

# **Guidance Notes for Pilot Scheme on Food Waste Smart Recycling Bins in Private Housing Estates**

## **1. Introduction**

According to Waste Statistics for 2021, there were approximately 11,500 tonnes of municipal solid waste (hereafter MSW) disposed of in landfills in Hong Kong every day, of which about 30% (equivalent to 3,400 tonnes) were food waste. Considering that private housing estates account for approximately 70% of the population in Hong Kong, and domestic households contribute around 70% of the total food waste, the Environmental Protection Department (hereafter EPD) aims to strengthen the support for smart food waste recycling in private housing estates. This initiative not only helps reduce the amount of food waste disposed of in landfills but also facilitates the implementation of MSW charging.

To facilitate the Government's initiative of expanding the food waste collection network, the Environmental Campaign Committee (hereafter ECC) supports the EPD in implementing the "Pilot Scheme on Food Waste Smart Recycling Bins in Private Housing Estates" (hereafter the Scheme), by providing fund through the Environment and Conservation Fund to appoint contractors to provide eligible private housing estates with a two-year rental service for food waste smart bins (hereafter FWSBs).

The relevant details of the Scheme are set out in this set of Guidance Notes. The EPD/ECC reserve the right to change any requirements or to decide how requirements should be interpreted / implemented at any time without prior notice.

## **2. Pilot Scheme on Food Waste Smart Recycling Bins in Private Housing Estates**

The Scheme aims to encourage and facilitate source separation and collection of food waste in large-scale private housing estates, and raise residents' awareness and promote food waste recycling in the community by adopting FWSB technology. FWSB refers to food waste collection bin equipped with intelligent design, which basically include the following aspects:

- (i) Connection to the common communication platform of the EPD's "GREEN\$ Electronic Participation Incentive Scheme";

- (ii) Smart sensors to measure weight and fill-level of food waste, and trigger an alert system;
- (iii) Enclosed design with disinfection device/odour abatement system, capable of spraying deodorant regularly to reduce odour;
- (iv) Pest control system to eliminate the breeding environment for pests inside the bin;
- (v) Data storage system to record information such as weight of food waste collected from individual users, date and user identification; and
- (vi) Real-time communication system to transmit weight / fill-level status, control and alert signals to management office.

The technology of smart bins for food waste collection has become more mature in recent years. FWSBs not only encourage the active participation of residents and cultivate the habit of food waste recycling, but also have functions of anti-overfill, deodorising and pest control to reduce environmental hygiene issues caused by food waste. Moreover, FWSBs are also able to automatically record food waste quantity in real-time, enabling the EPD to optimise collection routes, thereby enhancing operational efficiency as well as reducing carbon footprint.

### **3. Eligibility for Application**

- (i) All private housing estates in Hong Kong that fulfil the following requirements are eligible to apply for the Scheme:
  - (a) The total number of households in the estate no less than **1,000** units;
  - (b) The estate is willing to cooperate with the EPD on food waste collection arrangements, as well as all promotion and educational activities related to food waste recycling; and
  - (c) The estate commits to taking responsibility for the daily cleaning of FWSBs, including wiping the inner and outer surfaces with a damp towel, replacing the food waste inner bins, and transporting the inner bins to specific locations such as the estate's refuse room, and bears the related expenses.
- (ii) The relevant residents' organisation or the property management company representing them is eligible to apply for the Scheme on behalf of the qualified private housing estates. Applicants must adhere to the following terms or

conditions:

- (a) **Incorporated Owners or Owners' Corporation** registered under the Building Management Ordinance (Cap. 344) can act as an applicant.
- (b) **Incorporated Owners or Owners' Corporation** may authorise the property management company to act as an applicant on their behalf.
- (c) **Owners' Committee, owners' organisations or other residents' organisations (hereafter RO)** of private housing estates shall authorise the property management companies to act as an applicant on their behalf. The RO shall provide relevant clauses in the Deed of Mutual Covenant (hereafter DMC) to demonstrate its establishment under the DMC of the housing estate. If the establishment of a RO is not specified in some DMCs, minutes of relevant residents' meetings can be submitted to demonstrate their residents' recognition.
- (d) **Property management companies (PMC)** acting on behalf of the RO are also eligible if written agreement from the RO is obtained before submitting their application. If a PMC submits an application, the relevant RO is required to sign an undertaking letter, agreeing to continue and complete the project in the event that the PMC becomes unable to execute the project.

Public rental housing estates owned by the Hong Kong Housing Authority and the Hong Kong Housing Society are not covered by the Scheme, as they are already eligible for other forms of Government funding support.

#### **4. Project Duration**

The first 24 months of the Scheme serves as an open-application period, during which eligible private housing estates can submit their applications to the EPD. Upon approval, the housing estates will participate in a 28-month food waste collection project, including:

- (i) 3 months of preparation work;
- (ii) 24 months of operation of FWSB; and
- (iii) 1 month of dismantling work.

## 5. Funding Details and Limits for Application

The EPD/ECC will cover the related rental expenses of FWSBs (including repair and maintenance fees), and distribute FWSBs to the applying housing estates appropriately. **Under normal circumstances, one FWSB will be allocated for every 500 households, while a maximum of 20 FWSBs can be granted for a private housing estate.** The allocated FWSBs are generally equipped with basic functions as mentioned in Section 2, and the EPD/ECC reserves the right to make the final decision on the model and brand of FWSBs allocated to each applicant.

The EPD will also provide a food waste bucket (approximately 8 litres) to each household of the participating housing estates to encourage residents to practice source separation at home and cultivate a food waste recycling habit.

Applicants are required to arrange additional manpower and resources on their own for the daily operation of FWSBs, including daily cleaning and replacing 120-litre purple food waste inner bins, as well as bear the extra staffing costs for the workers. Applicants are also required to provide basic electrical infrastructure (including waterproof sockets) or other necessary minor works (e.g. platforms, additional lighting and canopies) to support the safe installation and daily operation of FWSBs, as well as bear the electricity expenses incurred by the operation of FWSBs.

## 6. Assessment Criteria

The EPD will assess each application based on the following criteria:

- (i) Readiness and ability of the applying private housing estates, such as:
  - (a) Experience in promotion projects/activities (whether the housing estate has experience in recycling projects or promotion activities)
  - (b) Capabilities of project team (whether the management team and frontline staff have experience in undertaking projects related to recycling)
  - (c) Management capability for undertaking the project (whether there are sufficient resources, manpower, staff training, ISO certification, etc.)
- (ii) Applicants are required to provide the housing estate's layout plan(s) and photo(s), showing the proposed locations of the FWSBs, as well as other relevant information (e.g. temporary storage locations for purple food waste inner bins and

collection points for food waste collection trucks). The proposed installation locations shall fulfil the following requirements:

- (a) Located within the boundaries of the housing estate
- (b) Easily accessible by residents
- (c) Covered area
- (d) Well-ventilated
- (e) Equipped with essential infrastructure support (electrical installations)
- (f) Stable telecommunication network coverage
- (g) Safe (away from roads / inclined grounds, etc.)
- (h) Evenly distributed within the housing estate to cater for households from different blocks

The proposed installation locations suggested by applicants must obtain consent from relevant stakeholders. The contractors are not required to pay any rent or additional fees for setting up and operating FWSBs at those locations.

- (iii) The applying housing estates are required to cooperate with the EPD on the arrangements for daily food waste collection, including providing suitable parking locations for food waste collection trucks and coordinating with the department regarding collection time, frequency and specific suggestions. The EPD and its contractors are not required to pay any fees, such as entry fees and loading/unloading fees, during food waste collection, transportation, and delivery of materials. Otherwise, the applicant shall make its own arrangement for delivering the collected food waste to O-PARK1 or other food waste treatment facilities with consent given by the EPD. However, such transportation costs are not covered within the funding scope of the Scheme.
- (iv) The EPD/ECC will notify applicants of the application result within six months from the date of receipt of the application. Approved applicants are required to sign an agreement with the Government that includes terms and conditions.

In addition to the above criteria, the EPD will also take into consideration the geographical location of the applying housing estates, the estimated amount of food waste collected, the current food waste collection routes of EPD, etc., when assessing the cost-effectiveness and feasibility of each application. This ensures that the Scheme can expand the EPD's food waste collection network and increase the quantity of recycled food waste in Hong Kong. Apart from the total number of households, the EPD will also take into consideration the number of blocks as well as their locations when deciding the total number of FWSBs granted for each applicant.

## 7. Safeguarding National Security

By submitting an application for the Scheme, the applying organisation acknowledges and undertakes to comply with the following clauses:

- (i) Notwithstanding anything to the contrary in this application guide and/or the agreement signed between the recipient organisation and the Government in respect of the Scheme, the EPD/ECC reserves the right to disqualify the recipient organisation on the grounds that it has engaged, is engaging, or is reasonably believed to have engaged or be engaging in acts or activities that are likely to cause or constitute the occurrence of offences endangering national security or otherwise the exclusion of the organisation from future applications for other EPD / ECC's schemes is necessary in the interest of national security, or is necessary to protect the public interest, public morals, public order or public safety of Hong Kong.
- (ii) The Government may immediately terminate any agreement with the recipient organisation upon the occurrence of any of the following events:
  - (a) The recipient organisation has engaged or is engaging in acts or activities that are likely to constitute or cause the occurrence of offences endangering national security or which would otherwise be contrary to the interest of national security;
  - (b) The continued engagement of the recipient organisation is contrary to the interest of national security; or
  - (c) The EPD/ECC reasonably believes that any of the events mentioned above is about to occur.

The applying organisation is required to sign an agreement on safeguarding national security in **Annex I** of the application form. Failure to submit this Annex will result in the application **being considered invalid.**

## 8. Application Procedures

Applicants are required to submit the following documents:

- (i) An original completed and signed copy of the Application Form, along with an electronic version (in MS Word format)

- (ii) Copies of the supporting documents listed in the Application Form
- (iii) **Annex I** of the Application Form
- (iv) **Annex II or Annex III** of the Application Form

*Application Form:*

Please complete the Application Form (available at the below link) and submit it to the ECC Secretariat (5/F, Southorn Centre, 130 Hennessy Road, Wan Chai, Hong Kong) by mail, and mark “Application Form for Pilot Scheme on Food Waste Smart Recycling Bins in Private Housing Estates” on the envelope.

( [https://www.ecc.org.hk/tc/publicity/pilot\\_fwsb.html](https://www.ecc.org.hk/tc/publicity/pilot_fwsb.html) )

## **9. Suspension or Termination of Funding Support**

The EPD/ECC reserves the right to suspend or terminate funding support for the rental service of FWSBs. Circumstances which warrant suspension or termination of funding support include, but are not limited to, unsatisfactory project progress (including low utilisation rate), a breach of the terms and conditions of the funding agreement, or the Government’s decision to terminate the project based on public interest. Once the project is suspended or terminated, the applicant is required to dismantle and return the allocated FWSBs.

Enquiries regarding the scheme can be addressed to –

Waste Reduction and Community Recycling Group

Tel: 3690 7839

Email: [fwsbecc@epd.gov.hk](mailto:fwsbecc@epd.gov.hk)

Website: [https://www.ecc.org.hk/tc/publicity/pilot\\_fwsb.html](https://www.ecc.org.hk/tc/publicity/pilot_fwsb.html)