



# Waste Management Reform in Jakarta: Policy Solutions for Sustainable Cities

*A study on participation gaps and community engagement*

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## Summary

Jakarta, a metropolitan hub of over 30 million people, generates approximately 8500 tonnes of waste daily, with only 0.85% of it being processed by the waste banks (Asia-Europe Foundation (ASEF), 2022). Despite efforts like Bank Sampah (waste banks) and WWF's Zero Waste School Program, the city faces severe environmental and social consequences from its inefficient waste management system. Overwhelmed landfills, river pollution, and greenhouse gas emissions highlight the urgent need for intervention.

This policy brief identifies key challenges, including the lack of public participation, especially among men, and inadequate government collaboration with NGOs. Cultural norms that assign waste management as a "woman's responsibility" further limit progress. We propose the following recommendations to address these challenges:

1. Mandatory Bank Sampah Participation in Schools: Integrate Bank Sampah visits and waste management activities into the curriculum to bring awareness and participation from a young age.
2. Government-NGO Collaboration: Partner with NGOs like WWF to expand educational campaigns through schools, TV, and social media, reaching a wider audience.
3. Encourage Male Participation: Develop initiatives to engage men in waste management, such as family-inclusive Bank Sampah events and government-led campaigns.

By implementing these policies, Jakarta can move towards a sustainable waste management system through community engagement, and finally reduce its environmental footprint.

# Why Waste Management Matters in Jakarta

Jakarta, the bustling capital of Indonesia, is home to over 10 million people and serves as the core of a metropolitan area exceeding 30 million. Every day, the city generates approximately 8500 tonnes of waste, with only 0.85% of it being processed by the waste banks (Asia-Europe Foundation (ASEF), 2022), according to The Jakarta Environment Agency. However, the city's waste management systems struggle to keep pace with this output, leading to severe environmental, social, and economic consequences.



The city's landfills are at capacity, river pollution is at record highs, and the improper disposal of waste contributes significantly to greenhouse gas emissions (Purnomo Yusgiantoro Center, 2024). As Jakarta continues to grow, these issues intensify, threatening public health, urban sustainability, and the city's climate resilience. Efforts such as Bank Sampah (community-based waste banks) and the WWF Zero Waste School Program have shown promise but remain insufficient to reverse the growing crisis.

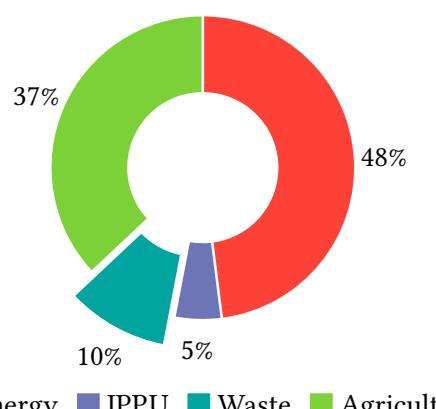


Figure 1: *Indonesia carbon emission contributors*  
Adapted from (Purnomo Yusgiantoro Center, 2024)

This policy brief examines two critical aspects of Jakarta's waste management: the cultural and

systemic barriers to public participation, and the effectiveness of grassroots initiatives. The overarching question we seek to answer is: What actionable steps can policymakers take to enhance waste management participation and infrastructure in Jakarta?

Drawing on field research, interviews, and observational data, this brief identifies key challenges and offers evidence-based recommendations. By addressing these issues, Jakarta can adopt a sustainable approach to waste management and serve as a model for other rapidly urbanising regions.

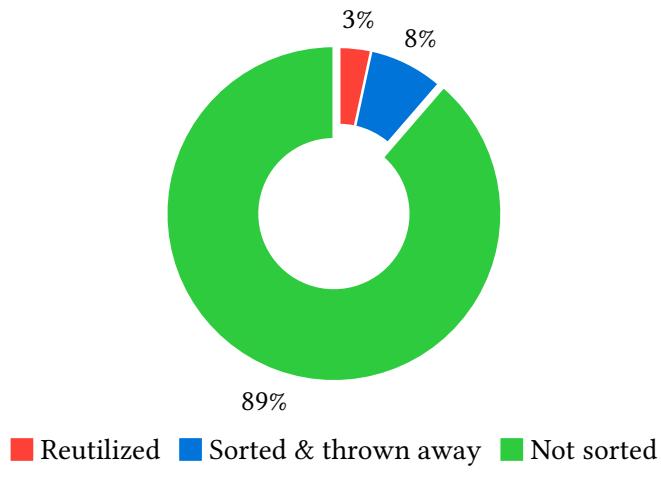


Figure 2: *Waste management along Ciliwung*

Adapted from (Nizardo et al., 2021)

## Key Findings from Our Research

### Proper Waste Management is a Lacking Habit

Waste management is not ingrained as a daily habit for many residents in Jakarta. Field observations revealed rampant littering and minimal household-level, campus-level and city-level sorting of waste. Waste disposal is seen as a "household chore" and is predominantly assigned to women, reinforcing cultural norms that deter broader participation. Significant behavioural shifts are needed to normalise responsible waste management practices, especially across different demographics.



## Even when people want to change their habits, there is no infrastructure to support sustainability

*It does not matter how many people sort their waste, if the recycling bins get dumped with the rest when collected.* The absence of infrastructure (recycling facilities, accessible Bank Sampah locations) makes sustainability unattainable for many, and these are critical government responsibilities. An infrastructure reform is necessary first step to enable meaningful public participation in waste management.

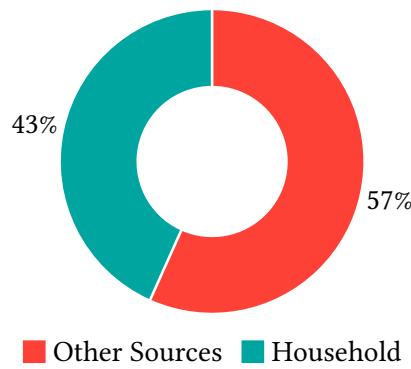


Figure 3: Waste sources in Jakarta  
Adapted from (News, 2024)

## Prominent Under-Involvement of Men in Waste Management Initiatives

We observed that men are significantly underrepresented in waste management activities:

- Less than 1 in 10 participants in WWF's Zero Waste School Program and Bank Sampah initiatives are male.
- Interviews with students revealed that fathers often resist adopting waste-sorting practices, despite their children's willingness to engage.
- Cultural Barriers: this imbalance reflects deep-rooted cultural norms that exclude men from environmental responsibilities.

Engaging men in waste management is essential to achieving widespread behavioural change.



## Grassroots Movements Are Making Progress but Lack Scale

Programs like Bank Sampah and WWF's Zero Waste School Program are effective at engaging local communities and raising awareness but are limited in scope: Bank Sampah units are often limited to specific neighbourhoods, and participation depends on individual effort. NGO-led educational programs primarily target women and children, leaving other demographics underserved. In order for these efforts to be effective, they must be scaled up and made much more inclusive.

## Recommendations



## Mandatory Bank Sampah Participation in Schools

The government should mandate that all schools integrate Bank Sampah visits and activities into their curriculum. As part of the Profil Pelajar Pancasila (P5) program, students would visit a Bank Sampah at least once a year to learn about waste sorting and recycling.

### **Implementation:**

1. Schools can collaborate with nearby Bank Sampah locations for fieldwork.
2. Introduce a school-based Bank Sampah program offering vouchers (e.g., for canteen food) in exchange for sorted waste, creating a tangible incentive for students to participate.

### **Expected Outcomes:**

1. Early exposure to waste management will help instill the necessary habits among younger students.
2. Increased participation will boost Bank Sampah operations and their role in helping manage the waste crisis.



### **Government-NGO Collaboration on Waste Management Education**

Partner with NGOs like WWF to develop and implement large-scale educational campaigns across schools, social media, and traditional media.

### **Implementation:**

1. The Ministry of Education and Culture and Ministry of Environment and Forestry should formalise partnerships with NGOs to create interactive educational materials and digital campaigns targeting younger audiences.
2. Use influencers and social media platforms to increase engagement among urban youth.

### **Expected Outcomes:**

1. Increased public awareness and understanding of waste management.
2. Scaled outreach to urban and rural communities, encouraging broader participation, especially through peer pressure.

### **Encourage Male Participation in Waste Management**

Design initiatives that directly engage men in waste management activities, addressing the gender imbalance in existing programs.

### **Implementation:**

1. NGOs like WWF could host family-focused events, encouraging women to bring their spouses and children to Bank Sampah or educational programs.
2. The government should organise an annual climate event featuring prominent male role models advocating for waste management.

### **Expected Outcomes:**

1. Greater male involvement in community-based waste management initiatives.
2. Cultural shift towards shared responsibility for environmental sustainability.



### **Improve Bank Sampah Infrastructure and Accessibility**

Improve the operational efficiency and reach of Bank Sampah units through logistical and financial support from the government.



### **Implementation:**

1. Provide Bank Sampah units with pick-up trucks for efficient waste collection.
2. Expand the network to the RT administrative level, increasing accessibility for households.

- Strategically locate Bank Sampah units in high-traffic areas such as markets, mosques, and shopping centres to encourage broader community use.

#### **Expected Outcomes:**

- Increased household participation due to improved convenience.
- Higher recycling rates, reducing the burden on landfills.

### **Capacity Building for Bank Sampah Staff**

Equip Bank Sampah volunteers and staff with the skills and knowledge necessary to operate effectively.

#### **Implementation:**

- Organise training programs and excursions to exemplary Bank Sampah models, such as those in Banyumas, to share best practices.
- Establish certification programs to incentivise skill development among staff.

#### **Expected Outcomes:**

- Professionalisation of Bank Sampah operations.
- Improved efficiency and effectiveness in waste collection and recycling.



### **Conclusion: What's at Stake?**

Jakarta is at a critical point in addressing its waste management crisis. With over 8500 tonnes of waste generated daily, the city's current systems are inadequate to manage the environmental, social, and economic repercussions. Overburdened landfills, toxic river pollution, and escalating greenhouse gas emissions highlight the unsustainable trajectory of the status quo.

Failure to act decisively will only worsen all these issues, threatening public health, urban resilience, and the city's ability to adapt to climate challenges. The sinking city already faces significant environmental

risks, and its waste management system is a key lever for mitigating further damage.



However, by implementing the recommendations outlined in this policy brief:

- mandatory waste education in schools,
- infrastructure reform,
- and broader community engagement—Jakarta

can reverse this trend. This is an opportunity to transform waste management into a shared societal responsibility, to adopt sustainable practices and to improve quality of life for millions of people. Our research showed how the path forward is clear: investing in sustainable waste management practices today will secure a cleaner, healthier, and more resilient Jakarta for future generations.

### **References**

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