Learning from Vancouver: A Comparative Study on Waste Collection Systems in Kagoshima City and Vancouver

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1) Purpose of the research, Background, and Waste Collection

Purpose of the research

I was surprised by Vancouver's waste collection system and high recycling rate.

Despite being a multicultural city, Vancouver manages waste in a clear, organized, and accessible way. This experience made me think about what Kagoshima City could learn and improve.

-especially in terms of recycling systems, multilingual support, and easy-to-understand public guidance

Background

Item	Kagoshima City	Vancouver
Population	590,000	660,000
Culture	Community-base	Highly Multicultural (42%'s first language isn't English)
Homelessness	13(2025)	5232(2025) Many homeless people live in shelters or on the streets

Waste Collection in Kagoshima City and Vancouver

\	Aspect	Kagoshima City	Vancouver
	Method	Community drop-off	Curbside collection
	Sorting	45 detailed categories	Blue/Green/Black bins
5	Frequency	Varies by area	Weekly
	Rules	Complicated, mostly Japanese	Simple, multiigual
	Operator	City Environmental depot	Recycle BC
	Policy	No clear numerical target	Zero Waste 2040













(2) Recycling Facilities in Vancouver and Kagoshima City

■ 1. Recycle BC Depot(By Recycle BC)

(Accepts)

Metals, electronics, Styrofoam batteries, and household recyclables (Feature)

A drive-through style facility...residents can drop off recyclables directly from their car Main site

Vancouver Zero Waste Center

2. United We Can Depot

Location

Downtown Eastside, Vancouver

(the area with the highest concentration of low-income and homeless individuals in Vancouver)

What is United We Can

A non-profit social enterprise that supports vulnerable people through recycling Who works there?

People who are:

- Experiencing homelessness
- Living with low income
- Facing barriers to regular employment
- →They are called "binners"

[What they do (Activities)]

- →Collect refundable beverage containers (cans, bottles)
- →Sort and count materials at the depot
- \rightarrow Receive refund money(10¢/ per item)
- →Some become paid staff after gaining experience



↑Return-it Depot



↑Vancouver Zero Waste Center

←Vancouver Zo Waste

Center from YouTube

↑Express system

■ 3.Return-it Depot(By Encorp Pacific)

Accepts

Refundable beverage containers: plastic bottles, cans, cartons, and glass beverage(10¢/ per item)

[Return Systems]

Traditional

Bring containers → counted on site → cash refund

★Express

Resister phone number → Print label at kiosk → Drop off bag → Refund sent online automatically

Main site

Vancouver Central Return-it Depot

Recycling and Reuse Facilities in Kagoshima City (1) Kagoshima City Recycling Plaza (Public)

Used items→Repair→Reuse→Resale workshops and environmental education events for citizens

(2) Recycle Shops (Private)

Repaired items → Display → Low-price resale Book Off/ Second Street/ Eco Ring

(3)Eco Plaza Kagoshima

Exhibition → Workshops → Community learning Environmental education center eco-craft activities and reuse events for citizens Vancouver & Kagoshima City

The difference between

Vancouver

It is policy-driven and centralized, supported by multilingual tools and the facilities that promote practical, everyday recycling behavior.

Kagoshima City

It focuses on reuse, education, and community involvement through local facilities, but is less centralized and has limited multilingual access.

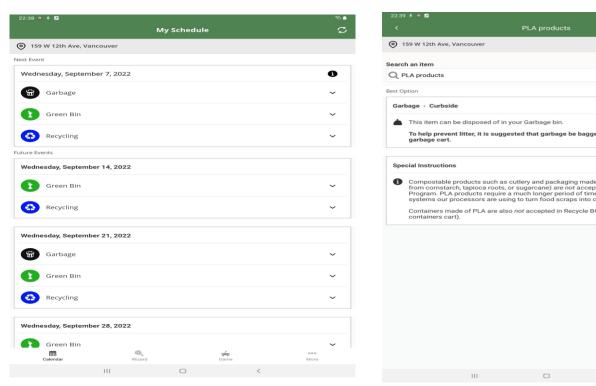
(3) App Comparison

	Kagoshima City	Vancouver
Name of App	San-Aru(さんあーる)	Vancollect/ RecycleBC
Managed by	Kagoshima city,	City of Vancouver/ Recycle BC
Language	Japanese and Limitated English	English, Chinese, Punjabi, Tagalog, French
Feature	Schedule, Al sorting, reminder	Notifications, schedule, search
Limitation	Hard for foreign residents	Easy access for everyone
Advantage	Simple and cute design, educational quiz for residents	Multilingual, visually easy to understand, and connects with the city's Zero Waste 2040 policy
Disadvantage	Available mostly in Japanese, Few educational or policy links: not directly tied to environmental goals	Information is split across two apps: which makes users confuse



↑San-Aru





↑Recycle BC

4 Conclusion/Suggestions

Conclusion

Kagoshima City has a strong foundation in environmental education and community involvement, but compared with Vancouver, its recycling system lacks clear policy direction, multilingual accessibility, and a centralized infrastructure.

Because education and recycling operate separately, the city's overall purpose becomes unclear, making the system harder for residents and newcomers to navigate.

■ Suggestions for Kagoshima City

(1)Improve the Recycling System

· Create a centralized hub similar to Vancouver's Zero Waste Center

· Increase visibility through clearer maps, signage, and public outreach

(2)Strengthen Multilingual Support

Provide a multilingual version of sorting guides and facility signs Add QR codes linking to multilingual instructions

Update signage at collection points and city facilities

(3)Upgrade the App Add full multilingual support to the App

(4) Establish a Clear Policy Direction for Recycling

- · Develop a concrete, city-wide recycling policy rather than relying mainly on education
- Align education programs with specific waste reduction goals
- Connect recycling actions with measurable outcomes, similar to Vancouver's Zero Waste approach

Reference(name of websits)

City of Vancouver/ Recycle BC/Return-it/ United we can/ City of Kagoshima/ Government of British Columbia