

# INSTITUTIONAL EMBEDDING OF AGENDA 2030 IN STRATEGIC URBAN GOVERNANCE: A GOVERNANCE MATURITY ANALYSIS OF ESPOO

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*Cities increasingly invoke the Sustainable Development Goals (SDGs) as an organising language for climate action, liveability, innovation, and inclusive development. Yet the use of SDG vocabulary does not by itself demonstrate institutional change. This article examines how Agenda 2030 has been incorporated into the strategic governance of Espoo, Finland's second-largest city, and asks how far SDG localisation has progressed from strategic commitment to routine administrative practice. The study is grounded in a directed qualitative secondary analysis of a published interview corpus consisting of twelve expert interviews conducted in April–June 2021 with councillors, city managers, sectoral administrators, university representatives, a technology-sector stakeholder, and national and European governance actors. Building on the empirical record of that case, the article develops a five-stage SDG governance maturity framework and evaluates six dimensions of institutional embedding: strategic anchoring, horizontal coordination, ecosystem co-production, policy instrumentation, accountability and temporal continuity, and monitoring and learning. The findings show that Espoo displays a comparatively advanced form of SDG localisation. Agenda 2030 is embedded in the Espoo Story, cross-sectoral development programmes, and collaboration with Aalto University and business partners. At the same time, the evidence also shows that sustainability is not yet consistently built into ex ante policy preparation; the SDGs are often considered only after policy choices have been shaped, accountability remains diffuse, and four-year council cycles complicate long-horizon implementation. The article argues that the decisive threshold in urban SDG governance is the movement from narrative alignment to procedural embedding. By translating qualitative evidence into a governance maturity framework, the study offers a practical analytical tool for urban development and smart-city research, especially for cities seeking to connect strategic ambition, service innovation, and institutional reform.*

*Index Terms* — sustainable development goals; sdg localisation; urban governance; smart cities; local government; espoo; institutional embedding; ecological modernisation

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## INTRODUCTION

Local governments are increasingly expected to carry the practical burden of sustainability transitions. In cities, climate mitigation, housing, mobility, education, service provision, digital infrastructure, and social inclusion intersect in ways that make urban governance central to the implementation of Agenda 2030. The Sustainable Development Goals (SDGs) therefore matter not only as global aspirations but also as an operational language through which municipalities define priorities, coordinate actors, and justify investment choices.

A recurring challenge in the urban literature is that the public visibility of SDG commitments often exceeds their administrative depth. Strategic documents may refer extensively to the SDGs while budget preparation, project appraisal, and interdepartmental decision routines remain guided by pre-existing sectoral logics. This distinction is especially important in the context of urban development and smart-city governance. A city can appear highly advanced because it performs well on innovation, digitalisation, or external rankings, while still lacking institutional mechanisms that make sustainability an obligatory part of ordinary governing practice.

Espoo provides a particularly revealing case. In 2016, a comparative study by the Telos Institute identified Espoo as the most sustainable city in Europe, and in 2018 the United Nations invited the city to act as a pioneer city for Agenda 2030. The city was also named Intelligent Community of the Year in 2018 by the Intelligent Community Forum. These recognitions increased the visibility of Espoo's sustainability agenda and reinforced its image as a city combining technological capacity, cross-sector collaboration, and long-term strategic ambition. At the same time, the underlying empirical record shows a more nuanced governance picture: Espoo has succeeded in integrating Agenda 2030 into strategic narration and collaboration, but systematic incorporation into everyday policy preparation remains incomplete.

This article addresses that gap through an institutional analysis of SDG localisation. Rather than treating the presence of SDG language as sufficient evidence of implementation, it asks how deeply the Agenda has been embedded in the city's rules, routines, and organisational relationships. The article makes three contributions. First, it reframes the Espoo case in terms directly relevant to urban development and smart-city scholarship by linking sustainability strategy to governance architecture. Second, it introduces a governance maturity framework that converts qualitative evidence into a structured diagnostic tool. Third, it identifies the specific institutional bottlenecks that still separate a high-performing strategic city from a fully embedded sustainability regime.

The study is guided by three research questions:

- RQ1. How is Agenda 2030 embedded in the strategic governance of Espoo?
- RQ2. Which dimensions of municipal governance most clearly reveal the depth and limits of SDG localisation?
- RQ3. Which institutional reforms are most likely to strengthen the transition from strategic commitment to routine procedural integration?

## URBAN CONTEXT AND CONCEPTUAL FRAMING

### *Espoo as a smart and sustainable urban governance case*

Espoo is located on the southern coast of Finland, west of Helsinki, and has approximately 300,000 inhabitants across an area of 528 km<sup>2</sup>. It forms part of the Finnish Capital Region and has grown rapidly since the mid-twentieth century, reaching the status of Finland's second-largest city only recently. The city is frequently described through a combination of polycentric urban development, high education levels, strong innovation capacity, and a close relationship with universities and technology firms.

The city's institutional setting is especially relevant for urban development research. Since the council term 2013–2017, Espoo has organised its overarching strategy in a story format. The *Espoo Story*, updated each council term, defines the city's vision, values, operating principles, and term-specific goals. It is implemented through annual performance targets, sector-level stories, performance unit goals, and cross-sectoral development programmes. Initially, five cross-sectoral development programmes were created, one of them being *Sustainable Espoo*. Unlike the other programmes, the sustainable development programme continued across the last three council terms, which indicates unusual strategic continuity in a municipal setting shaped by electoral turnover.

Agenda 2030 has been incorporated into this governance architecture as a practical tool rather than as an isolated reporting framework. In the published case evidence, the SDGs are described as integral elements of the *Espoo Story*, while references to them also appear in cross-sectoral development programmes and sectoral policies. Each sector translates the SDGs in a bottom-up fashion within its own legally and administratively regulated duties. This positioning is crucial: it links SDG localisation to the city's operational model and places the case squarely within debates on strategic urban governance, service-oriented administration, and smart-city coordination.

Espoo's wider ecosystem reinforces this relevance. The co-location of Aalto University, the VTT Technical Research Centre, and numerous high-technology companies in the Otaniemi area has created a fertile innovation environment. The city also benefited reputationally from its association with the Slush start-up ecosystem. These institutional and economic features make Espoo a strong case for examining how a municipality with substantial knowledge assets and digital-era collaborative capacity attempts to translate sustainability strategy into governance practice.

### *From SDG discourse to institutional embedding*

The literature on SDG localisation consistently shows that the Agenda's effects are often most visible in discourse, coordination, and agenda-setting. This is politically significant, but discursive uptake is not the same as institutional embedding. In municipal governance, deeper embedding occurs when sustainability priorities shape how decisions are prepared, how trade-offs are examined, how funds are allocated, how responsibilities are assigned, and how performance is reviewed over time.

This distinction also matters for smart-city debates. Technological sophistication, indicators, and innovation branding can strengthen sustainability governance, but they can also produce a techno-managerial illusion of progress when underlying routines remain unchanged. A city can be highly capable in data, partnerships, and strategic communication while still relying on discretionary, post hoc, or personality-driven implementation. For urban development scholarship, the relevant question is therefore not only whether a city uses the SDGs,

but whether the SDGs operate as a governing logic.

To make that distinction analytically tractable, this article uses a governance maturity perspective. The framework does not reduce qualitative evidence to a mechanical score. Instead, it provides a structured way to distinguish between strategic visibility and procedural integration.

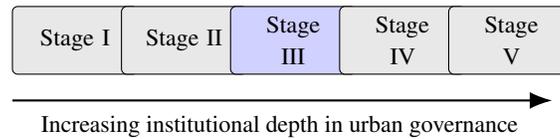


Figure 1: Conceptual continuum of SDG governance maturity.

Five stages are distinguished: (i) symbolic acknowledgement, where the SDGs are referenced sporadically; (ii) narrative adoption, where the Agenda is visible in strategic language; (iii) selective integration, where some sectors and flagship collaborations are aligned but implementation remains uneven; (iv) procedural embedding, where the SDGs structure regular decision processes; and (v) transformational institutionalisation, where sustainability functions as a citywide operating logic.

## MATERIALS AND METHODS

### *Empirical basis*

The analysis is based on a directed qualitative secondary reading of the published Espoo interview corpus reported by Halko, Mäntysalo, and Purkarthofer (2024). The empirical material consists of twelve expert interviews conducted in April–June 2021 under semi-structured conditions. Owing to pandemic restrictions, all interviews were conducted through Microsoft Teams except one, which was completed by email. The recorded interviews were transcribed, and their duration ranged from 41 to 94 minutes, with an average length of 51 minutes.

The interviewees were selected through discretionary sampling from actors who had participated directly in Espoo's Agenda 2030 or strategy work and were therefore well placed to comment on the city's sustainability governance. The sample included two local councillors from leading parties in the City Council (the National Coalition Party and the Greens), the mayor and a programme manager from the mayor's office, three sectoral administrators or specialists from the technical and environment and cultural and learning sectors, two representatives of Aalto University, one representative of an Espoo-based software technology start-up, one official from the Finnish National Council of State, and one official from the EU Committee of the Regions.

This composition matters analytically because it captures multiple governance scales and organisational standpoints. It includes elected officials, civil servants, knowledge institutions, business actors, and supra-local stakeholders. For an urban governance study, that breadth makes it possible to examine both internal municipal practice and the wider ecosystem through which the city attempts to implement sustainability goals.

### *Analytical procedure*

The present article synthesises the published evidence through a directed content-analytic lens focused on institutional depth. Six dimensions were selected because they recur directly in the empirical record and

because together they capture the organisational transition from strategic ambition to embedded practice: strategic anchoring, horizontal coordination, ecosystem co-production, policy instrumentation, accountability and temporal continuity, and monitoring and learning.

Table 1: Analytical dimensions of SDG governance maturity

<b>Dimension</b>	<b>Analytical meaning</b>	<b>Empirical cues in the Espoo case</b>
Strategic anchoring	Incorporation of the SDGs into the city's overarching strategic framework and sectoral narratives.	Agenda 2030 is described as an integral element of the Espoo Story and appears in cross-sectoral development programmes and sectoral policies.
Horizontal coordination	Degree of cross-administrative alignment inside the municipal organisation.	The city uses cross-sectoral development programmes and repeatedly frames the SDGs as an intertwined whole rather than as isolated targets.
Ecosystem co-production	Capacity to align municipal action with universities, firms, and other external actors.	Strong cooperation with Aalto University, the Otaniemi innovation ecosystem, and business partners; broad emphasis on collaboration across boundaries.
Policy instrumentation	Extent to which the SDGs shape ex ante decision preparation, project appraisal, and resource decisions.	Interviewees report that SDGs are often considered only after policies are formulated rather than during the preparatory phase.
Accountability and temporal continuity	Clarity of responsibility, incentive structures, and continuity across council terms.	Four-year council cycles, diffuse ownership of long-term goals, and reliance on long-serving leaders are recurrent concerns.
Monitoring and learning	Translation of global goals into locally meaningful indicators, reporting routines, and adaptive review.	Reporting is considered useful and visible, but interviewees emphasise the difficulty of defining and localising meaningful measures for the city context.

The analytical objective is interpretive rather than positivist. The article does not claim to reproduce the original coding process. Instead, it organises the published evidence into a coherent evaluative framework, making explicit which institutional strengths and weaknesses emerge from the empirical record.

## FINDINGS: THE GOVERNANCE MATURITY OF SDG LOCALISATION IN ESPOO

### *Overall profile*

The evidence indicates that Espoo is best characterised as a case of *selective integration*. The city has moved clearly beyond symbolic acknowledgement. Agenda 2030 is visible in the strategic vocabulary of city leadership, translated into the Espoo Story, linked to cross-sectoral programmes, and used as a legitimate umbrella for collaboration. Yet the same evidence also shows that the SDGs are not consistently built into the most decisive moments of governance: preparatory policy work, formal responsibility allocation, and multi-cycle implementation discipline.

The result is not a contradiction but a specific institutional pattern. Espoo combines strong strategic ambition and collaborative capacity with uneven procedural routinisation. In practical terms, this means that the city can lead, convene, and innovate effectively, but still face difficulty when sustainability goals must be converted into mandatory and durable administrative practice.

Table 2: Empirical profile of SDG governance maturity in Espoo

<b>Dimension</b>	<b>Assessment</b>	<b>Evidence-based interpretation</b>
Strategic anchoring	Strong	The Agenda is embedded in the Espoo Story and treated as a useful common language for strategic direction, legitimacy, and citywide alignment.
Horizontal coordination	Moderately strong	Cross-sectoral development programmes support integrated work, but interviewees still call for stronger systemic coherence in both leadership and practical action.
Ecosystem co-production	Very strong	Collaboration with Aalto University, the Otaniemi innovation ecosystem, and local firms is repeatedly presented as a major asset for implementation.
Policy instrumentation	Limited	The most important weakness is the lack of consistent ex ante integration: interviewees explicitly state that links to the SDGs are often examined only after policy choices have been made.
Accountability and temporal continuity	Limited	Long-term sustainability goals are difficult to secure across four-year council terms, and no one is consistently held accountable for achieving them.
Monitoring and learning	Moderate	Reporting improves visibility and collaboration, but interviewees emphasise the challenge of translating global goals into locally meaningful formulations and measures.

### *Strategic anchoring: a mature narrative platform*

The strongest feature of the Espoo case is the degree to which sustainability has been consolidated in the city's strategic narrative. According to the interview evidence, a holistic understanding of sustainability was already built into city leadership when the mayor took office in 2011 and was incorporated into the first story-based strategy in 2013. Interviewees inside the city describe this as fertile ground for Agenda 2030 to take root

later. This chronology matters. It shows that Espoo did not simply adopt the SDGs as an external compliance exercise; rather, the city incorporated the Agenda into an already evolving strategic model.

Interviewees do not describe the Agenda as an end in itself or as a top-down mandate. Instead, they characterise it as a resource for internal and external collaboration, a source of legitimacy for a chosen direction, and a way to connect issues and actors. This is a strong indicator of narrative maturity: the SDGs are not peripheral to how the city explains its development path.

*Horizontal coordination: meaningful integration, incomplete routinisation*

The evidence also points to genuine cross-administrative learning. In the interviews, the SDGs are repeatedly framed as an intertwined whole rather than as a set of separate goals. The city uses cross-sectoral development programmes, and interviewees emphasise that better results follow when sustainability is treated systemically. One concrete example given in the published evidence is the argument that investment in active mobility can reduce future health-service costs, illustrating how the Agenda can support joined-up reasoning across policy domains.

At the same time, the case does not yet demonstrate fully routinised whole-of-government integration. Interviewees continue to describe the need for broader changes in thinking, working practices, and practical coherence. In other words, the city has achieved a substantial degree of coordination, but not yet an administrative state in which sustainability integration is automatic and unavoidable.

*Ecosystem co-production: the city's clearest comparative advantage*

Espoo's strongest institutional asset lies in its external governance relationships. The interviews repeatedly underline the importance of cooperation with the wider urban ecosystem, especially with Aalto University, the Otaniemi cluster, and local business actors. Aalto University is described as one of the city's most significant partners, and the cooperation between the city and the university is characterised as "easy and nice." Their strategies are reported to have been intentionally streamlined, and the use of "SDG lenses" is presented as an important part of that alignment.

This aspect is central for urban development and smart-city research. Espoo's sustainability governance is not confined to formal municipal departments. It is built through a knowledge-intensive network that connects public administration with research, entrepreneurship, innovation, and infrastructure. Such co-production expands the city's implementation capacity, supports access to funding, and helps translate the Agenda into projects that involve multiple actors.

*Policy instrumentation: the critical implementation gap*

The principal weakness identified in the empirical record concerns policy instrumentation. Several interviewees state directly that decision-making and administrative preparation were not yet sufficiently connected to the Agenda. The most consequential observation is that the relationship between adopted policies and sustainable development goals was often examined only after the fact. The SDGs were therefore frequently treated as an afterthought rather than as a guiding criterion in the preparatory phase.

This finding is decisive because it marks the boundary between strategic rhetoric and institutional embedding. As long as sustainability remains post hoc, its practical influence depends on interpretation and goodwill. A

municipality may describe itself as a pioneer and still rely on other, more powerful ideologies or arguments when decisions are actually prepared. In governance terms, this means that the city has not yet fully crossed from selective integration into procedural embedding.

#### *Accountability and temporal continuity: the unresolved time problem*

A second major weakness is temporal. The interview evidence stresses that political decision-making operates through four-year council terms, whereas sustainability goals require longer time horizons. Concrete actions are typically organised within the council cycle, while incentives for taking bold measures remain weak when political actors cannot easily claim credit within a single term. Interviewees also note that no one is consistently held accountable for the achievement of long-term goals.

This creates a structural tension. Espoo's sustainability agenda benefits from the continuity provided by long-serving city managers, and interviewees explicitly recognise the importance of that continuity. Yet the same evidence points to a persistent risk of discontinuity once those individuals leave office. A governance model that depends too heavily on durable personalities has strategic strength but limited institutional resilience.

#### *Monitoring and learning: visible progress, uneven localisation*

The interviews show that reporting and visibility matter in Espoo. Reporting on Agenda-related activity is presented as helpful for collaboration, public communication, and linking local work to global action. However, the same evidence also underlines the difficulty of transferring globally formulated SDGs into the local context. Interviewees emphasise that the deeper meaning of each goal must be interpreted locally and that precise formulation, measurement, and monitoring must be adapted to the realities of a specific city.

The example of SDG 4 in the education sector illustrates this well. High-quality education may appear to be an established Finnish strength, yet the local question becomes whether the goal is achieved equally for all children, including those in a growing multilingual population. One interviewee noted that more than 40 native languages were already taught in primary schools, while some educational responses still depended on fixed-term project funding. This example shows that localising the SDGs is not a matter of attaching a global label to an existing service. It requires re-examining what the goal means under changing urban conditions.

## **DISCUSSION: IMPLICATIONS FOR URBAN DEVELOPMENT AND SMART-CITY GOVERNANCE**

Three broader implications emerge from the findings.

First, the Espoo case demonstrates that discursive consolidation is not trivial. Shared strategic language can reduce coordination costs, broaden coalitions, and legitimate cross-sector action. In a complex municipality, these are substantive governance gains. The problem is not that discourse is unimportant; the problem is assuming that discourse alone amounts to implementation.

Second, the findings clarify a key distinction in smart-city debates. Espoo's recognition as a technologically capable, innovation-oriented city is not irrelevant to sustainability governance. The city's knowledge ecosystem, public-private collaboration, and service-oriented administrative culture clearly strengthen its ability to mobilise action. Yet these same strengths do not automatically deliver deeper institutional integration. A smart city can be strategically advanced and still procedurally incomplete. This supports critiques of overly

techno-managerial understandings of urban sustainability that privilege indicators, rankings, and innovation branding over reforms in decision rules and accountability.

Third, the case refines debates on ecological modernisation. The interview record shows that sustainability in Espoo is closely associated with business development, competitiveness, green innovation, and liveability. This orientation has obvious advantages: it makes coalition building easier, aligns city policy with firms and universities, and turns climate action into an opportunity structure. At the same time, it can sideline more demanding reforms that do not translate as easily into competitiveness narratives, including binding ex ante review, explicit trade-off management, and stronger accountability mechanisms. The case therefore suggests that ecological modernisation can function as an institutional accelerator for collaboration while remaining an incomplete basis for deeper administrative transformation.

Table 3: Priority reforms for stronger procedural embedding

<b>Reform priority</b>	<b>Why it matters</b>	<b>Likely institutional gain</b>
Mandatory SDG impact statements for major council items	Moves sustainability from post hoc justification to ex ante policy preparation.	Makes cross-goal effects visible before decisions are adopted.
Budget tagging linked to SDG priorities	Connects strategy language to annual allocation choices.	Strengthens the relationship between ambition, spending, and review.
Named cross-sector implementation owners	Reduces diffuse responsibility for long-term goals.	Improves follow-through and interdepartmental coordination.
Multi-cycle sustainability compacts extending beyond one council term	Addresses the mismatch between long-term transitions and electoral cycles.	Increases continuity and reduces dependence on individual leaders.
Annual learning reviews combining indicators and qualitative implementation memos	Treats monitoring as adaptive governance rather than reputational reporting.	Improves institutional learning and course correction.

For urban development practice, the main lesson is clear: advanced sustainability governance depends less on producing new strategy documents than on redesigning the municipal operating system. The next step for high-performing cities is not additional vision language, but stronger procedural infrastructures that make sustainability integral to preparation, budgeting, implementation, and review.

## CONCLUSION

Espoo is an important contemporary case of urban SDG governance because it combines strategic ambition, smart-city capacity, and an unusually strong collaborative ecosystem. The empirical record shows that Agenda 2030 has been embedded in the city's strategic framework, cross-sectoral programmes, and external partnerships. The city therefore represents more than symbolic compliance. It has built a credible platform for sustainability-oriented urban governance.

At the same time, the case also reveals the institutional threshold that still separates strategic success

from deeper transformation. The SDGs are not yet consistently integrated into ex ante policy preparation, responsibility for long-term goals remains diffuse, and continuity across council terms is fragile. These are not peripheral shortcomings. They are the core institutional reasons why sustainability can remain visible yet only partially binding.

The broader contribution of the article is to show that the key test of SDG localisation lies in institutional depth. In urban development and smart-city research, the most meaningful question is not whether the SDGs are present in a city's narrative, but whether they shape the ordinary machinery of governance. Where that machinery changes, sustainability becomes durable. Where it does not, even a highly reputed city remains only partially transformed.

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Manuscript Published; 15 September 2024.