CLAIMS

1. A resource collection apparatus for collecting wastes to be reused as a resource, the resource collection apparatus comprising:

an opening associated with a predetermined sorting type;

an opening/closing unit configured to open and close the opening;

a first detector configured to perform an operation to detect a target waste belonging to a user; and

a controller configured to:

specify a sorting type of the target waste using a result detected with the first detector;

switch the opening/closing unit from a closed state to an open state when the sorting type is specified as the sorting type of the opening; and

adjust an opening area of the opening in the open state, based on a size of the target waste, the size being identified or estimated using the result detected with the first detector.

2. The resource collection apparatus according to claim 1, wherein

the first detector is configured to include at least one selected from the group consisting of:

a tag reader configured to read information from an electronic tag attached to the target waste;

a camera configured to capture an image of the target waste; and

a code reader configured to read a barcode or a two-dimensional code, attached to the target waste.

3. The resource collection apparatus according to any one of claims 1 to 2, further comprising:

a communicator configured to communicate with a server apparatus; and

a second detector configured to perform an operation to detect the user or an operation to detect belongings of the user other than the target waste, wherein

the controller is further configured to switch the opening/closing unit from the closed state to the open state based on a result of the second detector when the sorting type specified from purchase history information of a commercial product purchased by the user matches the predetermined sorting type of the opening.

4. The resource collection apparatus according to claim 3, wherein

the second detector is configured to include at least one selected from the group consisting of:

a camera configured to capture an image of the user;

a code reader configured to read a barcode or a two-dimensional code attached to the belongings; and

a communication interface configured to communicate with the belongings.

5. The resource collection apparatus according to claim 3 or 4, wherein

the resource collection apparatus is placed in an area where an event is held or an area surrounding the area, and

the belongings include a ticket belong to a participant of the event.

6. The resource collection apparatus according to any one of claims 3 to 5, wherein

the controller is configured to switch the opening/closing unit from the closed state to the open state when a first sorting type specified using the result detected with the first detector and/or a second sorting type specified using the purchase history information matches the predetermined sorting type of the opening.

7. The resource collection apparatus according to claim 6, wherein

the controller is configured to switch the opening/closing unit from the closed state to the open state when both of the first sorting type and the second sorting type match the predetermined sorting type of the opening.

8. The resource collection apparatus according to claim 6 or 7, wherein

the controller is configured to control the opening/closing unit based on the second sorting type specified using the purchase history information, when specification of the first sorting type using the result detected with the first detector fails.

9. The resource collection apparatus according to any one of claims 1 to 8, wherein

the controller switches the opening/closing unit from the open state to the closed state, when a closing condition is satisfied after the opening/closing unit is switched from the closed state to the open state, and

the closing condition includes a condition that the waste has been put through the opening and/or a condition that a certain time period has elapsed after the opening/closing unit is switched from the closed state to the open state.

10. The resource collection apparatus according to any one of claims 1 to 9, further comprising:

a plurality of openings including the opening, each of the plurality of openings being associated with a corresponding sorting type; and

a plurality of opening/closing units including the opening/closing unit, each of the plurality of opening/closing units being provided to respective one of the plurality of openings, wherein

the controller is configured to switch the opening/closing unit provided to the one opening from the closed state to the open state, when the sorting type specified using the result detected with the first detector matches a sorting type associated with one opening of the plurality of openings.

11. The resource collection apparatus according to claim 10, wherein

the controller is configured to determine an order of switching the plurality of opening/closing units from the closed state to the open state, based on a sorting type of each of a plurality of kinds of wastes, when the first detector detects the plurality of kinds of waste that are to be sorted into different sorting types.

12. A control method for a resource collection apparatus for collecting wastes to be reused as a resource, the control method comprising:

performing a detection operation for a target waste belonging toa user;

specifying a sorting type of the target waste is to be sorted, by using a result of the detection operation; and

opening and closing an opening associated with a predetermined sorting type, wherein

the opening and closing is configured to include switching from a closed state to an open state when the sorting type is specified as the sorting type of the opening.