

Urban Governance Models For Sustainable Cities: Integrating Csr Into Circular Economy Strategies

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Summary

This article presents a systematic review (PRISMA) on urban governance models that integrate corporate social responsibility (CSR) into circular economy strategies for the development of sustainable cities. The search in Scopus and Web of Science, with the keywords urban governance, sustainable cities and circular economy, yielded 15 studies that met the eligibility criteria. Through qualitative synthesis and thematic analysis, the findings show that effective governance operates as a portfolio architecture: public-private-social co-production platforms, economic instruments, and regulatory arrangements that coordinate sectors (construction, waste, energy, food) and scales (neighborhood-city-region). CSR ceases to be peripheral and is integrated into the contractual core of urban management through circular public procurement, material passports, traceability and goals of prevention, reuse and decent employment. Systemic levers (renewable energy and data), land policies to accommodate circular chains, and strategies for discontinuing linear practices are identified. Measurement gaps—recycling-focused indicators—and challenges in institutional capacity and financing persist. It is concluded that the most robust models combine territorial differentiation, material metrics (prevention, repair, recycled content) and continuous institutional learning, making CSR the operational driver of urban circularity. Lines of action are proposed for governments, companies and civil society, and a set of indicators for monitoring and accountability.

Keywords: Urban Governance; Circular Economy; Corporate Social Responsibility; Sustainable Cities; Circular Public Procurement; Circularity Indicators; Land Policy; Urban decarbonization.

1. INTRODUCTION

Rapid global urbanization represents one of the main challenges for sustainability. The accumulation of people in urban areas has increased resource use, waste production, and pressure on ecosystems. Healey (2018) points out that "modern cities face increasing tensions due to the complexity of social, economic, and environmental systems" (p. 23). These tensions have generated the need to develop urban governance models that incorporate sustainability principles and focus on the formation of resilient and adaptive cities.

In this context, the circular economy is presented as a strategic solution to the linear model of production and consumption. Geissdoerfer, Savaget, Bocchen, and Hultink (2017) describe the circular economy as "a regenerative system where the input of resources, waste, emissions, and energy losses are minimized through the closure of material and energy cycles" (p. 759). This definition underscores the importance of redesigning production and consumption processes in cities, fostering innovations that can only thrive under proper governance schemes.

However, the concept of circular economy still faces both conceptual and practical challenges. Kirchherr, Reike, and Hekkert (2017) indicate that "despite political and academic interest, the circular economy does not have a commonly accepted definition and its implementation is uneven"

(p. 224). Therefore, governance models must play an articulating role that helps overcome cultural, regulatory and technological barriers, facilitating the transition to more sustainable urban environments.

Urban governance is increasingly seen as a networked, inclusive and multidimensional process. Rhodes (1996) argues that "governance implies self-managed, interdependent networks of public, private and social actors" (p. 652). In the context of sustainable cities, this perspective involves the integration of different levels of government, companies and citizens to create policies that redirect practices towards circularity and shared responsibility.

In this sense, corporate social responsibility (CSR) becomes a fundamental element in connecting companies with common urban sustainability goals. Carroll (1991) argued that "CSR includes the economic, legal, ethical, and philanthropic expectations that society has of organizations at a given time" (p. 42). By being incorporated into urban circular economy strategies, CSR provides a regulatory and practical framework that enables companies to contribute effectively to the environmental and social well-being of communities.

Aguinis and Glavas (2012) state that "CSR research is still very fragmented and lacks theoretical integration" (p. 933). This observation highlights the need to link CSR with frameworks such as the circular economy and urban governance, establishing a research and practice agenda that reduces the gap between the discourse of companies and the true needs of cities.

The role of cities as centers of innovation in sustainability has become more relevant in recent years. Nevens, Frantzeskaki, Gorissen, and Loorbach (2013) state that "urban transition laboratories are experimental spaces where diverse actors co-create visions and strategies for sustainable transformation" (p. 112). These spaces act as drivers of the circular economy, facilitating cooperation between responsible companies, local governments and organised communities.

The capacity for governance at different scales is another fundamental aspect. Betsill and Bulkeley (2006) point out that "cities are important protagonists in global climate governance, to the extent that they can link local policies with transnational agendas" (p. 143). This role is enhanced in the context of the circular economy, where it is vital that local strategies are aligned with national regulations and international sustainability commitments.

In this context, Bulkeley and Castán Broto (2013) point out that "government through urban experimentation has become a common practice to face environmental challenges" (p. 362). Experimentation provides opportunities for corporate social responsibility to be implemented in circular economy pilot projects, ranging from shared mobility systems to circular industrial zones, with the possibility of scaling to well-established public policies.

In addition, the social dimension of circularity is equally important. Murray, Skene, and Haynes (2017) warn that "the circular economy often focuses on the technical aspects of the materials cycle, without adequately considering the social impacts" (p. 371). Including corporate social responsibility in this approach ensures that the benefits of circularity – such as employment, inclusion and environmental equity – are fairly distributed among different social groups.

The potential of the circular economy is also manifested in the macroeconomic effects. Wijkman and Skånberg (2015) conclude that "a circular Europe could significantly reduce carbon emissions and create millions of additional jobs" (p. 18). However, for these benefits to materialize, urban governance models are required that can institutionalize corporate social responsibility as a driver of change in the business environment, guaranteeing transparency, co-responsibility and long-term sustainability. Finally, as Matten and Moon (2008) indicate, "corporate social responsibility manifests itself explicitly and implicitly, according to institutional and cultural frameworks" (p. 406). In the urban environment, this means that the incorporation of corporate social responsibility into the circular economy should not be uniform, but adapted to local particularities, respecting community values and political priorities. Thus, this article aims to critically analyse how urban governance models have integrated corporate social responsibility into circular economy strategies, identifying lessons and challenges to move towards more sustainable cities.

2. General objective

To systematically analyse the urban governance models identified in the scientific literature indexed in Scopus and WoS, in order to assess how they integrate corporate social responsibility into circular economy strategies, and to determine their contribution to the development of sustainable cities.

3. Theoretical framework

The idea of urban governance has established itself as a key term in analyses of planning and sustainability. Healey (2018) mentions that "urban governance should be seen as a relational process, where various actors negotiate and collaborate to define the development of the city" (p. 27). This perspective underlines that urban challenges cannot be addressed solely from hierarchical state structures, but through collaborative networks that include the public, private, and community sectors.

The term network governance was introduced in the early years by Rhodes (1996), who indicated that "governance represents the self-management of interdependent networks, defined by trust, common rules, and negotiations" (p. 653). In the urban context, this approach manifests itself in models where local authorities share responsibilities with companies, universities and civil society, with the goal of achieving collective objectives such as sustainability and resilience.

With regard to urban sustainability, Bulkeley and Betsill (2005) argue that "cities are strategic points in the fight against climate change, but their capacity for action depends on inclusive governance frameworks that operate at multiple scales" (p. 45). This perspective positions cities not only as spaces of consumption and pollution, but as agents of change capable of developing innovative policies that motivate other levels of government.

The circular economy (CE) is presented as a new paradigm that transforms the way cities understand the use of resources. According to Geissdoerfer, Savaget, Bocchen, and Hultink (2017), "the circular economy is a regenerative system that seeks to preserve the value of resources for as long as possible" (p. 759). The implementation of this model requires rethinking the production, consumption and management of waste, presenting cities with the challenge of evolving towards circular platforms.

However, Kirchherr, Reike and Hekkert (2017) highlight that "the circular economy is a developing concept, which can be defined in multiple ways and has various applications" (p. 225). This multifaceted nature complicates its uniform application in urban contexts, making it necessary to create governance models that adapt to the principles of circularity according to local characteristics. At the same time, the literature on corporate social responsibility (CSR) offers a conceptual framework that links corporate dynamics with urban sustainability goals. Carroll (1991) suggested that "business responsibilities are economic, legal, ethical, and philanthropic" (p. 42), emphasizing that the legitimacy of a company is based on its ability to meet social expectations. From this perspective, CSR goes beyond philanthropic actions, and can be integrated into urban plans to facilitate transitions towards circularity.

According to Matten and Moon (2008), "corporate social responsibility can manifest itself in a clear way, when it is established in policies and plans, or in a more subtle way, when it is derived from social and cultural norms" (p. 406). In the context of the circular economy in cities, this differentiation is fundamental, since many entrepreneurial actions emerge from (explicit) institutional requirements, while others are based on (implicit) community interactions. Both facets enrich the development of governance models that are inclusive.

Mainstreaming corporate social responsibility into urban governance is best understood from the multi-stakeholder collaboration approach. Ansell and Gash (2008) describe collaborative governance as "a joint process where both public and private actors are directly involved in decision-making to achieve shared results" (p. 544). In this way, corporate social responsibility can serve as a means for companies to adopt defined commitments within urban circular economy agendas.

The literature also highlights the importance of social innovation in the creation of sustainable cities. Nevens, Frantzeskaki, Gorissen, and Loorbach (2013) comment that "urban transition labs provide an experimental context for co-creating transformative solutions" (p. 112). These innovation environments are enhanced by integrating CSR practices and circular strategies, establishing synergies between business interests and the needs of citizens.

However, the implementation of the circular economy and corporate social responsibility encounters obstacles and limitations. Murray, Skene, and Haynes (2017) recognize that "despite the fact that the circular economy has attracted the attention of academics and policymakers, its practical application is still rudimentary and unsystematic" (p. 372). In addition, the criticisms of Aguinis and Glavas (2012) indicate that CSR "does not yet have a solid integration between theory and practice" (p. 933). This highlights the urgent need to link both approaches within sound governance frameworks.

An additional aspect is the multidimensionality of urban challenges and solutions. Betsill and Bulkeley (2006) state that "global urban networks allow cities to overcome their administrative boundaries and collaborate on climate governance at the international level" (p. 143). This suggests that urban governance focused on circularity and CSR goes beyond the local, connecting with agendas at the regional and global levels.

Finally, it is crucial to emphasize that sustainable urban governance depends not only on institutional structures, but also on evaluation and accountability mechanisms. Frantzeskaki, Kabisch and McPhearson (2016) mention that "impact assessment is essential to provide feedback on governance processes and increase their effectiveness" (p. 713). In this context, CSR can offer clarity and traceability to circular economy strategies in urban environments, strengthening the legitimacy of the actors involved and ensuring the long-term sustainability of projects.

4. METHODOLOGY

This research was designed under the systematic review methodology, following the guidelines of the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) model. This approach seeks to ensure transparency, reproducibility, and rigor at every stage of the process. Moher, Liberati, Tetzlaff, and Altman (2009) point out that "the objective of PRISMA is to help authors improve the reporting of systematic reviews and meta-analyses" (p. 264). All phases were therefore carefully documented.

4.1 Eligibility Criteria

Inclusion and exclusion criteria were established to ensure the relevance of the studies analyzed. Academic articles published in journals indexed in Scopus and Web of Science between 2015 and 2024, in English and Spanish, that explicitly addressed at least one of the following axes: urban governance, sustainable cities, circular economy and/or corporate social responsibility (CSR) were included. As exclusion criteria, duplicate documents, short reviews, grey literature, theses and chapters of non-refereed books were discarded. According to Petticrew and Roberts (2006), "the precise definition of eligibility criteria is a crucial step in ensuring the validity of a systematic review" (p. 83).

4.2 Sources of information and search strategy

The bibliographic search was carried out in the Scopus and Web of Science (WoS) databases, selected for their international recognition and for covering high-impact literature. According to Falagas, Pitsouni, Malietzis, and Pappas (2008), "Scopus and Web of Science are the two most widely used databases in academic research, with wide coverage of indexed journals" (p. 3). The keywords used were: "urban governance", "sustainable cities", "circular economy" and "corporate social responsibility", combined with Boolean operators (AND, OR) and truncations to expand the results.

4.3 Selection of studies

Screening was carried out in three phases: identification, screening, and eligibility. In the first phase, 128 documents were recovered. Following the removal of duplicates, 94 titles and abstracts were reviewed. In the screening stage, 63 were discarded because they did not meet the inclusion criteria. Finally, 15 articles were left for in-depth qualitative analysis. This procedure responds to what was proposed by Higgins and Green (2011), who point out that "the selection process should be presented as a flow chart that shows the reasons for exclusion at each stage" (p. 97).

4.4 Data Extraction and Encoding

For each selected publication, an analysis matrix was constructed that included the following elements: author, year, country, objective, methodological approach, main variables, type of governance identified, presence of CSR strategies and link with the circular economy. According to Liberati et al. (2009), "standardized data extraction allows for homogeneous comparison of findings and reduces researcher bias" (p. 3).

4.5 Quality assessment

The selected studies were evaluated using methodological quality criteria, considering their level of indexing, number of citations, clarity of objectives, methodological coherence and relevance of the results. Harden and Gough (2012) argue that "quality assessment does not seek to exclude evidence, but rather to weigh the weight of each study in the final synthesis" (p. 153).

4.6 Synthesis and analysis of results

The synthesis of results was carried out under a descriptive qualitative approach, prioritizing the identification of patterns, gaps and convergences between the articles. Meta-analyses were not applied, as the methodological heterogeneity of the studies did not allow it. According to Noblit and Hare (1988), "qualitative synthesis seeks to go beyond mere aggregation, generating interpretations and expanded theoretical perspectives" (p. 28).

4.7 Ethical considerations

Although this is a bibliographic review and we did not work with human subjects, ethical criteria of transparency and academic rigor were respected, adequately citing all sources. As Booth, Sutton, and Papaioannou (2016) point out, "ethics in systematic reviews implies guaranteeing completeness, honesty in the selection, and appropriate attribution of knowledge" (p. 64).

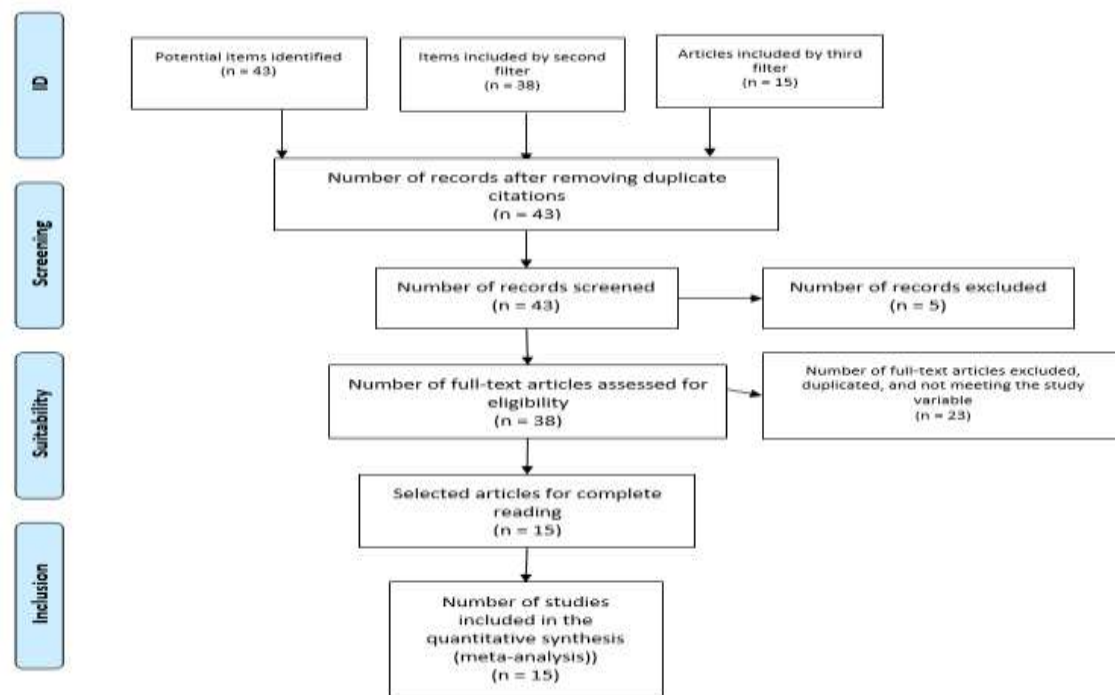


Figure 1. Flowchart of a systematic review carried out under the PRISMA technique (Moher, Liberati, Tetzlaff, Altman, & Group, 2009)

Source: Authors; Based on the proposal of the Prisma Group (Moher, Liberati, Tetzlaff, Altman, & Group, 2009)

5. RESULTS

Table 1 shows the results after applying the search filters related to the methodology proposed for this research, after recognizing the relevance of each of the referenced works.

N o.	RESEARCH TITLE	AUTHOR/YEAR	COUNTRY	TYPE OF STUDY	INDEXING
1	A multi-stakeholder engagement framework for material-building-city synergy through circular transformation	Bostancı, H. B., Tanyer, A. M., & Habert, G. (2024)	TURKEY, SWITZERLAND	QUALITATIVE	SCOPUS

2	<i>Review of Renewable Energy, Sustainability Concerns, and Climate Solutions for Smart Cities</i>	Sharma, K., Dasarathy, A. K., Upadhyay, R., & Kulhar, K. S. (2024).	INDIA	QUALITATIVE	SCOPUS
3	<i>The complexity and interconnectedness of circular cities and the circular economy for sustainability</i>	Brglez, K., Perc, M., & Lukman, R. K. (2024)	SLOVENIA	QUALITATIVE	SCOPUS
4	<i>Designing a circular cities declaration for Japan building on the European Union's case study</i>	Herrador, M., de Jong, W., Nasu, K., & Granrath, L. (2024).	SPAIN, GERMANY, CHINA, JAPAN	QUALITATIVE	SCOPUS
5	<i>Green Transition Assessment, Spatial Correlation, and Obstacles Identification: Evidence from Urban Governance Data of 288 Cities in China</i>	Yu, Z., Guo, T., Song, X., Zhang, L., Cai, L., Zhang, X., & Zhao, A. (2024).	CHINA	QUANTITATIVE	SCOPUS
6	<i>Pathways for Cleaner, Greener, Healthier Cities: What Is the Role of Urban Agriculture in the Circular Economy of Two Nordic Cities?</i>	De Jesus, A., & Aguiar Borges, L. (2024)	SPAIN	QUALITATIVE	SCOPUS
7	<i>Self-Sufficiency and Sustainable Cities and Regions: Planning for Sustainable, Circular and Carbon-Neutral Development</i>	Medeiros, E. (2024).		QUALITATIVE	SCOPUS

8	DEVELOPMENT OF ECOLOGICAL CONSCIOUSNESS THROUGH URBAN DESIGN AND DEVELOPMENT	Li, X., & Feng, D. (2024).	TURKEY, IRAQ	QUANTITATIVE/QUALITATIVE	WOS
9	<i>Interactions between a circular city and other sustainable urban typologies: a review</i>	Pegorin, M. C., Caldeira-Pires, A., & Faria, E. (2024).	BRAZIL	QUALITATIVE	WOS
10	<i>Municipal circular economy indicators: Do they measure the cities' environmental ambitions?</i>	Kopp, M., Petit-Boix, A., & Leipold, S. (2024)	GERMANY	QUALITATIVE	WOS
11	<i>Circular cities: a sustainable approach for the urban future</i>	Parreira, L. S. A., & Guimarães, A. Q. (2024).	BRAZIL	QUALITATIVE	WOS
12	<i>Exploring sustainable urban governance: Evolving dynamics, transitions, and ambiguities</i>	Thoyyib, V. M., Islam, K. B., & Guha, A. (2024)	INDIA	QUALITATIVE	WOS
13	<i>Finding land for the circular economy: territorial dynamics and spatial experimentation in the post-industrial city</i>	Baumgartner, J., Bassens, D., & De Temmerman, N. (2024).	BELGIUM	QUANTITATIVE	WOS
14	<i>Understanding circular city policies as a discontinuation strategy: Policy insights from circular construction</i>	Isoaho, K., & Valkama, P. (2024).	FINLAND	QUANTITATIVE	WOS

15	<i>Performing, co-producing and strategizing for a sustainable city: Urban sustainability policy in Tel Aviv, 2000-2020</i>	Barner, H., & Marom, N. (2024).	ISRAEL	QUANTITATIVE	WOS
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Table 1. List of articles analyzed
Source: Own elaboration

Available information suggests that the shift towards sustainable cities needs governance structures that integrate public decisions with measurable private sector commitments and social circularity practices. In the field of construction, a multi-stakeholder approach is suggested that connects the synergy between materials, buildings and cities to facilitate circular transformation. This kind of coordination at different scales turns corporate social responsibility into a linking mechanism: companies' commitments in design, procurement and reverse logistics are aligned with municipal objectives of prevention, reuse and regeneration, bridging the gap between what is declared and what is actually done.

In terms of energy and digitalization, the development of smart cities relates renewable energies, information and demand management with material circularity goals. The study on renewable energy and climate solutions for smart cities highlights that technological adoption can decrease dependency and facilitate sustainable initiatives in the urban environment. When applied to governance, this entails public-private partnerships with corporate social responsibility clauses, such as efficiency, green procurement, and clean energy, as well as reporting systems that direct investments towards low-carbon urban cycles.

At the systemic level, the transition to circular practices shows complexity and interconnection between policies, sectors and actors, which requires compatible models and constant coordination. From this observation emerges a principle of institutional design: corporate social responsibility is not developed as an isolated action, but as part of a governance system that incorporates externalities, such as waste, emissions and employment, through shared goals, traceability and comparable metrics between departments, companies and organizations.

Declarative instruments are useful for setting expectations and sharing international learning. The study that proposes a declaration of circular cities for Japan based on the case of the European Union suggests principles, commitments and indicators that integrate circularity in the design, development and management of urban areas. In the context of corporate social responsibility, these agreements facilitate clear commitments from companies in relation to materiality, waste management objectives and inclusive procurement, which can be audited and reviewed publicly on governance platforms.

The territorial aspect and institutional diversity are significant. The analysis of 288 cities in China detects spatial correlations in the green transition and the identification of obstacles, such as institutional capacity, productive structure and investment in the environment. For governance, this implies the design of context-differentiated tools: where strong capacities exist, incentives for circular innovation are encouraged; where there are none, a gradual elimination of linear practices is proposed, accompanied by technical assistance and public purchases that promote the demand for recycled materials.

Sectoral mechanisms demonstrate how corporate social responsibility is applied in urban projects. Urban agriculture is presented as a way to achieve cleaner, greener and healthier cities, closing organic matter cycles and generating additional social benefits. From a governance perspective, this is reflected in companies' commitments to the use of bio-waste, local labelling, inclusion in employment and co-responsibility in community food security, all within a framework of municipal regulations and impact metrics.

A second principle arises from regional planning: "self-sufficiency... circular and carbon neutral" as a foundation for development at the city-region level (Medeiros, 2024). The integration of CSR and CE here involves coordinating business investments (energy, logistics, construction) with territorial strategies that pursue neutrality and circularity, through sets of projects that have common indicators and public procurement criteria that value circular performance.

Urban design influences circular behaviour. Including "ecological awareness" in urban planning (Li & Feng, 2024) means regulating the types of buildings, encouraging active mobility, and creating spaces for repair and sharing that make circularity tangible in everyday life. From the perspective of CSR, this implies that companies and developers adopt commitments regarding cycles of use, repairability and servitization, supported by monitoring tools in licenses and concessions.

Various studies advocate managing the convergence between sustainable urban models. The review on "interactions between a circular city and others... typologies" reveals that circularity "interrelates" with smart, resilient and low-carbon approaches, recommending 10R frameworks with coherence of indicators (Pegorin, Caldeira-Pires, & Faria, 2024). This requires governance that is organised by policy portfolios (not silos) and integrated CSR within urban value chains (e.g. construction, food, mobility) with compatible objectives.

Evaluation is the crucial element that links governance and CSR. The analysis on "municipal circular economy indicators" questions whether they really reflect environmental "ambition" (Kopp, Petit-Boix, & Leipold, 2024). It is concluded that the focus on recycling omits aspects such as prevention, eco-design, reuse and decent work. To close this gap, CSR must incorporate relevant indicators at the contract level (design for disassembly, recycled content, traceability) and territory (local employment, inclusion, environmental health), included in the city's public reports.

Translating ambition into action requires physical space and land-use regulations. The study "finding land for the circular economy" highlights the need for locations for circular centres, addressing "territorial dynamics" and tensions over land value (Baumgartner, Bassens and De Temmerman, 2024). In this context, CSR acts as a support to generate co-benefits (employment, inclusion of recyclers, training) that justify regulatory adjustments, temporary concessions and performance clauses in urban planning agreements.

Another key aspect is the "discontinuation strategy": it is not enough to support innovations; linear practices need to be phased out, especially in construction (Isoaho & Valkama, 2024). Effective governance establishes exit plans (e.g., progressive bans, minimum circularity standards, elimination of waste subsidies) and positions CSR as an instrument for corporate transformation (design changes, procurement, and reporting).

Finally, the political and organizational dimension is manifested in the experience of Tel Aviv, where urban sustainability is "realized, co-produced, and planned" through coalitions, experimentation, and institutional learning (Bar-ner & Marom, 2024). The message for our purpose is clear: governance models that merge CSR and CE are effective when they turn commitments into sustained capacity (metrics, financing, land, contracts) and into learning practices that endure across political cycles.

6. CONCLUSIONS

The results of the review indicate that the transition to sustainable cities is not based on a single "perfect model", but on a varied governance system that can coordinate government policies, business commitments and social practices in various sectors (construction, waste, energy, food) and levels (neighbourhood, city, region). In this context, corporate social responsibility becomes central and is incorporated into the city's contractual axis: prevention and reuse objectives, eco-design criteria, traceability of materials and social co-benefits in licenses, concessions, government purchases and public-private partnerships are included, with metrics that can be verified and accounted for.

In addition, the evidence highlights that the urban circular economy needs, at the same time, entry strategies (innovation, pilot projects, repair centers, industrial symbiosis, digitalization for traceability) and exit strategies that progressively eliminate linear practices (regulations that prevent disassembly, waste subsidies, contracting that favors the use of new materials). The territorial aspect is crucial: without land use and location policies to establish circular chains (storage, reconditioning, reverse logistics), circularity only becomes a statement. Likewise, the focus on what

is measured alters the paths to be followed: indicators must transcend recycling and include prevention, reuse and repair, recycled content in public works, local green employment and distributional effects by district.

Finally, the facilitating role of renewable energies and data in organizing low-carbon and material urban cycles is validated: digitalization allows for proper monitoring and predictive maintenance, while demand management and electrification help to close the cycles. Urban design influences daily circular behaviors, and purposeful participation reinforces legitimacy by offering tangible benefits (savings, employment, health, public spaces). Given the institutional and productive diversity among cities, the key is to combine territorial differentiation with constant institutional learning, reassessing goals and scaling up what shows positive results.

7. Recommendations

To carry out an effective transition, local and metropolitan governments must establish a circular governance platform that has a clear mandate in terms of priorities, coordination and transparency. This structure would unite political and technical leaders with business and civil society working groups, in addition to a group of indicators that guarantee traceability and accountability. Its immediate objective would be to organize portfolios according to sector and area, manage financing and disseminate results frequently, so that corporate social responsibility is integrated into the heart of urban management. A key aspect is circular public procurement: specifications must include minimum requirements for recycled content, design for disassembly, material passports and end-of-life plans for municipal works and supplies; In addition, it is important to consider social co-benefits, such as local employment and the inclusion of vulnerable groups, to align the budget with the results.

Land use policy represents the other fundamental pillar. Without identifying and enabling areas for reverse logistics, repair, refurbishment and second-hand markets, circularity remains only in discourse. It is suggested to reserve logistics-circular land for each inhabitant, allow temporary mixed uses, adjust rates according to performance and promote material districts near freight corridors. At the same time, strategies should be adopted to phase out linear practices, such as landfill limits, minimum standards of reparability and reuse, and eliminate waste subsidies, providing technical assistance and clear transition timetables for companies and public entities.

In the private sphere, corporate social responsibility must evolve from marginal initiatives to contractual commitments that are verifiable. This involves setting targets for prevention, reuse, traceability and decent employment in city agreements and in supply chain contracts that are subject to independent audits. It is recommended to promote circular business models, such as servitization, leasing, buyback and reconditioning, and to create "material passports" that facilitate maintenance, repair and second life, being compatible with municipal platforms. It is also necessary to establish local green employment objectives per project and mechanisms to include waste pickers and small and medium-sized enterprises, connecting dual training with the needs of the urban portfolio.

Data governance must be a constant: exchange agreements between municipalities and companies should allow the traceability of flows, the monitoring of contracts and public visualizations that facilitate the comparison of performance by district, sector and supplier. To guide decisions and prevent "recycling bias", measurement systems should focus on prevention indicators (kg/inhabitant year avoided relative to baseline), readiness for reuse and repair (percentage of flow managed), recycled content in public works (contract and annually), adoption of material passports (projects with traceability), local green employment (FTE per 10,000 inhabitants), circular land enabled (m² per 1,000 inhabitants), territorial equity of circular spending (€/inhabitant per district) and associated decarbonisation (tCO₂e avoided per portfolio). Regular disclosure of these indicators, with independent verification, increases legitimacy and learning.

Finally, the strategy should be developed in different stages. In the short term, it is essential to establish the platform, identify material and energy flows, initiate an initial portfolio and circular procurement pilot projects, reserve priority land and create public information spaces. In the medium term, it is necessary to expand contracting to larger works, set up circular centers, demand passports for materials in public initiatives, formalize data agreements and establish the first regulations on discontinuation. In the long term, it is necessary to review objectives and portfolios

based on evidence, adopt mandatory standards for reparability and recycled content, strengthen joint financing of the public and private sectors, and submit the system to an external evaluation to make regulatory adjustments. If this journey is carried out consistently, corporate social responsibility will become the practical driver of the urban circular economy and cement sustainability in the city's daily institutional structure.

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