

2026 Best Practices of Carbon Neutral Cities in East Asia

Seoul: From Single-Use to Waste-Zero Pathway

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1. Background

Seoul is facing growing waste management challenges driven by changing urban consumption patterns and modern lifestyles. Over the past decade, especially after the COVID-19 pandemic, the rapid expansion of food delivery services, e-commerce, and single-person households has significantly increased the use of disposable products and packaging materials. In the past 10 years, household plastic waste in Seoul increased by nearly 70%, with synthetic resin packaging materials doubling.

At the same time, Seoul has recognized that recycling alone cannot sufficiently address the scale of the waste management challenge, as rising volumes of disposable products, contamination of recyclable materials, and increasing treatment costs call for a more waste-preventive and resource-circular approach. In response, in 2022, the Seoul Metropolitan Government (SMG) launched **the Zero Waste Seoul project** to mainstream reusable systems and embed circular practices into everyday urban life.

2. Key Components

The Zero Waste Seoul Project is a citywide policy package that aims to reduce packaging waste across the production, distribution, and consumption stages through the combination of regulation, economic incentives, pilot projects, private-sector partnerships, and infrastructure reuse.

Revision and Update of Regulation Policy for Disposable Products

After announcing the initiative in 2022, SMG strengthened Zero Waste Seoul in March 2024 by revising the Waste Management Ordinance, with implementation beginning in September 2024. The current ordinance includes provisions on the use of products suitable for waste reduction and recycling, plans for the recycling of event supplies, measures for the separate collection of waste, and plans for evaluating event waste reduction. The revised regulation shifted Seoul's approach from voluntary waste reduction practices to a more institutionalized waste management system.

Expansion of Mandatory Use of Reusable Containers

Before the Zero Waste Seoul Project, disposable tableware was the standard option at most public events and high-volume public facilities in Seoul. Reusable container practices in Seoul were mostly limited to smaller or more controlled settings, such as selected public events, reusable cup trials, and private zero-waste stores.

Following the launch of Zero Waste Seoul in 2022 and the revision of the Waste Management Ordinance

Regulatory Timeline for Zero Waste Seoul Source: Seoul Metropolitan Government

Key policy frameworks from announcement to on-site implementation



Key revision : By September 2024, large Seoul-hosted events had to restrict disposable products and include waste-reduction plans.



Seoul Pay-Personal Cup Point System Poster : Financial incentives (~400 KRW) for personal cup use
Source: Seoul Metropolitan Government

in 2024, SMG began expanding reusable container systems to high-volume venues such as sports stadiums, hospitals, and funeral halls. These pilot projects were designed to test whether reusable containers could substitute for the large quantities of disposable tableware commonly used in these settings.

Citizen Engagement through Behavioral Incentives

While regulations can reduce disposable waste in public events and facilities, everyday consumption depends on repeated individual choices. To address this, SMG introduced the Personal Cup Point System, a pilot incentive-based program launched in 2023 and operated in connection with Seoul Pay since 2024. Through the program, customers who bring their own cups to participating cafés receive an immediate discount (100~400 KRW) when purchasing beverages.

Collaboration with the Business Sector

A reusable container system can only work when the full cycle is connected: use, return, collection, washing, and redistribution. For this reason, SMG works with private sectors such as delivery platforms, cafés, restaurants, and reusable-container service providers. Through strategic partnerships with major delivery platforms such as Baemin, Yogiyo, Coupang Eats, and Dangyo, Seoul aims to expand the use of reusable containers in delivery services.

3. Implementation

In the revised SMG Waste Management Ordinance, a key update is that disposable products are restricted at public events hosted by the city and its affiliated public institutions with more than 1,000 participants expected per day. Building on this policy framework, Seoul has expanded the use of reusable containers through municipal support programs. SMG has introduced support programs to facilitate the transition to reusable alternatives, including reusable container deployment and waste reduction planning for large-scale events, such as Seoul Jazz Festival and Seoul Park Music Festival.

One notable example is the introduction of reusable containers at Seoul World Cup Stadium. Beginning with FC Seoul's home opener in March 2026, reusable containers were fully introduced across convenience stores, food trucks, and beverage vendors within the stadium. To support implementation, 25 dedicated return stations were installed throughout the venue, creating a closed-loop collection-and-reuse system. Seoul has also expanded the initiative to other large sports venues, including Jamsil Baseball Stadium and Gocheok Sky Dome.

Similar systems have been introduced in hospitals and funeral halls, sectors traditionally associated with large volumes of disposable tableware. These facilities operate through a collection–washing–redistribution model, supported by specialized municipal coordination and service providers.

To foster behavioral change among citizens, since 2024, Seoul has operated the Personal Cup Point System through Seoul Pay, encouraging customers to order drinks with personal cups. For each order, customers receive 300 KRW as a Seoul Pay point, which can be used as cash through the Seoul Pay mobile application; in the meantime, partner cafés are expected to provide an additional discount of at least 100 KRW. Additionally, Seoul also announced support for partner cafés to hold a monthly Tumbler Day, during which customers can receive larger discounts for drinks purchased with personal cups. By linking citizen behavior, café participation, and Seoul Pay's digital payment infrastructure, the project integrates reusable cup use into everyday routines, making sustainable consumption both convenient and rewarding.



Reusable containers and return-stations at Seoul World Cup Stadium
Source: YNA News

To encourage business participation across multiple stakeholders, SMG actively incentivizes reuse practices with financial support programs. Through the Seoul Credit Guarantee Foundation, businesses adopting reusable containers for delivery are recognized as eligible ESG practice companies, which qualify them for preferential financing, including a 90% guarantee ratio, an annual guarantee fee of 1.0%, and an interest reduction of 2.5 percentage points when connected to Seoul's ESG fund. These financial measures effectively reduce the burden for small businesses to adopt reusable delivery systems.

4. Outcomes

Measurable Waste Reduction

Since its adoption, Zero Waste Seoul has achieved measurable reductions in single-use waste while promoting reusable consumption practices in everyday urban life. One of the most tangible outcomes has been the replacement of disposable containers at public events and festivals. One notable example is the 2023 Seoul Jazz Festival, where SMG supported the festival by providing reusable containers, spoons, and forks at 16 food-and-beverage booths. Approximately 24,890 single-use containers were replaced over the three-day event, achieving an estimated reduction of 6.1 tCO_2e in greenhouse gas emissions.

At the policy level, the revised SMG Waste Management Ordinance has further strengthened implementation. Since the single-use item restrictions for city-hosted events came into effect in September 2024, 54 events organized by SMG and its affiliated institutions have complied with the directive, as of March 2026. Seoul is also scaling this approach to local districts through a "standard ordinance bill" that mandates pre-event waste-reduction plans and the use of recyclable or reusable products.

The impact has also been significant in high-waste venues such as sports stadiums and funeral halls. SMG first demonstrated the feasibility of reusable container systems in sports stadiums through the introduction of reusable containers at Jamsil Baseball Stadium during the 2024 season (March-October). It achieved a reduction of approximately 600,000 uses and an estimated 17 tonnes of plastic waste reduction, even as audience numbers increased. The city further expanded the model to

both Jamsil Baseball Stadium and Gocheok Sky Dome in 2025 season (March-October). Across 160 games, approximately 890,000 reusable containers were used, reducing about 25 tonnes of single-use waste. Notably, while attendance increased by 11%, overall waste has decreased by 13%, suggesting that reusable container systems can reduce waste even in high-volume entertainment venues.

Funeral halls have shown particularly strong potential for waste reduction. As of September 2025, Seoul reported a cumulative reduction of 489 tonnes of disposable waste from funeral hall reusable-container programs. The program has also expanded from public hospitals to major private hospitals, including Samsung Medical Center, with positive public perception. A 2025 survey of funeral hall users reveals a 94.6% satisfaction rate, citing environmental benefits and hygiene of reusable containers over disposables.

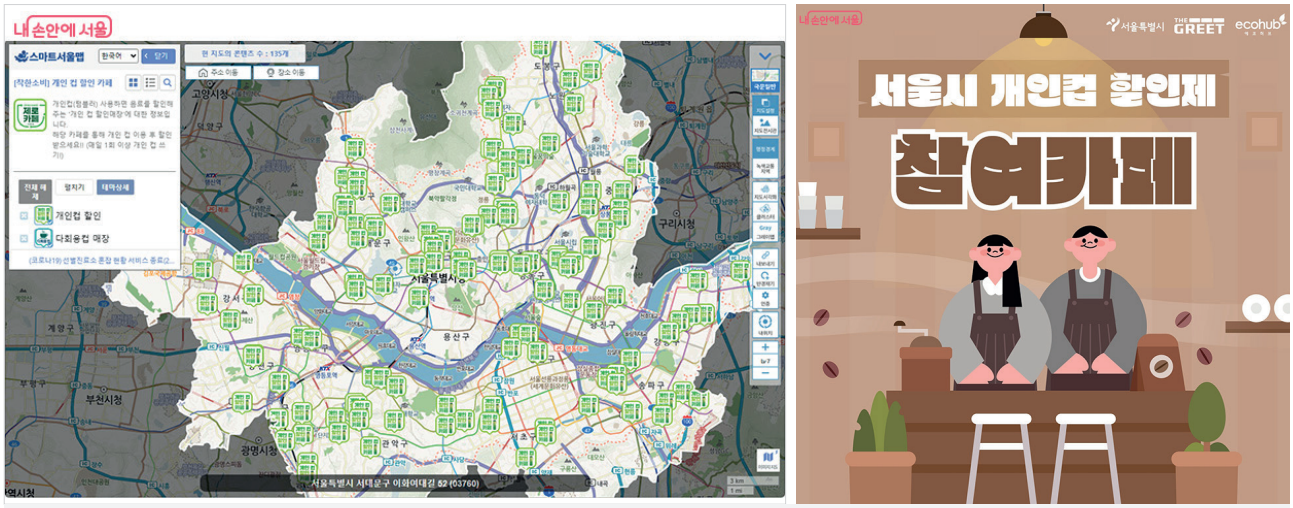
Increased Adoption of Reusable Practices

The project has also encouraged everyday behavioral change. From 2024 to June 2025, SMG's Personal Cup Point program has contributed to approximately 120,000 personal cup uses. In May 2026, the Personal Cup Discount Program increased the municipal subsidies to 400 KRW. Combined with a minimum store discount of 100 KRW, citizens save at least 500 KRW per purchase. Seoul further lowered the barrier for cafés and bakeries to join the initiative by removing the Seoul Pay membership requirement and recruiting the participating stores on a rolling basis. By accessing the Smart Seoul Map, customers can easily locate an eligible café or bakery nearby.

In the delivery sector, reusable-container orders through four major delivery platforms reached 102,000 cases in 2023, about 3.5 times higher than the previous year, while service areas expanded from five districts in 2022 to fifteen in 2024.

Systematic Transformation

Beyond these quantitative outcomes, the project has generated broader impacts. First, it has helped normalize reusable consumption by placing reusable containers in familiar settings such as cafés, stadiums, delivery apps, festivals, and funeral halls. Second, it has improved waste-separation practices at large events by requiring organizers to plan for waste reduction and install appropriate collection systems. For example, at the Gwanghwamun BTS



Cafés that are participating in the Personal Cup Discount Program in Seoul
Source: Seoul Metropolitan Government



Reusable containers in the delivery sector
Source: Hankyung ESG News

concert in March 2026, Seoul supported additional separation bins for paper and plastic waste and promoted measures such as reduced single-use items and reuse of event materials. Third, the project has contributed to the mainstreaming of a zero-waste event culture, where public events are expected to reduce waste by design rather than to treat waste as an afterthought.

Moving from pilot projects to broader institutionalization, the Zero Waste Seoul is scaling its reuse system through strengthened district-level policy, citizen incentives, and business support. Its impact lies not only in the amount of waste reduced, but also in the creation of a new urban norm, with reusable options becoming increasingly visible and accessible in everyday life.

5. Conclusion

Further, SMG is driving district-level implementation by tying event waste-reduction performance with evaluations and offering reusable-container subsidies to high-performing events. To mainstream green habits among citizens, the city is aggressively expanding its Personal Cup Discount Program across cafés and bakeries by further lowering eligibility barriers.

In addition, SMG is expanding the zero-waste business ecosystem through the Seoul Zero Market program, including 325 new zero-waste stores in 2026 to promote circularity. With integrated policy regulations, financial incentives, and citizen engagement, Seoul is evolving from pilot projects towards a more scalable and systematic model for urban circular practices.



Seoul's Zero Waste Shop
Source: Seoul Metropolitan Government

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