

Inclusivity as a Property of Waste Management

Michelle Nica¹

Abstract

This article explores inclusivity as a core feature of environmental governance design, using waste management in Romania as a case study. Although the European Union has developed an extensive waste policy framework, compliance remains uneven across member states. Romania's repeated infringement procedures are often explained by weak administration or low environmental awareness. This article offers a different interpretation. Drawing on constructivist theory, it argues that non-compliance can result from governance models that overlook everyday differences in capacity, access, and infrastructure. When such assumptions are imposed on diverse contexts, exclusion becomes a structural outcome. The article contrasts these failures with the relative success of Romania's deposit–return system (SGR) for beverage packaging. By embedding participation into routine practices and attaching a direct economic incentive to recycling, the SGR system has enabled broad engagement, including by informal and marginalized actors. The findings suggest that inclusivity is best achieved through governance design that lowers participation barriers, rather than through enforcement or awareness-raising alone.

Keywords

Waste management, inclusivity, constructivism, deposit-return system, environment

1. Introduction and Methodology

Inclusivity is a central concern of European public policy, most visibly in relation to migration, minority rights, and social cohesion. Far less attention, however, has been paid to the ways in which inclusivity is implicitly governed through environmental policy, particularly in technically framed domains such as waste management. Waste systems do more than regulate materials; they structure everyday practices, allocate responsibility, and define who is able to participate meaningfully in sustainability transitions. As such, they constitute an important but underexplored site of social governance. Within the European Union, waste management is governed through an extensive body of legislation and policy instruments

¹ PhD candidate at Babes Bolyai University, Faculty of European Studies. E-mail: michellenica26@gmail.com.

that articulate ambitious sustainability objectives. Yet compliance with these objectives remains uneven across member states. Romania has been subject to multiple infringement procedures related to landfill use, recycling targets, and separate collection systems. These persistent compliance gaps are often attributed to administrative weaknesses, insufficient public awareness, or inadequate enforcement. While not inaccurate, such explanations obscure a more fundamental issue: the implicit assumptions about social capacity and participation embedded in waste governance itself.

This article argues that inclusivity failures in Romanian waste management can emerge not from resistance to sustainability norms, but from rigid governance imaginaries. The objective is to examine how these imaginaries have the power to shape waste management inclusivity, using the example of the SGR deposit-return system. A further objective is to reconceptualize environmental compliance as potential signal of inclusivity gaps in governance design. Methodologically, the article seeks to demonstrate the value of a constructivist, interpretive approach for understanding how environmental norms are translated into everyday practice. The scope of the article is limited to waste management inclusivity, using as example the SGR deposit-return system. EU waste policy often assumes a socially homogeneous landscape characterized by stable infrastructure, institutional trust, and equal access to services. When these assumptions are projected onto heterogeneous contexts, governance systems risk excluding those who do not fit the imagined ideal policy subject (Iacoboaia et al. 2025). In such cases, non-compliance becomes a structural outcome rather than an expression of opposition. At the same time, not all waste-related interventions in Romania have followed this trajectory. The recent introduction of the SGR deposit-return system for beverage bottles offers a striking example. By attaching a direct monetary value to returned packaging and embedding return points into everyday commercial spaces, the SGR system has generated rapid and widespread participation. Notably, it has also enabled informal actors such as homeless and economically marginalized individuals to take an active role in waste collection, transforming discarded materials into a source of income and social participation.

The contrast between persistent infringement in conventional waste management domains and the relative success of the SGR system provides a valuable lens through which to examine inclusivity in environmental governance. Rather than treating inclusivity as an auxiliary social objective, this article conceptualizes it as a property of governance design. By taking a look at the everyday functioning of the SGR system, the article contributes to debates on norm compliance, policy design, and the social dimensions of sustainability transitions. It argues that inclusivity is not achieved through

communication or enforcement alone, but also through governance arrangements that recognize difference and embed participation into material practice. By focusing on the everyday functioning of the SGR system, the article contributes to debates on EU norm diffusion, environmental compliance, and the social dimensions of sustainability transitions. The article does not aim to provide a comprehensive empirical evaluation of all Romanian waste policies, nor does it claim that the SGR system alone can resolve structural deficiencies in waste governance. Its contribution lies instead in offering a conceptual reframing of compliance and infringement as potential indicators of inclusivity gaps in governance design. By doing so, the article seeks to open space for a more socially attuned, flexible and creative understanding of environmental governance opportunities.

2. Inclusivity, Governance Imaginaries and Waste Policy

In environmental policy, inclusivity tends to remain implicit and assumed, rather than articulated. Waste management provides a particularly instructive domain in this respect. Although commonly framed as a technical and logistical issue, waste governance embeds assumptions about who can comply, who bears responsibility, and whose everyday practices are recognized as legitimate. These assumptions shape not only policy outcomes but also discourse and patterns of participation and exclusion.

From a constructivist perspective, the world and its reality are socially constructed and able to change through interaction and meaning (Wendt 1995). Agency and structure are not independent, but are constituted through their ongoing interaction (Theys 2018). In this context, policies can have the power to shape discourse, beliefs, encode meanings, norms, and expectations about appropriate conduct. Waste systems can function as sites of norm production and social ordering. Through rules on separation, collection, payment, and sanctions, these systems implicitly define the responsible environmental subject and risk to marginalize alternative forms of engagement. Inclusivity, in this sense, is not an external add-on to policy design, but a property of the governance imaginary that supports it.

There is a growing body of literature focusing on the social dimensions of waste governance throughout the world, highlighting how environmental norms are translated into everyday practice. Oguntoyinbo (2012) notes that ignoring informal workers in Nigeria reduces both environmental efficiency and social opportunity, while Sembiring and Nitivattananon (2010) highlight that formal recognition of these actors enhances system performance and creates income-generating opportunities. Similarly, global initiatives and policy briefs emphasize that inclusive approaches such as integrating waste

pickers into municipal operations, providing training, and offering fair compensation support both social justice and environmental objectives (WIEGO 2023; UNDP Vietnam 2025; ICLD 2025). These interventions illustrate the principle that inclusivity should be embedded into system design, rather than applied as a post hoc social program. Beyond the informal sector, accessibility, infrastructure, and incentive mechanisms have been identified as critical for inclusive participation. Urban waste management frameworks that rely on complex administrative requirements or assume access to formal collection points risk excluding marginalized populations (C40 Knowledge Hub 2023; ESCAP 2025). In contrast, systems that integrate low-barrier participation, such as decentralized collection points or material incentives, reduce social and cognitive barriers to engagement and can normalize recycling behaviours across diverse populations (The Climate Drive 2025; C40 2023). These examples demonstrate that inclusivity emerges not only from policy mandates but also through material arrangements and infrastructural logic.

In the context of waste management, inclusivity can have multiple touchpoints. Brie outline principles of inclusive governance such as respect for diversity, partnership, positive discrimination, cultural identity preservation, and multicultural integration, which can be analogously applied to the design of waste management systems to ensure broader participation and equity (Brie 2025, 7–14). First, governance frameworks have to recognize and acknowledge social heterogeneity, including differences in income, language, ethnicity, religion, housing conditions, mobility, and the prevalence of informal practices. Second, they must take into account the practical capacities of individuals and groups to comply with policy requirements within their specific social and material contexts. Finally, inclusivity depends on the availability, accessibility, flexibility and usability of infrastructural arrangements that enable meaningful participation in waste systems. Even in ways that form organically, during or after implementation, the way it happened with Romania's SGR, a guaranteed return system for beverage containers.

EU waste policy, particularly as articulated through directives and implementation guidelines, tends to operate with a universalist logic. Participants are assumed to have stable access to housing, standardized waste containers, proximity to collection points, and the cognitive, educational and temporal resources necessary to follow increasingly complex sorting rules. While such assumptions may hold in certain contexts, they become problematic when projected onto socially uneven environments. Where recognition, capacity, or access is lacking, non-compliance emerges not as a direct deviance towards environmental protection but as an outcome of structural misalignment (Iacoboaea et al. 2025).

This perspective challenges explanations that attribute waste governance failures primarily to deficits in environmental awareness or civic responsibility. Instead, it directs attention toward the ways in which policy design implicitly governs inclusion and exclusion. The question, therefore, is not simply whether citizens accept sustainability goals, but whether governance systems are constructed in ways that allow diverse social actors to enact those goals in practice and whether they leave enough space for creative and inclusive compliance to appear.

The concept of governance imaginaries is useful for capturing the shared assumptions, expectations, and representations that underpin policy design. The European Union recognizes its peoples' diversity and is actively working towards building upon the „united in diversity” motto. These imaginaries shape how problems are defined, spoken about, which solutions are considered legitimate, and who is envisioned as the target of intervention. In the field of waste management, dominant imaginaries often prioritize efficiency, standardization, and behavioural correction, while marginalizing informal or non-institutional forms of engagement. However, norms do not travel intact from one governance level to another, especially in such a various constellation of cultures and peoples such as that of the EU. Instead, they are interpreted, translated, and contested as they move from the EU to national and local contexts. Norm internalization depends not only on legal transposition but also on the resonance between policy expectations and everyday social realities. Where such resonance is absent, compliance mechanisms tend to rely increasingly on sanctions and enforcement both on state actors and citizens, often with limited success. In this sense, persistent infringement procedures can be understood as symptoms of deep governance mismatches and lack of imaginary to translate them into national or local policies. Rather than meaning outright resistance to EU norms, they reflect the failure of policy frameworks to align with the lived conditions of their intended subjects. Inclusivity failures thus emerge not from opposition to sustainability objectives, but from governance imaginaries that insufficiently account for social diversity and vulnerability and lack enough flexibility and creativity.

Waste management systems operate at the intersection of material infrastructure and normative order. Collection points, containers, deposit machines, and pricing mechanisms are not neutral tools. They have the power to actively shape behaviour by enabling certain practices while discouraging others. The materiality of waste governance is therefore central to understanding how inclusivity is produced or undermined. Systems that rely heavily on moral appeals, complex sorting rules, or punitive sanctions presuppose high levels of institutional trust and individual capacity. By contrast, systems that embed participation into everyday routines and

provide immediate, tangible feedback tend to lower the threshold for engagement. From a constructivist standpoint, such systems facilitate norm internalization by making desired behaviour both meaningful and feasible. This distinction is crucial for the analysis that follows. By comparing conventional waste governance domains where Romania has faced repeated infringement with the operation of the SGR deposit–return system, the article aims to show how different governance imaginaries translate into different inclusivity outcomes. The focus, therefore, shifts from abstract compliance metrics to the social conditions under which environmental norms become part of everyday life regardless of social status, housing or education.

3. EU Waste Governance Inclusivity and Romania's Trajectory

The European Union has developed one of the most comprehensive regulatory frameworks on waste management globally, grounded in the principles of prevention, reuse, recycling, and landfill diversion. Through binding directives, quantified targets, and monitoring mechanisms, EU waste policy seeks not only to reduce environmental harm but also to harmonize sustainability practices across member states. Compliance with these norms, however, has proven uneven. Romania represents one instructive case, having been subject to repeated infringement procedures related to waste management since its accession to the Union. These infringement processes are often interpreted as indicators of administrative incapacity, delayed infrastructure development, or insufficient enforcement at the national and local levels. While such factors are undoubtedly relevant, the present paper argues that there is a more complex picture to take into consideration. Romania's persistent compliance difficulties point not merely to implementation gaps, but to deeper tensions between governance imaginary and the social and material conditions under which waste policy operates domestically.

EU waste policy is primarily structured around the Waste Framework Directive, which establishes the waste hierarchy as a guiding principle and mandates separate collection for key waste streams (European Commission 2025). Complementary directives regulate landfilling, packaging waste, and specific material flows, while circular economy action plans increasingly frame waste as a resource within wider sustainability goals aligned with the EU Green Deal. Governance within this framework relies on a mix of legal obligation, performance monitoring, and normative alignment. Member states are expected to transpose directives into national law, develop infrastructure to meet collection and recycling targets, and foster behavioural change among citizens. Implicit in this architecture is the assumption that regulatory clarity, combined with adequate enforcement,

will lead to convergence in practice. However, this model requires relatively uniform social conditions, stable municipal governance, high levels of trust in public institutions, and populations able to comply with increasingly differentiated waste sorting requirements regardless of social status, income, housing, education, ethnicity, and so on. Where these conditions are unevenly distributed, the translation of EU norms into everyday practice becomes considerably more fragile when met with a rigid imaginary.

Since accession, Romania has faced multiple infringement procedures related to excessive reliance on landfilling, failure to close non-compliant waste sites, insufficient separate collection, and underperformance in recycling targets. Official explanations for these infringements tend to emphasize technical deficits, such as delayed infrastructure investment or fragmented institutional responsibilities. Public discourse often adds a moral dimension, attributing failure to low environmental awareness or weak civic culture. Both narratives, however, obscure the social assumptions embedded in the governance model itself. In many Romanian localities, waste governance has been introduced into contexts characterized by socio-economic inequality, informal housing arrangements, and uneven access to services. Requirements for separate collection, fee structures based on household registration, and standardized bins presuppose forms of stability that do not universally exist. In such a context, infringement becomes less a matter of unwillingness to comply and more a structural outcome of misaligned and uncreative governance expectations.

Policies that rely on rigid compliance mechanisms tend to privilege those with stable housing, regular income, and predictable routines, while disadvantaging the poor, the mobile, and those operating in informal economic spaces (Oguntoyinbo 2012). These groups are not explicitly excluded by policy design, yet they are often implicitly governed out of participation. The EU infringement framework itself reinforces this dynamic by focusing on aggregate performance indicators rather than differentiated social outcomes. Compliance is assessed through metrics such as recycling rates or landfill diversion, without systematic attention to who is able to participate in the system and under what conditions. As a result, governance failures are framed as technical or administrative shortcomings, rather than as signals of deeper inclusivity gaps. This compliance centered logic also shapes national responses. Faced with infringement pressure, authorities might tend to prioritize rapid legal transposition and enforcement intensification, often through fines and sanctions. While such measures may improve formal compliance, they risk worsening exclusion by placing additional burdens on those least able to adapt. Inclusivity failures, in this sense, are reproduced rather than resolved.

Romania's experience shows that EU waste norms are formally accepted but unevenly embedded in everyday practice, resulting in partial, context-dependent implementation rather than full internalization. At the national level, policy discourse can embrace EU sustainability objectives, while at the local level implementation is shaped by practical constraints and social realities. This multi-level dynamic creates spaces of friction where norms lose coherence as they travel downward. Local authorities may also formally comply with national legislation while lacking the capacity to operationalize it inclusively. Citizens, in turn, may accept the legitimacy of environmental goals while finding existing systems inaccessible or burdensome. In such cases, non-compliance does not reflect norm rejection, but rather norm displacement. Understanding infringement through this lens allows for a more nuanced interpretation of Romania's waste governance challenges. Rather than treating infringement as evidence of weak social acceptance, this article interprets it as a potential indicator of governance frameworks that insufficiently account for inclusive participation.

The persistence of infringement in conventional waste management domains stands in sharp contrast to the relative success of Romania's deposit–return system for beverage packaging. Unlike traditional waste policies, the SGR system embeds participation directly into everyday economic practices, lowers cognitive and infrastructural barriers, and recognizes informal actors as legitimate participants. This contrast is analytically significant. It suggests that inclusivity is not an automatic outcome of sustainability-oriented policy, but a consequence of how governance is designed, materialized, and socially embedded. The following section therefore turns to the SGR system as an example of governance arrangement, examining how its infrastructural logic enables broader participation and facilitates norm internalization beyond the ideal policy subject.

4. The SGR Deposit–Return System as an Inclusive Model

While Romania's broader waste management framework has been marked by persistent compliance gaps and infringement procedures, the introduction of the national deposit–return system, or SGR, for beverage packaging represents a notable departure from this trajectory. The scheme launched at the end of 2023 and in short period of two years it has become one of the most complex networks in the country (Popoviciu 2025). RetuRO is a company managed by three private representative associations of beverage producers and the Romanian State as shareholders, working on a not for profit principle but with the aims to reinvest into the further development of the SGR system (RetuRO 2025). It is currently the largest

circular economy project in Romania, involving actors from the entire life-cycle of a bottle: from the producer to its end user, local authorities and as it turns out, even informal users such as homeless people or waste collectors, boosting inclusivity. Its aim is to help Romania reach the EU recycling targets for PET, aluminium and glass recycling targets. When purchasing a beverage bottle marked with the SGR symbol, a 0.50 RON deposit is attached to each container. In order to recover the deposit, the bottles need to be returned with the SGR symbol visible and intact, to any collection point now widely available in stores throughout the country, either to the cashier or to an automated reverse vending machine. The returned beverage packaging is then recycled.

In 2024 Romania still scored the lowest rate of recycling in the EU (Eurostat 2025). However, according to the preliminary reports released for the year 2025, more than 80% of the total number of SGR bottles -plastic, metal and glass - released last year, surpassing one billion pieces, have been returned (Raportare preliminară RetuRO, 2025). According to the same reports, the recycling rate of said SGR bottles in 2025 reached 74% for all three categories. Unlike conventional waste policies, which rely heavily on formal compliance mechanisms and municipal infrastructure, the SGR system operates through a materially embedded, incentive-based governance logic. This section highlights the SGR system as a model that showcases how inclusivity can be structurally integrated into environmental governance design. Traditional waste management policies implicitly construct an ideal policy subject: a registered household, with stable residence, access to standardized infrastructure, and the cognitive and temporal capacity to comply with differentiated sorting rules. The SGR system disrupts this model by decoupling participation from formal household status and administrative compliance. By attaching a fixed monetary value to each returned bottle or can, the system reframes waste as something that, first, does not get unlinked from the user as soon as the bottle is empty, and second, transforms a regulatory obligation into an immediately legible economic transaction. Participation does not require registration, prior knowledge of waste hierarchies, or interaction with municipal authorities. Instead, it relies on universally accessible retail spaces and automated return infrastructure. In doing so, the SGR system lowers both social and cognitive barriers to participation, enabling engagement across socio-economic and demographic divides. From a constructivist perspective, this design shift is significant. Norms of recycling are not imposed through instruction or sanction, but enacted through everyday practice. The act of returning packaging becomes normalized not because it is mandated, but because it is materially rewarded and socially visible.

One of the most distinctive features of the SGR system is its capacity to incorporate actors typically excluded from formal waste governance. Homeless individuals, economically marginalized persons, and informal waste collectors have become visible participants in the system, collecting discarded packaging and exchanging it for monetary compensation. These dynamic questions traditional distinctions between formal and informal waste management. Rather than being treated as a problem to be regulated or eliminated, informality is functionally integrated into the system's operation. Discarded bottles acquire value independent of their original owner, enabling secondary collection and redistribution. The value is not so high as to negatively impact everyday consumers, however, it is significant enough to incentivise people's creativity. For vulnerable groups, this creates an opportunity for income generation without bureaucratic mediation, while simultaneously contributing to environmental objectives. This inclusion is not explicitly articulated as a social policy goal, yet it emerges as an outcome of governance design. Inclusivity here is not achieved through targeted outreach or compensatory measures, but through infrastructural arrangements (Iacoboaia et al. 2025) that also recognize difference without stigmatization. The system does not ask who the participants are; it only responds and works based on what they do.

The rapid uptake of the SGR system suggests a high degree of norm internalization, despite Romania's historically uneven performance in recycling-related compliance. This internalization, however, differs qualitatively from the one through traditional waste policy instruments. Rather than appealing to environmental responsibility or European obligations, the SGR system aligns sustainability norms with immediate personal benefit. Over time, repeated participation reinforces behavioural routines, embedding recycling into daily consumption practices. The visibility of return machines in supermarkets and the circulation of returned bottles in public space further contribute to the social normalization of the practice. In line with constructivist perspectives, these norms are most effectively internalized when they are enacted rather than explained. The SGR system exemplifies this principle by translating abstract environmental goals into concrete, routinized and extremely simplified actions to anyone. Importantly, this process does not require uniform motivation. Participants may engage for environmental, economic, or pragmatic reasons, yet the overall effect aligns with EU and national sustainability objectives.

The contrast between Romania's infringement-prone waste management domains and the relative success of the SGR system underscores a central analytical claim of this article: inclusivity is not necessarily a matter of communication, awareness, or enforcement, but of infrastructural design as well. Where conventional waste governance relies

on layered administrative coordination and citizen compliance, the SGR system operates through direct material interaction. Infrastructure here performs governance functions by shaping behaviour, allocating responsibility, and enabling participation without presupposing social homogeneity. This insight has broader implications for EU and national environmental policy. It suggests that compliance failures should not be interpreted solely as deficits of capacity or willingness, but as indicators of governance models insufficiently attuned to social diversity. Systems that embed participation into everyday material practices seem to be more likely to achieve both environmental effectiveness and social inclusivity.

The SGR system does not resolve all of Romania's waste management challenges, nor does it eliminate the structural causes of infringement in other domains. However, it demonstrates that alternative, creative and flexible governance imaginaries are possible within the same national context. By recognizing participation as heterogeneous and embedding norms into accessible infrastructures, the SGR system mitigates the very exclusions that often underpin non-compliance. This suggests that future EU waste governance efforts, especially in member states facing persistent infringement, could benefit from shifting emphasis away from compliance centered models toward design centered inclusivity. In this sense, the SGR system functions not merely as a technical instrument, but as an empirical intervention into debates on norm diffusion, governance legitimacy, and the social dimensions of sustainability transitions. It reveals that when governance imaginaries align more closely with lived social realities, inclusivity and effectiveness can become mutually reinforcing rather than competing objectives.

5. Inclusivity and Waste Management Design

The analysis presented in the preceding sections invites a broader reconsideration of how inclusivity operates within waste governance. Rather than treating inclusivity as a normative aspiration or a corrective social add-on, the SGR case illustrates that inclusivity is fundamentally shaped by the design logic of instruments themselves. Persistent infringement procedures and uneven compliance cannot be fully understood without examining the governance imaginaries that structure participation, responsibility, and legitimacy in waste management systems.

From a constructivist perspective, EU waste governance exemplifies a hierarchical model of norm diffusion. Sustainability norms are articulated at the European level, codified through directives, and expected to cascade downward through national legislation and local implementation. The infringement procedure functions as a corrective mechanism within this architecture, identifying deviations and applying pressure for alignment.

However, this model assumes that norms retain their meaning and feasibility as they travel across governance levels. In practice, norms are reinterpreted and reshaped as they encounter diverse social and material contexts. Where governance design does not accommodate this diversity, compliance becomes fragile and enforcement increasingly coercive.

The SGR system demonstrates an alternative pathway through which environmental norms can be internalized. Rather than relying on abstract legal obligations or moral appeals, the system embeds recycling norms into material infrastructure and everyday routines. Participation is enabled through direct interaction with return machines, standardized deposits, and universally accessible retail spaces. This design minimizes the need for prior knowledge, institutional trust, or formal inclusion within municipal systems. Inclusivity emerges not because the system explicitly targets vulnerable groups, but because it refrains from excluding them through design. The absence of registration requirements, the uniform deposit value, and the visibility of return points create conditions under which diverse actors can participate on equal terms. This comparison reveals an important insight: governance systems that rely on compliance with administratively complex rules implicitly privilege socially advantaged groups, while those that operate through simple, material incentives are more likely to accommodate heterogeneity. Inclusivity, in this sense, is not achieved through additional policy layers or compensatory measures, but through governance arrangements that lower thresholds for engagement. The SGR system illustrates how infrastructural design can perform social governance functions by enabling participation without surveillance, sanction, or moral judgment.

Importantly, this does not suggest that incentive-based systems are universally superior or that all waste governance can be reduced to deposit schemes. Rather, it highlights the need for reflexivity in policy design. When governance instruments assume uniform capacities and conditions, they risk producing exclusion as an unintended outcome. Conversely, when systems are designed with flexibility and openness to multiple forms of participation, inclusivity can emerge organically. The Romanian SGR case thus challenges dominant compliance centered approaches in EU environmental governance and stresses the value of design centered inclusivity.

6. Conclusions: Inclusivity as a Property of Environmental Governance

This article has argued that inclusivity in waste management should be understood not as a supplementary social objective, but as a core property of environmental governance design. Through an analysis of

Romania's success of the SGR deposit–return system in contrast to the persistent infringement in conventional waste management domains, the article has shown how governance imaginaries can creatively shape who is able to participate meaningfully in sustainability transitions.

Romania's experience with EU waste governance illustrates the limits of hierarchical, compliance-driven models of norm diffusion. Repeated infringement procedures do not necessarily signal resistance to environmental norms, nor a lack of public legitimacy. Instead, they may reflect deeper mismatches between policy assumptions and social realities. Waste governance systems that presuppose stable housing, formal registration, and uniform capacity risk excluding precisely those groups whose participation is necessary for achieving aggregate sustainability targets. Under these circumstances, non-compliance becomes a structural outcome rather than a behavioural failure. The SGR system offers a compelling counterpoint. By embedding environmental norms into accessible infrastructure and everyday economic practices, it enables participation across socio-economic divides without requiring formal inclusion or normative alignment. Its capacity to incorporate informal actors demonstrates that inclusivity can emerge as an unintended but powerful effect of governance design. Rather than correcting behaviour through enforcement, the system reshapes the conditions under which behaviour occurs. This shift from compliance enforcement to participation enablement is central to its effectiveness.

The broader implication for EU environmental governance is that inclusivity and effectiveness need not be competing objectives. On the contrary, governance systems that recognize social heterogeneity and embed participation into material practice may achieve higher levels of norm internalization and compliance precisely because they lower barriers to engagement. In this sense, infringement should be reinterpreted not only as a legal problem, but as an analytical signal pointing to inclusivity gaps within governance imaginaries. Future waste governance efforts, particularly in member states facing persistent compliance challenges, would benefit from moving beyond standardized policy templates toward more reflexive, design-sensitive approaches. While the SGR system cannot be mechanically replicated across all waste streams, it demonstrates that alternative governance imaginaries are possible within existing EU frameworks. Recognizing inclusivity as a constitutive element of environmental governance creates new opportunities for understanding how sustainability transitions can be both socially legitimate and environmentally effective.

Bibliography

- Brie, Mircea (2025). "Inclusivity. Vision, Mission, Goals, and Perspectives". *Inclusivity*. No. 1, Research Center EuroINCLUS, Editura Universitatii din Oradea, 7–14. Accessed January 6, 2026. <https://doi.org/10.58603/XQZT9578>.
- C40 Knowledge Hub (2023). "Inclusive Waste Management in Cities." Accessed January 6, 2026. https://www.c40knowledgehub.org/s/article/Inclusive-waste-management-in-cities?language=en_US.
- Emenda Sembiring and Vilas Nitivattananon (2010). "Sustainable Solid Waste Management toward an Inclusive Society: Integration of the Informal Sector." *Resources, Conservation and Recycling* 54, no. 11: 802–809. Accessed January 6, 2026. <https://doi.org/10.1016/j.resconrec.2009.12.010>.
- ESCAP (United Nations Economic and Social Commission for Asia and the Pacific) (2025). "10 Principles to Create Inclusive Waste Management Systems and Reduce Marine Plastic Pollution." Accessed January 12, 2026. <https://www.unescap.org/blog/10-principles-create-inclusive-waste-management-systems-and-reduce-marine-plastic-pollution>.
- European Commission (2025). "Waste Framework Directive." *Environment (European Commission)*. Accessed December 23, 2025. https://environment.ec.europa.eu/topics/waste-and-recycling/waste-framework-directive_en.
- Eurostat (2025). "Over 12 % of Materials in the EU Come from Recycling." *Eurostat News*, November 19, 2025. Accessed December 28, 2025. <https://ec.europa.eu/eurostat/web/products-eurostat-news/w/ddn-20251119-1>.
- ICLD (2025). "Inclusive Waste Management Policy Brief." Accessed January 7, 2026. https://cdn.icld.se/wp-content/uploads/20250922105859/icld_policybrief_17_web.pdf.
- Iacoboaia, Cristina, Andrei Damian, Ioana Nenciu, Mihaela Aldea, Oana Luca, Mihai Șercăianu, Ancuța Neagu, and Emanuel Răuță (2025). "Towards Inclusive Waste Management in Marginalized Urban Areas: An Expert-Guided Framework and Its Pilot in Reșița, Romania." *Sustainability* 17 (11): 5070. Accessed January 7, 2026. <https://doi.org/10.3390/su17115070>.
- Oguntoyinbo, O. (2012). "Informal Waste Management System in Nigeria and Barriers to an Inclusive Modern Waste Management System: A Review." *Public Health* 126, no. 5: 441–447. Accessed January 6, 2026. <https://doi.org/10.1016/j.puhe.2012.01.030>.
- Popoviciu, Andrei (2025). "'We Like It a Lot': How Romania Created Its Hugely Popular Deposit Return Scheme." *The Guardian*, November 27, 2025. Accessed December 29, 2025. <https://www.theguardian.com/>

[environment/2025/nov/27/we-like-it-a-lot-how-romania-created-the-largest-deposit-return-scheme-in-the-world.](https://www.retuoro.ro/en/about-returo)

RetuRO (2025). "About RetuRO." *ReturoSGR*. Accessed December 28, 2025. <https://returogr.ro/en/about-returo>.

RetuRO (2025). "Raportare preliminară RetuRO, Decembrie 2025 - 15.01.2026." *RetuRO*. Accessed January 15, 2026. <https://returogr.ro/sites/default/files/2026-01/Raportare%20preliminara%20RetuRO%2C%20Decembrie%202025%20%20-%2015.01.2026.pdf>.

The Climate Drive (2025). "Advance Urban Circularity through Inclusive Waste Management." Accessed January 12, 2026. <https://www.theclimatedrive.org/action-library/advance-urban-circularity-through-inclusive-waste-management>.

Theys, Sarina (2018). "Introducing Constructivism in International Relations Theory." *E-International Relations*, February 23, 2018. Accessed December 28, 2025. <https://www.e-ir.info/2018/02/23/introducing-constructivism-in-international-relations-theory/>.

UNDP Vietnam (2025). "Scaling Integrated and Inclusive Waste Management Models through Empowering Informal Sector and Fostering Circular Economy Phase 2." Accessed January 12, 2026. <https://www.undp.org/vietnam/projects/scaling-integrated-and-inclusive-waste-management-models-through-empowering-informal-sector-and-fostering-circular-economy-phase-2>.

Wendt, Alexander (1995). "Constructing International Politics." *International Security* 20 (1): 71–81. Accessed December 23, 2025. <https://www.jstor.org/stable/2539217?origin=JSTOR-pdf>.

WIEGO (2023). "There is No Circularity Without Waste Pickers." Accessed January 11, 2026. <https://www.wiego.org/blog/there-is-no-circularity-without-waste-pickers/>.