CHAPTER 5

A BROADER PICTURE : BEVERAGE CONTAINERS IN GENERAL

5.1

Beverages available in Hong Kong are also commonly packed in aluminium cans, paper cartons and plastics. Whereas PRS initiatives seek primarily to ensure the proper management of spent products that do not have a ready market, we have considered the merits of extending the PRS on glass beverage bottles as discussed in the preceding chapters to other types of beverage containers.

There are non-PRS options for other types of beverage containers.

5.2

Aluminium cans are rarely found at our landfills in Hong Kong. The vibrant private market enables the recovery of waste aluminium cans at good prices which compensates the cost in the collection process. A mandatory PRS is unlikely to create further major environmental benefits for the recycling of waste aluminium cans.

5.3

On the other hand, we generate about 80 tonnes of beverage carton boxes (principally Tetra Pak® packaging) everyday. The volume is comparatively small as compared to the 150 tpd of landfilled glass beverage bottles. Tetra Pak® is a type of composite packaging material comprising (i) an outer layer of waxed cardboard, (ii) an inner layer of polyethylene, (iii) a thin layer of foil coated internally where the package is designed for store food without refrigeration, and (iv) a plastic pouring spout. Internationally, there are Tetra Pak® processing plants seeking to recover the paper and metal content but so far there is none in Hong Kong and we do not currently separate carton boxes at source for recycling.

We have a good start in local plastic resource recycling but more have to be done.

Ms. Florence Wong manages the Plastic Resources Recycling Centre as a social enterprise operated by Yan Oi Tong with ECF funding at the EcoPark. It is the only plastic recycling plant in Hong Kong engaging actively in recycling of local plastic waste as well as community education and promotion on recovery and recycling. It requires more support from our society to reduce the waste plastic disposal at our landfills.

5.4

For plastic beverage bottles, they are mostly made of polyethylene terephthalate (i.e. "PET"). Some private recyclers now collect waste plastic beverage bottles, as they do for waste paper and waste metal. The majority of them are exported as secondary raw materials after simple sorting and cleansing. In 2011, some 100 tpd of PET materials were still landfilled[6]. Our analysis is that —

(a) PET materials have good commercial value if they are sorted correctly and do not contain contaminants. As an illustration, the spot price for shredded PET scrap ranges from $4,000 to $5,000 per tonne respectively as at August 2012 depending on its purity and colour. This explains why for-profit private recyclers are taking the lead in the recycling of PET materials (similar to that of aluminium cans). Indeed, the same is true in Hong Kong with much of the recovered waste plastics exported to Mainland China as reusable resources.

(b) Mainland China[7] has yet to pass any legislation to mandate the recycling of PET bottles. In some European jurisdictions with a "manufacture-led" PRS, beverage manufacturers have to collect and recycle plastic beverage bottles. But a similar approach is not adopted in Mainland China where plastic bottle recycling is principally coordinated by for-profit private recyclers in the market.

Remark :
6. We do not have further breakdown on the tonnage for PET beverage bottles.
7. With our city being an international free port, the regulatory landscape in the neighbouring region is a key factor to consider whether or not mandatory PRS initiatives should be introduced for these beverage containers. Financed with a recycling fee imposed on beverage containers generated locally in Hong Kong, these PRS initiatives could not viably handle recyclables generated from outside Hong Kong. To this end, developments in Mainland China are of notable relevance given the vast volume and ease of cross-boundary trades.

5.5

With ECF funding, a non-profit making organisation is running a plastic waste recycling centre at EcoPark Phase Two. So far this approach has worked to promote source separation of waste plastics for local recycling while respecting the market operation of collection of the bulk of waste plastic bottles for recycling outside Hong Kong.

5.6

To sum up, the landfill pressure from glass beverage bottles (around 150 tpd) is more serious and urgent when compared to beverage containers made of carton box (80 tpd) or plastic (up to 100 tpd). Thus, we will focus our efforts at this stage on glass beverage bottle recycling. That said, with the implementation of the mandatory PRS, there might be switching to non-glass packing alternatives. We will review the case for introducing a PRS on beverage plastic bottles and Tetra Pak® packaging in the light of developments both locally on other PRSs and in our neighbouring cities.