

Testing and Commissioning

Quality Control Items

All essential features and functions of the FWSB are tested and confirmed in proper condition at factory, including but not limited to, water-proof design, automatic weighting function, self-diagnosis function, auto-deodorization function, pest control devices, fill level alert sensor, QR code scanning device, user interface device, remote monitoring device, a Big Data Platform, and equipped with device for wireless 4G or 5G network communication.

Testing and Commissioning Items

1. Visual test
 - (a) Physical damage/ dirt/ corrosion
 - (b) Physical dimension and weight of the FWSBs
 - (c) Wrapping design with correct information shown
2. Safety tests (e.g. anti-pinch function)
3. Functional tests for the FWSBs, Big Data Platform and QR Code Scanning Device, User Interface Device in accordance with the specifications

(A) Food Waste Smart Bins

- (i) Accuracy test: Test the weighing accuracy of each compartment of the FWSBs with standard weights of 0.1kg, 1kg, 10kg and 100kg.
- (ii) Functional test: Test the overall recycling process of each compartment of the FWSBs with single and/ or multiple types of recyclables items. Test the overall recycling process with a minimum of three (3) different QR codes of GREEN\$ membership.
- (iii) Repeatability test: Test the consistency of the weighing function with standard weights of 0.1kg and 1kg, each repeatedly tested for at least three (3) times.
- (iv) Self-diagnosis status test: Test all the self-diagnosis functions of the FWSBs as specified in the technical specifications, including but not limited to the fill level of each compartment of the FWSBs.

(B) Big Data Platform

- (i) Connectivity test: Test GREEN\$ transaction, connection and communication between the Big Data Platform and Common Communication Platform and Integrated Waste Management Information System (IWMIS) at UAT or production environment.
- (ii) Record test: Test the Big Data Platform in storing transaction

data/information at different occasions (i.e. network failure, abnormal transaction, etc.)

(C) QR Code Scanning Device and User Interface Device

1. User recognition test: Test the recognition function of the QR Code Scanning Device
2. Control panel function: Test the control panel functions and correct logic flow and design of the User Interface Device
3. Other tests as recommended by the Contractor and accepted by the EPD, and/or as requested by the EPD.