

Lack of Information

- Residents often don't know which plastics are recyclable.
- Information is hidden in long government documents.
- Instructions vary by city and aren't easily accessible.
- Recycling bins rarely include clear visual guides.

Inconsistent Policies

- Different municipalities have different recycling rules.
- Recycling companies use different symbols and standards.
- National recycling guidelines are unclear or outdated.
- Policy changes are not communicated to residents.

Behavioral Challenges

- People throw recyclables in trash when unsure.
- Apartment dwellers lack convenient recycling options.
- Recycling feels inconvenient or time-consuming.
- Residents are unsure how to clean recyclable items properly.

Environmental Impact

- Contaminated recycling leads to landfill overflow.
- Improper sorting increases processing costs.
- Low recycling rates contribute to higher carbon emissions.
- More waste reduces community sustainability goals.

Technology Solutions

- A mobile app could scan items to show if they're recyclable.
- Users could receive local recycling notifications.
- AI image recognition could identify items by photo.
- Gamification could encourage recycling habits.