation and Co-ordination Office (PICO) shall be a suitable authority for this purpose, as PICO aims to innovate traditional approaches on government behaviours and to generate synergetic effects amongst departments.

Without proper accountability, it would be very difficult to improve the effectiveness of the current recycling programme.

2. Quantification and Regular Reporting on Recycling Efforts

There can be little dispute that the general public awareness on the importance of recycling has considerably increased in the past decade.

HKWMA opines that one of the keys to increasing recycling rates is **"Trust"**. As perceived by a substantial portion of the general public, these bins are just for waste disposal but not for recycling. Even if they are, the recyclables still end up at landfills anyway. This **"why bother"** impression is a very serious misperception (or maybe a rightful perception), and should be corrected.

Furthermore, the number of waste producers practicing source segregation is still relatively low and the recyclables are either not properly segregated at source, or not being placed in the right bins.

This significantly reduces the recyclability of the collected recyclables and increases the overall materials recovery and recycling costs. The Government should strengthen the publicity of the Three-Colour Recycling Bins programme and public education on source segregation of

the recyclables. Without this, it would be difficult to increase the captured rate of the recyclables and avoid / reduce contamination of the recyclables.

We understand that EPD is implementing an outreach programme to promote recycling. We would recommend that EPD provide regular feedback to the participating housing estates or organisations on their recycling programme (e.g. tonnage of recyclables recovered, degree of contamination of the recyclables collected, where the collected recyclables are delivered to, and overall recycling rate achieved, etc.). We believe that such feedback will regain trust from the general public regarding the programme, and enable the participants to improve their recycling practices.

In addition, EPD should provide clear, accurate, traceable and auditable data and statistics of recycling for the whole of Hong Kong, which should be publicly available on internet and published regularly. This data could include:

(a) The amount of recyclables collected from these bins on monthly basis, by type, by region, etc. over time.

(b) Quantities of collected recyclables sent to recyclers, and contaminants disposed of at landfills.

(c) Potentially avoided environmental damage of these materials if not properly collected and recycled otherwise, in easy-to-understand figures and numbers.

(d) Environmental and social benefits of using the collected recyclables as feedstock for production of new products comparing to virgin materials (e.g. CO_2 emission avoided, electricity saved, etc.), again in clear figures and numbers.

(e) Clearly, not everything can be recycled. For collected materials that cannot not be practically reprocessed, their forms, states, endpoints shall be properly documented and reported.

(f) A QR code could be displayed at each recycling station so the recycling statistics, or even the educational information, on these stations can be obtained by the general public, rather than the current system where a generic QR code is provided to divert the public to complaint hotlines and is discouraging. The communication channel shall also be interactive, rather than the current one-way channel. Even if a member of the public has responsibly reported on an issue, no feedback or progress of the rectification is provided at present.

The data collection could be facilitated by using specific QR code for each Three-Colour bins location. The QR code could also be displayed at each

collection point to enable the general public to scan and obtain the recycling statistics.

With these, the citizens' recycling efforts can be quantified, realised and honoured. HKMWA opines that only with clear, easy-to-understand and auditable results and figures can the Government turn around the current public perception on the "trust" issue with respect to recycling.

3. Strategic Locations of Recycling Bins

As mentioned above and for one reason or another, some recycling bins are not located at their ideal positions. In general, these bins should be located at places which are convenience to the users (e.g. lobbies on each floor of high rise buildings, concourse of train stations or bus terminus, etc.), but not at basements or a corner of a car park. This will encourage the waste producers to use the recycling bins and hence increase the capture rate of the target recyclables.

Supported by statistics and data suggested above, the ideal locations of recycling bins can be better determined instead of a "wild guess" or a trial-and-error exercise. The capacities of these bins should also be reviewed to cater for varying levels of local recycling activities, rather than letting the bins over-flow.

The collection frequency should also be aligned with the volume of recyclables generated at each recycling station. Too often are the recycling bins seen overflowing for days before a routine collection. Government should consider using smart bins to allow more effective and efficient collection of the recyclables with respect to the quantities of recyclables deposited in the bins. This will avoid the problem of material overflow and hence improved the overall image of the programme.

4. Collection Services of the Recyclables

The said collection services, covering the entire Hong Kong, was awarded to a single service provider under a contract administered by EPD. Due to the highly volatile and fluctuating market prices of the recycled commodities, the recycling industry has managed to stay vibrant due to the high competitiveness and flexibility of all recyclers.

However, if there is only one single service provider in the market, potentially managing / dominating particular types of recyclables, the options for the other active recyclers will be very limited. This is against the Government's current intention in stabilising a healthy recycling chain and to ensure the recyclables are properly delivered to the approved recyclers. The current single contract arrangement shall be reviewed and segregated into smaller, maybe district-based, contracts to maintain openness and a market-driven, fair competition.

5. Availability of Sorting and Recycling Facilities

With the implementation of the above measures, the quality and quantity of recyclables recovered will be improved. However, there may still require some kinds of processing (e.g. sorting to further remove the contaminants in each recyclable stream) of the collected materials so that they are of suitable quality for downstream recycling. To avoid the recovered materials being disposed of at landfills due to lack of recycling outlets, Government should provide the necessary support to the local recycling industry in terms of land allocations and technologies. The current Recycling Fund should be enhanced so that the recyclers who process recyclables with a market will obtain priority support for exporting recyclables to Mainland China or other nearby regions, or the recycling industry will face significant challenges in the future.

The current EcoPark imposes less-than-friendly tenancy conditions and should be reviewed. Available spaces at active (and maybe even some closed) landfills should be investigated more closely to (re-)establish sorting / processing and recycling capacity in Hong Kong. This will help to close the loop of the circular economy for the recycling programme in Hong Kong.

6. Changes in Hong Kong Planning Standards and Guidelines

For new buildings and re-developments, due considerations should be given to waste management and recycling facilities, which should be encouraged in the Hong Kong Planning Standards and Guidelines to ensure that the new buildings will be built to enhance materials recovery at source. For example, spaces can be reserved for building-based recycling stations which can centralise recyclables generated from the residential, commercial and industrial buildings, rather than taking them all to the Green Community Stations and the Recycling Stores.

HKWMA also notes that some private and large housing estates are also participating in this “Three-Colour Recycling Bins” programme. In absence of clear statistics, the relevant public resources and funding are clearly not efficiently utilised. Just as with the recycling bins in the public area, the recycling efforts of these residents are not properly realised and honoured. Changes must be made.

At a macro-perspective, HKWMA believes that the proposed MSW charging scheme will change the citizens' behaviour, by providing financial incentive for citizens to source-segregate recyclables. The landscape and business models of the recycling industry will be revolutionised for good, as the quantities of the "workable" recyclables increase.

Coupled with an enhanced public education programme for clean recycling, it will also improve the quality of the recovered materials, which will further increase the recycling value of the materials. Public perception and

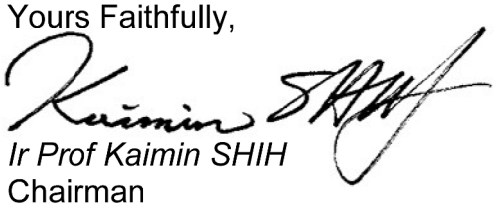
participations will be instrumental to increasing and sustaining the entire recycling regime.

To support the effective collection of an increased recyclables from sources, a more effective collection and logistics system will need to be in place. The current collection arrangement based on fixed collection frequencies will likely not able to meet the demands from different waste producers, especially those with less storage space on site.

We trust our views and opinions are well expressed, and we welcome further opportunity to participate and provide input related to the subject.

We thank you for your open invitation for the betterment of Hong Kong in future and our generations to come.

Yours Faithfully,



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