

Local Public Finances and the Governance of SDGs: Insights from Amsterdam, Barcelona, Bordeaux and Hamburg

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List of Abbreviations

ACAM	Amsterdam's auditor office
AE	Autorisation d'engagement (Commitment authorization)
AFNOR	Association française de normalisation (French association for standardization)
BezVG	Hamburg District Administration Act (Bezirksverwaltungsgesetz)
BHO	Federal Budget Code (Bundeshaushaltsordnung)
BUKEA	Ministry of Environment, Climate, Energy and Agriculture (Behörde für Umwelt, Klima, Energie und Agrarwirtschaft)
CAPF	Climate Action Planning Framework
CGCT	Code général des collectivités territoriales (General code for local authorities)
CSPF	Cities for Sustainable Public Finances
DGCL	Direction générale des collectivités locales (General directorate for local authorities)
DG ECFIN	Directorate-General Economic and Financial Affairs
DNSH	Do No Significant Harm
DILICO	Dispositif de lissage conjoncturel (Short-term smoothing mechanism)
FHH	Free and Hanseatic City of Hamburg
GBF	OECD Green Budgeting Framework
GBRF	EU Green Budgeting Reference Framework
GebG	Fees Act (Gebührengesetz)
GG	Basic Law for the Federal Republic of Germany (Grundgesetz)
HGB	German Commercial Code (Handelsgesetzbuch)
HGrG	Budgetary Principles Act (Haushaltsgrundsatzesgesetz)
HSC	Hamburg Sustainability Conference
HV	Constitution of Hamburg (Verfassung der Freien und Hansestadt Hamburg)
ICT	Information and Communication Technologies
ITU	International Telecommunication Union
KPI	Key Performance Indicators
LCE	Local Country Expert(s)
LHO	State Budget Code (Landeshaushaltsordnung)
LFPF	Loi de programmation des finances publiques (Public Finance Programming Act)
MECE	Mutually exclusive, collectively exhaustive
NGO	Non-governmental Organisation
NUTS	Nomenclature des unités territoriales statistiques
OECD	Organisation for Economic Co-Operation and Development
PCAET	Plan Climat Air Energie Territorial (Climate Air Energy Plan)
PEFA	Public Expenditure and Financial Accountability
PPI	Plan Pluriannuel d'Investissement (Multi-year investment plan)
SDG	Sustainable Development Goals
SLPF	Sustainability in Local Public Finances (EU-Funded Project)
SPUK	Specific benefits
StabG	Stability and Growth Promotion Act (Gesetz zur Förderung der Stabilität und des Wachstums der Wirtschaft)
TSI	Technical Support Instrument (EU Funding Programme)
U4SSC	United for Smart Sustainable Cities
UCLG	United Cities and Local Governments
UNECE	United Nations Economic Commission for Europe
VAT	Value Added Tax
VLR	Voluntary Local Review
VNG	Association of Dutch municipalities

1 Introduction and Methodological Approach

As the 2030 deadline for the Sustainable Development Goals (SDGs) nears, only 18% of targets are on track, with global crises and uneven local implementation slowing progress (Sustainable Development Goals Report, 2025). The five targets demonstrating the most advancement include mobile phone usage (SDG 9), access to electricity (SDG 7), internet usage (SDG 9), reduction in under-five mortality rates (SDG 3) and reduction in neonatal mortality (SDG 3). In contrast, the majority of countries are experiencing stagnation or regression in relation to five targets: the prevalence of obesity (SDG 2), the Press Freedom Index (SDG 16), the Sustainable Nitrogen Management Index (SDG 2), the Red List measuring biodiversity loss (SDG 15) and the Corruption Perception Index (SDG 16)¹. The EU has advanced major frameworks such as the European Green Deal, the Urban Agenda, and the integration of SDG indicators into the European Semester, yet translating these into effective local action remains a challenge. Since cities impact more than 65% of the Sustainable Development Goal targets, they have a crucial role to play in closing the gap (OECD, Synthesis Report 2020, p 86).

Thus, cities play a pivotal role in advancing and localising the SDGs. However, a range of interconnected challenges continues to impede their effective integration into local public financial management systems. A key barrier is the lack of systematic alignment between SDGs and local budgeting processes. Several cities still lack robust frameworks or tools that enable them to connect financial planning with SDG targets. Equally concerning are the limited awareness and institutional capacity among local government officials. Many public servants are not adequately equipped with the knowledge or skills to design and implement SDG-compliant financial strategies. National-level training and support initiatives often fall short in bridging this gap, resulting in a disconnect between international or national commitments and their local execution.

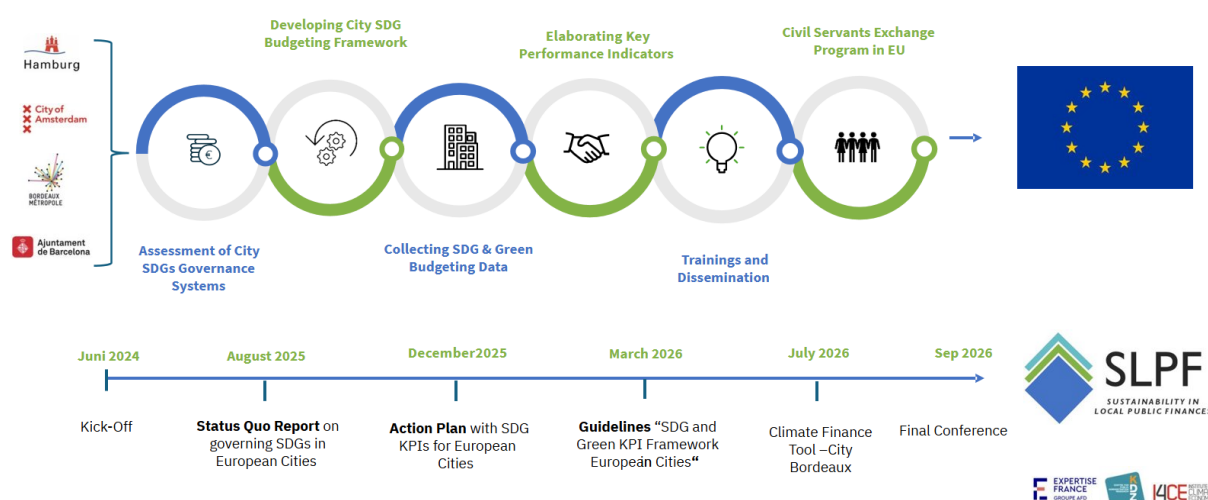
Moreover, existing policies and regulatory structures are frequently fragmented and not aligned with the SDGs, complicating efforts to integrate them into local governance frameworks. Cities also navigate diverse and sometimes contradictory regulatory environments, further hampering meaningful incorporation of SDG principles. This may result in inefficient allocation of financial resources and implies missed opportunities to advance sustainability targets.

¹ <https://s3.amazonaws.com/sustainabledevelopment.report/2025/sustainable-development-report-2025.pdf>

1.1 Purpose and Relevance

The Sustainability of Local Public Finances (SLPF) project, with funding from the European Commission through the Technical Support Instrument (TSI), supports four European cities in better embedding the SDGs into fiscal governance, aligning local spending with sustainability goals, improving transparency, and ensuring high social and environmental returns.

Figure 1: SLPF Project Visualisation



Source: KDZ, own illustration, 2024

This report presents an initial analysis of the current policy, regulatory, governance, and institutional frameworks that shape the integration of SDGs into budgetary governance systems in four European cities: Amsterdam, Barcelona, Bordeaux Métropole, and Hamburg. It offers the status quo of how local public finance structures and practices support or hinder the effective implementation of the 2030 Agenda within municipal administrations.

Entitled “*Local Public Finances and the Governing SDGs – Insights from Amsterdam, Barcelona, Bordeaux and Hamburg*”, it is among the first public-facing reports of the project.

This report seeks to:

- ◆ Identify and analyse the public policies and legislative instruments that guide the integration of the SDGs into budgetary governance;
- ◆ Map key stakeholders involved in SDG implementation at the local level;
- ◆ Examine existing processes, information systems, and technical infrastructures supporting SDG-related financial planning;
- ◆ Present preliminary findings, highlight commonalities across the four cities, and showcase innovative practices and ideas for embedding SDGs into the budget cycle;
- ◆ Identify ongoing obstacles and areas requiring further reform.

The experiences of the four case study cities demonstrate that, despite differing contexts, it is possible to develop compelling and innovative approaches to integrating the SDGs into the

budgetary process – through, for instance, strategic prioritisation, effective leadership, and forward-thinking reforms.

Ultimately, this report advocates for a comprehensive and coordinated approach to SDG implementation in local public finance, one that enables meaningful progress and sustainable outcomes.

1.2 Scope, Methodology, Structure and Limitations

As previously outlined, the objective of this report is to examine, compare, and contrast how four European cities integrate the SDGs into their respective budgetary cycles. This process, commonly referred to as SDG budgeting, also includes identifying innovative approaches and solutions toward this goal. According to the OECD, SDG budgeting refers to “the systematic application of analytical tools and processes as part of the budget process to highlight how budgetary policy advances towards the SDGs, and to assist in prioritising and financing policies aligned with the SDGs.”

While performance-based budgeting approaches such as program budgeting or outcome budgeting have long sought to strengthen the link between resources and results, SDG budgeting offers a distinctive added value. Its strength lies in the universality and multidimensionality of the 2030 Agenda: by combining social, economic, and environmental objectives within a single framework, SDG budgeting prevents the siloed treatment of policy areas that often characterises conventional systems. Moreover, the global nature of the goals allows for benchmarking and comparability across cities and regions, strengthening transparency and accountability in the eyes of both citizens and international partners. In this way, SDG budgeting goes beyond monitoring performance; it situates local financial decisions within a broader framework of sustainability, legitimacy, and global cooperation (Hege & Brimont, 2018).

The scope of this report, therefore, focuses on the intersection of local public finance management and the implementation of the SDGs in Amsterdam, Barcelona, Bordeaux Métropole, and Hamburg. These cities are not only seeking targeted support through the EU Technical Support Instrument (TSI) but are also striving for excellence, positioning themselves as pioneers in a growing global movement of SDG-driven cities.

The report goes beyond offering a snapshot of each city’s current state. It traces the actions, strategies, and operational changes recently undertaken to embed sustainability into local governance, changes that have driven sustainable development, economic resilience, and competitiveness at the city level.

At the same time, this report represents the first phase of the SLPF project; it does not aim to provide a standardised or exhaustive comparative study. Recognising that each city operates within its own legal, administrative, and cultural context, it focuses on policies, actions, and results within a flexible framework tailored to local realities, rather than on uniform data or legal comparisons.

To carry out this assessment, the expert team at KDZ used a collaborative, mixed-methods approach: a shared analytical framework to assess the status quo of SDG budgeting, document

analysis, stakeholder interviews, and field visits, in close collaboration with the four participating cities and four designated Local Country Experts (LCEs).

The project team recognised early on that local authorities do not have full control over all factors that influence SDG implementation, particularly in the budget process. Still, to fairly highlight each city's efforts, it was important to understand their unique starting points and contextual conditions.

Close collaboration with the city beneficiaries was a central pillar of the methodology. Thanks to the longstanding relationships within the CSPF network, the project placed a strong emphasis on cooperation and co-ownership.

CSPF: A Key Source of Expertise and Collaboration

Rooted in the European Cities for Sustainable Public Finances (CSPF) network (www.cspf.eu), a cross-border platform of senior finance leaders from the cities of Amsterdam (NL), Barcelona (ES), Bordeaux Métropole (FR), Hamburg (DE), the City of London Corporation (UK), and Trondheim (NO), the project draws on a decade of shared experience in strengthening public finance and, since 2020, in advancing SDG-focused strategies.

What makes this collaboration unique is its cross-border nature, providing a rare space where fiscal and financial management are addressed at the municipal level from a European perspective. The CSPF has consistently gathered and disseminated joint lessons learned. Since 2020, the group has dedicated increasing attention to the SDGs, discussing goals such as SDG 11 (*Sustainable Cities and Communities*), SDG 7 (*Affordable and Clean Energy*), SDG 13 (*Climate Action*), SDG 10 (*Reducing Inequalities*), and SDG 16 (*Peace, Justice and Strong Institutions*), all from a financial management viewpoint. The CSPF thus acts as a bridge between knowledge supply and demand across Europe's local administrations.

The research approach included a systematic review of each city's municipal strategies, legal frameworks, and instruments related to SDG implementation. This was supplemented by interviews (over 30) across the cities and field visits, which were conducted between February and May 2025, to deepen insights and enrich the analysis.

These city-specific assessments were refined through peer review and a co-design workshop with the European Commission to identify common elements of integrating the SDGs in local budgets and shape a future, forward-looking methodology respective to the cities' specific needs.

The report is structured in three main sections:

- ◆ **Foundations of Local Public Finances (LPF) for Agenda 2030:** This chapter examines the role of local public finance in advancing the Sustainable Development Goals (SDGs). It provides an overview of key legal and policy frameworks and highlights examples of relevant indicators used to monitor SDG progress at the global,

European, and local levels. These include the UN SDG indicators and Eurostat indicators, among others.

- ◆ **City Case Studies** (Amsterdam, Barcelona, Bordeaux Metropole, Hamburg)
Each city is profiled in its own chapter (in alphabetical order), covering:
 - **Legal and Institutional Frameworks:** Overview of public finance systems at both the national and subnational levels.
 - **Budget Cycle and Practices:** Analysis of how the budgeting process operates in each city, including legal provisions for SDG or Green Budgeting, prioritisation of funds, transparency mechanisms, and stakeholder engagement practices.
 - **Key Enablers and Challenges:** Identification of driving factors, barriers, and areas requiring improvement.
- ◆ **Conclusions:** The report concludes with a comparative chapter, synthesising lessons learned across the four cities, identifying core insights and shared methodological components, and proposing initial key enablers & drivers as well as recommendations. These findings will inform the development of subsequent steps and publications under the TSI SLPF project.

While this report offers important insights, it is not without limitations. The primary goal was to explore and document the efforts of four cities in embedding the SDGs into their policy and budgeting frameworks.

It must be acknowledged, however, that the SDGs, as officially adopted in 2015, do not necessarily constitute a fully coherent system of goals and targets. Instead, they entail inherent trade-offs and, in certain instances, even contradictions. Consequently, when applying the SDGs as a basis for budgeting, it is essential to analyse how the various targets interact with one another, as well as to consider the temporal dimensions relevant to resource allocation in the pursuit of these goals. In addition, each city operates within a unique legal, administrative, and cultural environment. Differences in size, structure, and regulatory context also influence their approach to SDG budgeting. As such, uniformity in data availability and reporting detail was neither feasible nor desirable. The narrative-driven approach highlights ambitious journeys but does not attempt to provide a standardised or exhaustive comparative study.

This publication does not aim to standardise practices, nor is it a study in comparative law. Rather, it focuses on policies, actions, and results within a flexible operational framework designed to reflect each city's individual context.

2 Foundations of Local Public Finances for the Agenda 2030

This chapter explores the financial bases that local governments have to employ in order to propel the Agenda 2030, and particularly their balance between sustainability objectives and budget constraints. It contrasts cases of fiscal stress with municipalities which keep their financial stability in addition to their quest for SDGs, and reviews literature on financial sustainability, fiscal indicators, and local policies. The chapter highlights European evidence, key gaps in linking finances with SDG reporting, and the need for integrated frameworks that balance financial and non-financial indicators.

City and local governments play an increasingly pivotal role in implementing the SDGs, reflecting the principle that “localising” the SDGs is essential for achieving Agenda 2030. However, while these governments are expected to design and adopt sustainable policies aligned with global goals, they must simultaneously operate within the constraints of limited resources and ensure the long-term soundness of their public finances. This tension between ambition and affordability has become particularly evident in the aftermath of major economic crises.

In the aftermath of the 2008 Great Recession and later the COVID-19 pandemic, many local governments worldwide experienced substantial financial vulnerability (Padovani et al., 2022, 2025). Some were forced into fiscal retrenchment, while others entered formal financial distress or declared insolvency. The United States offers several prominent examples of large municipalities filing for bankruptcy – such as Detroit, Stockton, and San Bernardino – highlighting how systemic shocks can destabilise local public finance.

In Europe, although direct bailouts are more prevalent than bankruptcy proceedings (Allers & de Natris, 2021), local fiscal distress has been widespread and persistent. A notable case is that of the Catalan regional government in Spain, which in 2012 faced a severe financial crisis. The roots of this crisis were multifaceted, involving significant cuts to intergovernmental transfers from the central government, the effects of a regional economic downturn, and the bursting of the real estate bubble, which had previously fuelled local revenues through construction-related taxes and fees (De La Fuente, 2022). Similar dynamics have been observed in Portugal (Lobo et al., 2011), where municipalities have faced increasing debt burdens, and in Italy, where 13% of local governments have undergone extraordinary financial oversight procedures due to fiscal imbalances over the past 30 years, with concentrations reaching up to 50% in certain regions (Corte dei Conti, 2024). By early 2025, 36% of German municipalities and 56% of larger cities rated their financial situation as poor, with 84% expecting further deterioration in 2025 and 90% through 2029; at the same time, the share of municipalities unable to maintain their infrastructure rose significantly – from 11% to 17% for school buildings and from 26% to 32% for roads – indicating growing financial stress and declining investment capacity, potentially undermining progress toward the SDGs (Raffer et al., 2025). In 2024, French local governments faced growing financial stress: gross savings fell by 7.3%, with a 60% drop for departments over two years. Net savings declined by 13.6%, and borrowing surged by 33.5%, marking the sharpest increase since 2012 (OFGL & DGCL, 2025).

Conversely, the four cities participating in the SLPF project demonstrate strong financial sustainability, as confirmed by major credit rating agencies, making them exemplary cases of how local governments can advance the SDGs without compromising fiscal stability: the City of Amsterdam (AA+, S&P Global, 2025), the City of Barcelona (Baa1, Moody's, 2025), the City of Bordeaux (Aa3, Moody's, 2024), and the City of Hamburg (AAA, Fitch, 2025).

Against this backdrop, local political and administrative leaders face a critical governance dilemma: how to pursue sustainable development in a way that is both socially transformative and fiscally responsible. As Caruana et al. (2019) point out, sustainable growth cannot be achieved without maintaining financial equilibrium. The implementation of SDGs may have direct and indirect implications for public accounts, especially when sustainability-oriented policies require upfront investments or shifts in expenditure priorities (Cordery & Hay, 2022). According to Guarini et al. (2022), over 65% of SDG targets directly involve local communities and their administrations, reinforcing the notion that SDG achievement must be grounded in local governance capacities.

This means that public decision-makers at the municipal level must rigorously assess the opportunity costs of SDG initiatives, especially in the context of scarce financial resources (Deslatte & Swann, 2017). In ideal terms, public finance strategies should be aligned with the SDGs, ensuring both that sufficient resources are allocated and that the financial impact of these strategies is transparently monitored. Guarini et al. (2022) argue that local governments should be able to trace how much is spent per SDG target, making the link between financial inputs and development outcomes both visible and accountable.

Despite the growing recognition of this interdependence, the academic literature addressing the intersection of local public finance (LPF) and the SDGs is relatively recent and remains fragmented. So far, research has evolved along two primary and interrelated streams that are of significant relevance to policymakers and practitioners:

1. The first concerns the relationship between financial sustainability, i.e., the ability to balance the budget and, more generally, to provide services and meet future obligations, and the degree of SDGs implementation at the local level.
2. The second focuses on the development and use of financial indicators to assess financial sustainability and the allocation of resources in connection with SDGs objectives.

Concerning the first stream, empirical findings have highlighted complex and sometimes contradictory relationships. Benito et al. (2023), in their study of Spanish municipalities, observed that those most engaged in SDGs implementation tend to pay suppliers more promptly, indicating a stronger commitment to stakeholder welfare. However, these same municipalities often display lower fiscal surpluses or larger deficits, pointing to potential trade-offs between sustainability objectives and short-term fiscal balance. The authors suggest that to avoid jeopardizing financial

health, municipalities should integrate strategic financial planning into their SDGs initiatives, explicitly detailing both funding sources and anticipated fiscal impacts.

Ríos et al. (2024) offer complementary insights. Similarly to Benito et al. (2023), their research shows that municipalities with higher fiscal surpluses tend to implement fewer SDG-related actions. Conversely, they find that municipalities with higher per capita tax revenues – indicative of greater financial autonomy – are more active in SDGs implementation. This suggests that municipalities with stronger own-source revenue bases may have greater capacity to invest in sustainable development, reinforcing the importance of fiscal decentralisation and local revenue generation.

A broader comparative study by Bisogno et al. (2024) analyses Spanish and Italian municipalities using per capita adjusted income (net of extraordinary items) and per capita debt as proxies for financial sustainability. Their findings indicate a positive association between financial sustainability and most SDGs goals, specifically those related to the biosphere, social equity, and economic development. The only exception was SDG 17 (“Partnerships for the Goals”), which may be less directly influenced by local finance, or it is not usually under city governments’ competencies. These findings echo earlier research by Cuadrado-Ballesteros et al. (2014), which demonstrated that financial health is positively linked to perceived quality of life, reinforcing the notion that robust fiscal frameworks can enable broader social and environmental outcomes.

Alonso-Morales et al. (2024) explored specific SDGs dimensions and their connection to financial variables in Spanish municipalities. They found that higher indebtedness is positively associated with SDG 2 (“Zero Hunger”). Interestingly, they also found that higher financial autonomy may correlate negatively with SDG 2 performance, and higher investment levels tend to perform lower on SDG 2, which may be due to concentrating limited resources on other specific social objectives. Therefore, when examining individual SDGs, the picture becomes even more complex, highlighting the need for further clarification of the specific linkages between financial sustainability and each of the different SDGs.

A further study by Gil-García et al. (2024) delves into the effects of budgetary allocations on SDGs outcomes under Spain’s national SDGs strategy. Their results suggest that merely allocating funds to SDGs targets is not sufficient to generate measurable outcomes. Instead, their research calls for greater efficiency in the use of public funds and highlights the need for more strategic and impact-oriented budgeting practices.

The second major stream of research focuses on measurement, specifically the integration of financial indicators into SDG-related performance frameworks. Despite growing interest in performance-based budgeting and sustainability reporting, current EU-based frameworks such as United4Smart Sustainable Cities², the Spanish Network for Sustainable Development³, and the Association of Flemish Cities and Municipalities (VMSG)⁴ incorporate only a limited set of

² <https://u4ssc.itu.int/>

³ <https://www.unsdnsn.org/our-networks/spain/>

⁴ <https://living-in.eu/supporters/association-flemish-cities-and-municipalities-vmsg>

financial indicators. These are generally restricted to expenditures related to specific services (e.g., education, environmental management, or social care), rather than addressing broader questions of financial sustainability or resource efficiency.

The situation is even more limited among cities that have voluntarily produced SDGs progress reports. Voluntary Local Reviews (VLRs) conducted by European cities often lack financial data. Cities like Barcelona and Malmö, analysed with reference to 2022, are among the few that attempt to connect budgetary data to specific SDG actions (Cohen et al., 2023). More recently, the city governments of Amsterdam and Hamburg have also published their VLRs. Yet even in these cases, no systematic link is drawn between financial sustainability and SDG performance, leaving a gap in understanding the fiscal implications of sustainability strategies.

As Ríos et al. (2024) note, greater transparency is correlated with higher SDG performance scores. However, when financial information is excluded from sustainability reporting, the ability of citizens, stakeholders, and oversight bodies to assess and influence policy is undermined. The dominance of non-financial indicators in SDGs reporting diminishes the accountability of public finance choices and obscures the cost-effectiveness of interventions.

Given these limitations, recent studies have called for the development of new, finance-oriented indicators that bridge the gap between fiscal sustainability and SDG performance (Cohen et al., 2023). These indicators should be developed collaboratively, with input from public managers, accountants, elected officials, and civil society, and embedded within local government management accounting systems. Such indicators could enable local governments to track the financial effort devoted to each SDG, evaluate cost-effectiveness, and better align public budgets with long-term sustainability goals.

In conclusion, although current research, largely concentrated in Southern European contexts such as Spain and Italy, suggests meaningful connections between local public finance and SDGs implementation, significant gaps remain. Studies indicate that (sub-dimensions of) financial sustainability, local fiscal autonomy, and transparent planning are positively associated with stronger SDG performance. However, the measurement frameworks that underpin policy-making and accountability are still underdeveloped. A comprehensive, integrated approach to performance measurement – linking financial and non-financial SDGs data – is essential to support effective, efficient, and equitable implementation of the SDGs at the local level.

As outlined later, the experience of the SLPF city governments, already applying performance-based approaches and demonstrating sound financial sustainability, illustrates both the potential and the challenges of moving toward more transparent and accountable SDG budgeting. Nevertheless, the SLPF city governments are still struggling to make the link between financial sustainability and the SDGs sufficiently clear and operational, so that budgeting and decision-making are no longer carried out in a black box but are aligned with strategic, measurable sustainability goals.

2.1 Selected Legal and Guiding Frameworks

The discussion of local public finance challenges and their linkages to the SDGs highlights the importance of ensuring both fiscal sustainability and measurable progress toward sustainable development. To better understand how this connection can be operationalised, the following section examines some existing international and European legal and guiding frameworks. The structure moves from the global framework (UN) to the intergovernmental (OECD) and supranational levels (EU), gradually narrowing the scope of analysis. These frameworks provide the reference points and tools that cities can draw upon when seeking to align their budgeting systems with the SDGs.

2.1.1 United Nations

UN SDG Indicators

The United Nations' 17 Sustainable Development Goals (SDGs) aim to address pressing global challenges across social, economic, and environmental dimensions (United Nations, 2015). Central to the SDG framework is the principle of “Leaving No One Behind” (LNOB), a commitment by UN Member States to prioritise the most disadvantaged populations. Disaggregated data plays an important role in achieving this objective, enabling governments to monitor progress, identify inequalities, and tailor evidence-based policies accordingly. Accurate data is also essential for ensuring that policies are coherent and do not accidentally exclude or harm marginalised groups. Persons with disabilities are most frequently identified as being left behind (over 70%), followed by women (over 60%), youth, older persons, children, and immigrants. For governments, the consistent and systematic collection of disaggregated data is fundamental to operationalising the LNOB principle. However, only a limited number of countries and cities currently collect such data in a comprehensive and standardised way. Strengthening data collection and disaggregation is widely recommended to support inclusive policy-making (de Jong & Vijge, 2025).

Each SDG is paired with specific targets and indicators, ranging from 8 to 12 targets and 1 to 4 indicators per goal. As of 2025, there are 234 official SDG indicators. Maintained by the United Nations Statistics Division (UNSD), these indicators vary in methodological development and data availability. They are used by national and local governments to assess progress and report through the so-called voluntary national or local reviews (Bartram et al., 2018).

The SDG framework includes two types of targets: “Outcome” targets, which define what should be achieved, and “Means of Implementation” (Mol) targets, which describe how outcomes are to be achieved (e.g., through finance, capacity-building, or technology). However, some studies have pointed out inconsistencies and a lack of clarity in the formulation of Mol targets and their related indicators, potentially posing challenges for measurement and monitoring (Bartram et al., 2018) (Kim, 2023).

These limitations highlight the importance of tailoring the SDGs to specific contexts, ensuring that targets and means of implementation are made operational and relevant at the local level.

“SDG localization is the process of adapting and customizing the SDGs and translating them into local development plans and strategies that fit the needs, context, and priorities of a particular region or locality, in coherence with national frameworks” (United Nations, 2024, p. 3).

While SDG implementation involves both public and corporate sectors, national and subnational governments remain the primary actors responsible for translating global goals into local strategies, policies, and actions.

The Global Indicator Framework⁵ was developed to support this effort by providing a standardised structure for monitoring SDG progress. Indicators are expected to be disaggregated by key variables such as income, gender, age, ethnicity, disability, and geography, to ensure that progress is measured inclusively and in accordance with the Fundamental Principles of Official Statistics.⁶



Potential Relevance for SDG Budgeting

- **Alignment of spending with global goals** – Local indicators can help ensure that public budgets reflect international commitments, linking financial allocations at the local level to the 2030 Agenda.
- **Prioritisation of fiscal resources for local SDG needs** – By selecting or adapting relevant indicators, local governments can direct limited financial resources toward the most pressing social, economic, or environmental challenges.
- **Budget accountability and transparency** – Using local SDG indicators alongside financial data allows municipalities to track how public expenditures contribute to SDG outcomes, strengthening oversight and public trust.
- **Evidence-based fiscal planning** – Reliable local SDG indicators provide a foundation for making budget decisions that allocate funds more efficiently and effectively, enhancing the impact of SDG-related investments.
- **Inclusive and legitimate financial governance** – Indicators create a shared reference point for dialogue between local governments, citizens, and stakeholders, reinforcing participatory approaches in budget planning and expenditure monitoring

⁵https://unstats.un.org/sdgs/indicators/Global%20Indicator%20Framework%20after%202022%20refinement_Eng.pdf

⁶https://unstats.un.org/unsd/dnss/hb/E-fundamental%20principles_A4-WEB.pdf

UN Budgeting for the SDGs Handbook (2022)

The B4SDGs (Budgeting for the Sustainable Development Goals) framework, developed by the United Nations Development Programme (UNDP), offers another practical roadmap to help primarily countries to integrate the SDGs into their Public Financial Management (PFM) systems. But it also offers a Module, out of four, on local budgeting for the SDGs. It therefore recognises that subnational governments are critical actors for achieving the SDGs, since many targets (urban services, housing, climate resilience, education, health, etc.) are implemented locally.

Module D: Local budgeting for the SDGs is directly devoted to cities and regions. It explains how subnational public financial management (PFM) systems can be reformed to align budgets with SDGs.

Key topics include:

- ◆ Understanding structures and functions of subnational governments and their role in delivering core services (e.g., water, sanitation, housing, education).
- ◆ Identifying challenges such as limited revenue autonomy, dependency on central transfers, and weak budget execution capacity.
- ◆ Tools for subnational SDG budgeting, including participatory approaches, fiscal decentralisation, and local SDG budget tagging.

The handbook stresses that local SDG budgeting requires adaptation of national frameworks (Medium-Term Expenditure Frameworks, Integrated National Financing Frameworks) to municipal contexts, while also allowing space for local innovation and pilot projects. It further provides some practical guidance:

- ◆ How to integrate SDGs into local budget cycles (formulation, execution, monitoring, audits).
- ◆ How to strengthen revenue sources and fiscal space at the local level (e.g., property taxes, local service charges, intergovernmental transfers).
- ◆ The importance of citizen participation, transparency, and accountability in local budgeting processes.
- ◆ Examples of local budget tagging and tracking methods to monitor SDG-related spending.

The Handbook also recognises that cities can be entry points for SDG budgeting reforms, meaning that piloting innovative approaches at the local level can later be scaled up nationally.



Example of the City of Riga

Riga is presented in the UNDP Budgeting for the SDGs Modular Handbook as a local-level case of emerging SDG budgeting practices.

- Riga has a Sustainable Development Strategy until 2030 and a Development Programme 2014–2020.
- Riga prepares annual action plans and investment plans. These plans specify which projects will be funded, how resources will be allocated, and what the expected outcomes are.
- This creates a direct link between the city’s stated sustainability objectives and the actual use of financial resources.
- Riga has introduced a digital monitoring platform called DP-2027.
- Riga’s monitoring system supports the mapping of the city’s long-term development objectives and action directions to SDG-related areas.

➔ **By taking these steps, the City of Riga contributes to the Localisation of the SDGs.**

United for Smart Sustainable Cities (U4SSC)

The United for Smart Sustainable Cities (U4SSC) initiative was launched in May 2016 by the International Telecommunication Union (ITU)⁷ and the United Nations Economic Commission for Europe (UNECE) in support of SDG 11. U4SSC provides a global platform for knowledge exchange, policy development, and partnership building to guide cities in adopting smart and sustainable approaches that can ensure efficient resource management, reduce inequalities, and foster socio-economic development.

Supported by 16 UN agencies and organisations, the initiative develops guidelines, frameworks, and best practices for integrating information and communication technologies (ICTs) into urban planning. A major component of the initiative is the development and implementation of KPIs, already applied in more than 50 cities worldwide, to help urban leaders monitor progress and measure their city’s journey toward sustainability and smart development.

The methodology for collecting and using KPIs in smart and sustainable cities is built on standardized definitions, reliable data sources, and quality control to ensure consistency and comparability across cities. Data is gathered mainly from official national, regional, and municipal records, then verified through clear formulas and guidelines to maintain accuracy. Beyond measurement, the KPIs are aligned with global frameworks such as the UN Sustainable

⁷ <https://www.itu.int/en/Pages/default.aspx>

Development Goals, ensuring they serve as practical tools to guide urban policy and sustainability strategies.



Example of U4SSC KPI - Renewable Energy Consumption

Definition:

Proportion of total energy consumed in the city that comes from renewable sources (e.g., solar, wind, hydro).

Formula:

Renewable Energy Consumption (%)
 = Energy from renewable sources/Total energy consumption × 100

Purpose:

Tracks the city's transition toward clean energy and contributes to sustainability goals (e.g., SDG 7: Affordable and Clean Energy).

Use:

Cities can benchmark progress, compare performance, and identify areas for improvement in energy policy.

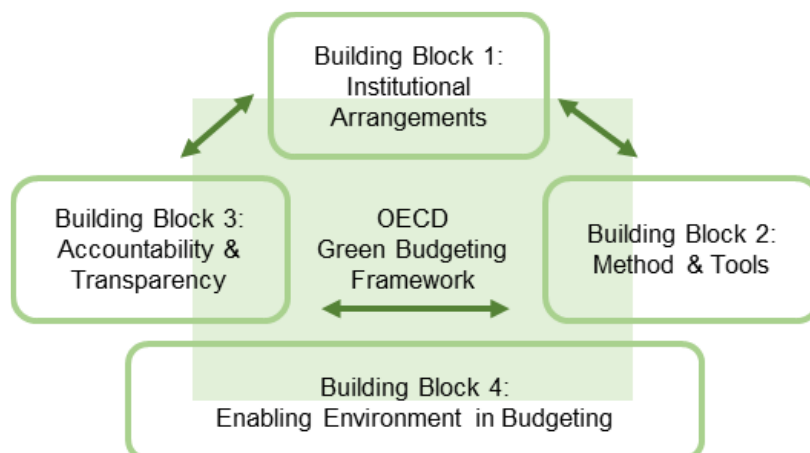
2.1.2 Organisation for Economic Co-Operation and Development (OECD)

OECD Green Budgeting Framework (GBF)

Although the OECD Green Budgeting Framework and the practices described in the Green Budgeting in OECD Countries 2024⁸ report were initially developed for central governments, they are equally relevant for sub-national authorities such as regions, cities, and municipalities. The framework's four building blocks as outlined in Figure 2 – institutional arrangements, methods and tools, accountability and transparency, and enabling environment – can be transferred to the local level.

⁸ https://www.oecd.org/content/dam/oecd/en/publications/reports/2024/04/green-budgeting-in-oecd-countries-2024_3c771827/9aea61f0-en.pdf

Figure 2: OECD Green Budgeting Framework



Source: OECD, 2020



Potential Relevance for SDG Budgeting

Although the OECD Green Budgeting Framework is primarily designed to address environmental and climate-related objectives, several of its methods and tools—such as budget tagging, impact assessments, cost–benefit analyses, or spending reviews—may be transferable to other dimensions of the SDGs, including health, education, or social inclusion. The four building blocks mentioned above provide a structured approach that could inform, with appropriate adaptation, efforts by sub-national administrations to integrate the SDGs into budgetary processes.

- ◆ **Institutional arrangements:** Cities and regions can link their budgets to local climate action plans, biodiversity strategies, or urban sustainability frameworks.
- ◆ **Methods and tools:** Municipalities can apply green budget tagging, environmental impact assessments for infrastructure projects, or spending reviews with a climate lens — just as national governments do.
- ◆ **Accountability and transparency:** Local councils and audit offices can monitor climate-related spending, while publishing citizen budgets enhances trust and civic engagement.
- ◆ **Enabling environment:** Performance budgeting, inter-departmental coordination, and staff training are as relevant to local administrations as to national ones.

Moreso, the toolbox for Green Budgeting has expanded considerably. Countries now use environmental impact assessments, cost-benefit analyses, carbon pricing instruments, and green budget tagging to identify and track climate-related expenditures. Some have gone further, integrating green perspectives into spending reviews, tax expenditure evaluations, multi-annual budgets, and macro-fiscal projections. For instance, Ireland has adopted economy-wide carbon budgets, while the United Kingdom uses climate risk assessments to inform fiscal planning. For these tools to inform policy development and budget allocation decisions, they must be integrated into the budget cycle (Petrie, 2021).

Incorporating Green Budgeting tools across the budget cycle requires the systematic integration of environmental considerations at each key stage of the fiscal process.

Specifically, this involves:

- integrating environmental objectives during the formulation of government strategy (**budget planning**);
- applying green criteria in the design and negotiation of budgetary measures and policy proposals (**budget preparation**);
- accounting for environmental impacts during the approval of **budget allocations**;
- ensuring that implementation aligns with identified green priorities (**budget execution**); and
- promoting accountability and transparency through monitoring, reporting, and evaluation mechanisms (**budget oversight**).

The effective implementation of Green Budgeting requires a mix of political, institutional, technical and procedural foundations. Political commitment is crucial. In some countries, Green Budgeting is embedded in legal frameworks (e.g. France) while in others, it is driven more informally through political priorities. Furthermore, institutional arrangements must assign clear responsibilities, often led by ministries of finance in coordination with environment ministries. Many countries established dedicated climate units, cross-ministerial working groups, or task forces to coordinate efforts and ensure that climate policy and budgeting are integrated.

Another important element is capacity building. Effective Green Budgeting depends on skilled personnel who understand both budgeting processes and environmental policy. Therefore, training, technical support and guidance materials can help build the necessary expertise across the government.

The requirements outlined in the OECD Green Budgeting (2024) report closely align with the empirical findings from the analysis of the four cities presented in this report. In each case, advancing SDG budgeting rests fundamentally on strong political will and well-defined institutional responsibilities, just as they are for effective Green Budgeting. These parallel highlights that both approaches rely on a similar set of enabling factors: strong political will to drive the agenda, well-defined institutional responsibilities to ensure coherence across government levels, and cross-departmental coordination to integrate sectoral policies into budgetary processes. By drawing this parallel, it becomes evident that SDG budgeting and Green Budgeting share a common governance architecture.

2.1.3 European Union

EU SDG Indicator Set

The European Union tracks its advancement toward the SDGs through a dedicated framework developed by Eurostat⁹. At the heart of this effort are annual monitoring reports that offer a data-driven overview of the EU's progress in implementing the SDGs.

⁹ <https://ec.europa.eu/eurostat/web/sdi/database>

These assessments rely on the EU SDG indicator set, a collection of indicators specifically chosen to reflect the EU's strategic priorities and policy landscape. While this indicator set draws inspiration from the global SDG framework established by the United Nations, it is customised to the European context. As a result, it includes metrics that are especially relevant to EU policymaking, allowing for targeted monitoring that supports both regional and international sustainability goals. This tailored approach ensures that progress tracking is not only consistent with global benchmarks where appropriate, but also capable of capturing the specific social, environmental, and economic dynamics across the EU.

Monitoring the SDGs at the regional scale with a robust and harmonised indicator framework at the EU level has not yet been produced. However, the EU SDG indicator set can potentially serve as a helpful reference for local governments looking to align their policies with broader sustainability goals. It offers a structured and reliable framework based on standardised data. Its main purpose is to track progress at the EU level, so many of the indicators are too broad or lack the detail needed for local decision-making. This limits their usefulness for local planning or monitoring. To address this, local authorities often need to develop their own indicators or adapt existing ones by using disaggregated data, such as at the regional (NUTS 2 or 3) or municipal level, when available. The following illustrates an EU SDG indicator under Goal 11, designed with a specific focus on cities and regions.



Example of EU SDG indicator – SDG 11: Sustainable Cities and Communities

The Soil Sealing Index

measures the extent to which natural or agricultural land is converted into impervious surfaces (e.g. asphalt, concrete) due to urban development and infrastructure expansion.

- **Unit of measure:** % of total area or km² sealed soil.
- **Reference period:** Annual (calendar year)
- **Data source:** Derived from the Imperviousness High Resolution Layer, a data product of the Copernicus Land Monitoring Service

Biophysical relevance:

The indicator captures irreversible changes to land cover that degrade key soil functions - such as water infiltration, carbon storage, and support for biodiversity - thereby impairing ecosystem services. Sealed surfaces exacerbate urban heat island effects and increase flood risks by preventing rainwater from infiltrating the soil.

Policy relevance:

Tracking sealed areas supports evidence-based climate adaptation strategies - such as increasing green infrastructure or permeable surfaces. This indicator enables policymakers to assess the environmental impacts of urbanisation trends, plan for more resilient cities, and meet the EU's sustainability targets regarding land degradation neutrality and urban resilience.

SDG Budgeting relevance:

Evidence-based budget prioritisation (e.g. soil sealing index is increasing) may inform budget prioritisation in areas such as green infrastructure, urban densification strategies and land restoration.

EU Green Budgeting Reference Framework (GBRF)

In contrast to the OECD's conceptual framework, the EU's Green Budgeting Reference Framework (GBRF)¹⁰ places greater emphasis on operational application while remaining consistent with the OECD's overall structure. The implementation of Green Budgeting requires the introduction of new methodologies, procedures, and forms of expertise within national and potentially also local budgetary systems. Establishing such a framework is therefore a gradual and resource-intensive process, best approached iteratively to ensure institutional coherence and opportunities for continuous improvement.

The GBRF identifies five core components as essential for embedding Green Budgeting at the national level and organises these into a three-tier structure to accommodate different levels of

¹⁰ <https://economy-finance.ec.europa.eu/system/files/2023-05/European%20Union%20Green%20Budgeting%20Reference%20Framework.pdf>

administrative capacity and readiness. The first tier represents a basic framework with minimum requirements for integrating environmental considerations into budgeting, the second tier reflects more advanced practices and wider application, and the third tier describes a fully institutionalised framework in which Green Budgeting is embedded across the budget system.

Additionally, to assist Member States in developing Green Budgeting practices, DG ECFIN compiled indicative ‘green’ and ‘brown’ lists¹¹ of budgetary items based on their broad environmental impact. These non-exhaustive lists serve as illustrative examples, rather than comprehensive tagging tools and aim to provide a starting point for countries and cities to design their own environmental budget classification methods, following discussions with national or local representatives.

For instance, in the housing sector, usually local competence, budget measures can either promote sustainability or reinforce unsustainable practices. Green measures, according to the list (Table 1), include energy retrofitting and efficiency renovations, such as subsidies for insulation, reduced VAT for thermal renovation, incentives for installing renewable heating systems and tax relief for passive or zero-carbon homes. By contrast, a brown budgetary measure is the support for the acquisition of land for construction (rather than using Brownfields).

The utilisation of the categories in the green or brown list may vary depending on the specific responsibilities and competencies assigned to local governments.

Table 1: Excerpt of Brown and Green List of Budgetary Items

Sector	Brown or Green	Category	Subcategories	Examples of measures
Housing and community amenities	Green	Housing development	Energy retrofitting of buildings, energy efficiency renovation	Subsidies for energy and material efficient renovations for houses and rehabilitation of old housing
Housing and community amenities	Brown	Housing	Unsustainable housing development	Support for acquisition of land for construction

Source: EU Commission, Directorate-General for Economic and Financial Affairs, 2022

EU Taxonomy for Sustainable Activities

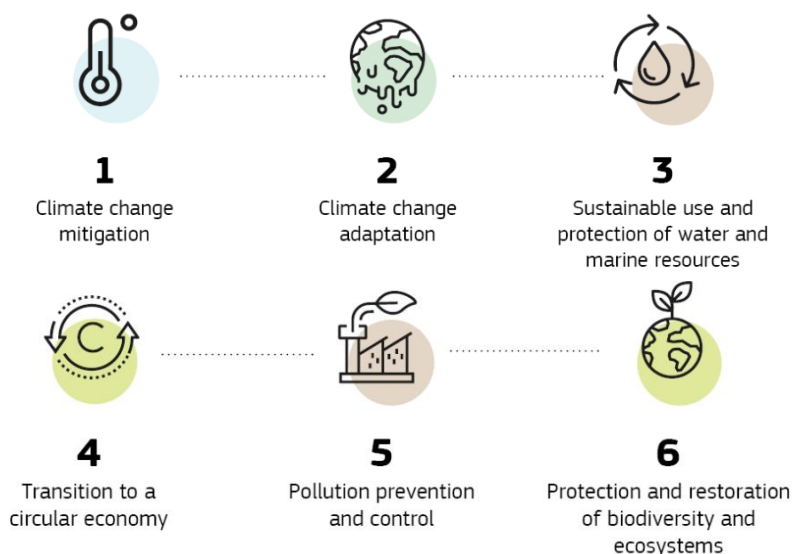
The EU Taxonomy¹² is a classification system developed by the European Union to define which economic activities can be considered environmentally sustainable. Its primary goal is to guide both public and private investment toward activities that support the EU’s climate and environmental objectives, particularly those outlined in the European Green Deal. By providing clear, science-based criteria, the taxonomy creates a common language for sustainability across sectors.

For an economic activity to be classified as environmentally sustainable under the EU Taxonomy, it must contribute substantially to at least one of six environmental objectives. In addition, it must not significantly harm any of the remaining objectives, a requirement known as the Do No Significant Harm (DNSH) principle and must comply with minimum social safeguards.

¹¹ https://economy-finance.ec.europa.eu/economic-and-fiscal-governance/national-fiscal-frameworks-eu-member-states/green-budgeting-eu_en

¹² https://finance.ec.europa.eu/sustainable-finance/tools-and-standards/eu-taxonomy-sustainable-activities_en

Figure 3: Six Objectives of the EU Taxonomy



Source: EU Taxonomy Navigator, 2025

Although the EU Taxonomy has thus far focused exclusively on ‘ecological’ objectives and therefore primarily serves as an instrument for Green Budgeting, its forthcoming extension to include ‘social objectives’ within a Social EU Taxonomy¹³ will, in the medium term, also become increasingly relevant for SDG Budgeting, specifically for municipal companies in housing, energy transport, and healthcare could demonstrate which of their services qualifies as “taxonomy-aligned” social contributions.

European Handbook for SDG Voluntary Local Reviews (2022)

Voluntary Local Reviews (VLRs)¹⁴ enable cities to assess their progress on the SDGs, prioritise actions, and raise sustainability awareness within administrations and communities (Siragusa et al. 2020).

The first European Handbook¹⁵ for SDG VLRs introduced the concept and provided flexible guidance for aligning local policies with the SDGs. The second edition expands on this by offering practical tools, updated methodologies, and revised indicators, with a greater focus on data integration, stakeholder engagement, and policy coherence.

The Handbook (2022) further defines the VLR as a process rather than just a reporting tool. Originally, VLRs were seen as outputs—written documents summarising local SDG progress—but this view has shifted. They are now understood as incremental, reiterative, and interactive processes that support governance and policy-making. Heterogeneity is inherent to the VLR process because local contexts differ greatly, and VLRs vary in format, scope, and methods. This diversity is seen as a strength, allowing cities to tailor the process to their needs while still contributing to global SDG monitoring.

¹³ <https://commission.europa.eu/system/files/2022-03/280222-sustainable-finance-platform-finance-report-social-taxonomy.pdf>

¹⁴ <https://publications.jrc.ec.europa.eu/repository/handle/JRC129381>

¹⁵ <https://op.europa.eu/en/publication-detail/-/publication/7199c232-49bd-11ea-8aa5-01aa75ed71a1/language-en>

Furthermore, a set of indicators is proposed. The methodology builds on the first edition (2020), where a pilot set of indicators was tested with European cities. Based on feedback and practical use, some indicators were retained, others deleted or replaced, and new ones added to improve relevance and usability. Indicators were chosen according to their policy relevance, data availability, comparability across European cities, and alignment with the global SDG framework. The balance between official statistics (e.g., Eurostat, national statistical offices) and experimental/local indicators (e.g., research institutions, municipal data) was also considered. The 2022 edition presents 72 indicators, covering 54 SDG targets. Of these, 53 are official indicators, while 19 are experimental. Together, they aim to capture the multidimensional nature of sustainability – social, economic, environmental, and institutional. The selected indicators are not prescriptive but serve as a reference toolbox. Cities are encouraged to adapt them to local contexts, using them as a foundation for their own monitoring systems while ensuring comparability with other municipalities across Europe.



Example of an EU Handbook VLR indicator – SDG 11: Sustainable Cities and Communities

PM2.5 Concentration:

Measures the average concentration of PM2.5 in the past two years in European cities with over 25,000 inhabitants.

- Unit of measurement: Rate
- Level of aggregation: City
- Time coverage and frequency: 2019-2020

Local policy relevance:

Focuses on traffic-related air pollution and helps identify hotspots requiring action.

2.1.4 Non-governmental Organisation

Bertelsmann Stiftung indicators

The Bertelsmann Stiftung, in collaboration with the Sustainable Development Solutions Network (SDSN), has developed an indicator catalogue¹⁶ to assess and steer local progress towards the SDGs. The main objective is to empower municipalities to identify areas of strength as well as those areas in need of action. This toolkit can be flexibly adapted to local priorities and conditions.

The methodology behind the production of the indicators follows a multi-step, evidence-based process:

1. **Relevance:** The 169 SDG sub-targets were systematically examined to determine which are relevant and actionable at the local level. Only these were pursued further.
2. **Indicator Identification and Evaluation:** Suitable indicators were identified, assessed and categorised based on quality criteria such as validity, data availability and functionality.
 - Type 1: High-quality indicators with comprehensive data coverage
 - Type 2: High-quality indicator with limited data availability



Example of Bertelsmann indicator – SDG 11: Sustainable Cities and Communities

Type 1 indicators:

- Rental prices: Average net cold rent per m²

Type 2 indicators:

- Housing cost burden: Proportion of households spending more than 40 % of their disposable income on housing in relation to the total number of households

This SDG indicator set for municipalities was developed with strong input from German local authorities, making it well-suited to the German context. While adaptation may be necessary for use in other countries, the framework offers a clear structure and includes many universally relevant indicators (see examples above). It provides a practical starting point for municipalities worldwide to localise and monitor the 2030 Agenda effectively. For instance, Italian municipalities have adopted the same methodology proposed in the Bertelsmann SDG indicators across 101 Italian municipalities,¹⁷ thereby translating the 2030 Agenda into the local context.

¹⁶ <https://www.bertelsmann-stiftung.de/de/publikationen/publikation/did/sdg-indikatoren-fuer-kommunen-vierte-auflage>

¹⁷ <https://sdg-portal.it/en/padova>

C40 Cities

C40¹⁸ is a global network of cities committed to combating climate change while fostering sustainable development. Its members collaborate with governments, businesses, and communities to reduce greenhouse gas emissions, share knowledge, and promote measurable climate action. The network spans all continents, including cities such as London, Paris, Tokyo, Lagos, and Rio de Janeiro.

One such interesting initiatives include the **Climate Budgeting Framework (CBF)**, which brings climate targets into the fiscal planning and decision-making of cities. It is a government-wide process that translates long-term climate commitments into funded, short-term, and quantifiable actions, thereby mainstreaming climate policy into regular budget processes. The integration ensures financial officials, particularly Chief Financial Officers, are held responsible for delivery on climate targets.

The CBF methodology is designed as a governance process that integrates climate and equity considerations into all aspects of city budgeting and decision-making. It is not a rigid recipe, but a principle- and criteria-based framework that cities can adapt to their context.

1. **Principles** – The CBF rests on three principles:

- **Scope and Targets:** Mainstream CAP goals for mitigation, adaptation, and equity.
- **Powers and Authority:** Use all available municipal powers (budgetary, legislative, regulatory, procurement).
- **Technical Analysis:** Apply robust data (GHG inventories, risk assessments, socioeconomic data) to guide decisions

2. **(Must-Have) Criteria** – Nine criteria operationalise the principles, requiring cities to demonstrate:

- Strong political commitment and leadership.
- Clear links between Climate Budgets and CAPs.
- Use of updated knowledge bases and data.
- Ownership by finance departments and cross-capacity teams.
- Mainstreaming responsibilities across governance structures.
- Inclusive stakeholder engagement.
- Integration of climate/equity into budget preparation, financial documentation, and approval.
- Public-facing Climate Budget outputs aligned with city budgets.
- Monitoring, evaluation, reporting, and learning to ensure accountability

3. **Process** – The methodology follows a cyclical process:

- **Plan:** Link to CAP, assess emissions and risks, identify projects.

¹⁸ <https://www.c40.org/>

- **Integrate:** Embed climate/equity into financial budgets and processes.
- **Implement:** Deliver projects across departments with clear responsibilities.
- **Learn:** Track results, assess impacts, and refine the process for the next cycle

SDG Budgeting Relevance:

The C40 Climate Budgeting Framework could be relevant for SDG budgeting, as they provide a structured way to integrate climate goals into municipal finance and governance. While explicitly focused on SDG 13 (Climate Action), it also advances SDG 11 (Sustainable Cities and Communities) and SDG 10 (Reduced Inequalities) by embedding equity and resilience into budget processes.

2.1.5 Overview of Selected Frameworks

The table below presents a selection of frameworks, described in Chapter 2, that might serve as valuable reference points in guiding the implementation of SDG budgeting at the sub-national level.

Table 2: Overview of Selected Frameworks

Framework	City-Level Applicability	Methodology	Tools	Main Focus	Indicators
Global SDG indicator framework	Global, national	Mainly quantitative data (90-95%), qualitative (5-10%), international statistical methods	Statistical data, surveys, geospatial classification, censuses, administrative records	All 17 SDGs	234
UNDP SDG Budgeting Handbook (2022)	Sub-national	Modular, step-by-step approach (qualitative & quantitative)	Budget tagging and coding, policy mapping, institutional analysis, process evaluation	All 17 SDGs	Refers to existing global, national or local indicators
United for Smart Sustainable Cities (U4SSC)	Sub-national	Mainly quantitative, three main dimensions (Economy, Environment, Society & Culture)	Standardized indicator collection templates, verification reports, benchmarking, policy recommendations	SDG 11, 3, 7, 9, 13	91
OECD Green Budgeting Framework	National	Classification, monitoring and institutionalisation	Environmental impact assessments, cost-benefit analysis, carbon budgets, spending reviews, tax expenditure reviews, green budget tagging	“Green” SDGs	-
EU indicator set	National	Mainly quantitative data	Statistical data	All 17 SDGs	102
EU Green Budgeting Reference Framework (GBRF)	National	Qualitative	Environmental impact assessments, cost-benefit analysis, carbon budgets, spending reviews, tax expenditure reviews, green budget tagging	“Green” SDGs	-
EU Taxonomy	National	Classification system	Technical screening criteria, six environmental objectives, DNSH, minimum social safeguards,	Economic activities	-
VLR Europe	Sub-national, local	Mainly quantitative data, complemented by qualitative narratives	Set of indicators, reporting tool, indicator mapping, policy review, data inventory and gap analysis, stakeholder engagement	All 17 SDGs	72
Bertelsmann Stiftung SDG Indicators	Yes (German municipalities focus)	Mainly quantitative, qualitative elements (e.g. standardised questionnaires)	Statistical data sources, administrative databases, geospatial systems, surveys and indexes, SDG Portal	All 17 SDGs	100
C40 Climate Budget	Yes	Evidence-based analysis, iterative learning	GHG Inventories, Emissions Reduction Pathways, Climate Risk and Vulnerability Assessments, budget climate assessment, carbon budget, project climate assessment	Paris Agreement, SDG 11 and 13	-

Source: KDZ, own illustration, 2025

3 Assessing the Status Quo of SDG Budgeting: Evidence from Four European Cities

This chapter analyses how Amsterdam, Barcelona, Bordeaux, and Hamburg – the four beneficiaries of the TSI SLPF project – are integrating the SDGs into their budgeting systems. It assesses the legal and institutional frameworks, budget processes, and key enablers shaping implementation, while providing case insights into how these cities align fiscal governance with sustainability objectives and the challenges they face in financing the 2030 Agenda.

3.1 City of Amsterdam

The capital city of Amsterdam is located in the province of North Holland in the western Netherlands, covering about 219 km² within the municipal boundaries. As of mid-2024, it has 931,748 residents, with over 1.45 million people in the broader urban area. The municipal annual budget for 2025 is around €8.1 billion, the largest of any Dutch city. Amsterdam is a leading and internationally recognised centre in northern Europe in terms of sustainable mobility solutions, strong knowledge economy, and vibrant creative and technology sectors.

Table 3: Financial Portrait of Amsterdam

City of Amsterdam	2024 ¹⁹	2025 (estimated) ²⁰
Own Revenues	€ 4 006.7 million	€ 4 151.6 million
National grants or transfers (revenues coming from the central budget)	€ 4 097.6 million	€ 3 959.1 million
Other revenues	-	-
Total revenues	€ 8 104.2 million	€ 8 110.7 million
Total debt	€ 7 063.6 million	€ 7 435 million
Number of inhabitants	931,748 ²¹	934,526 ²²

¹⁹ [Jaarverslag 2024 - Gemeente Amsterdam](#)

²⁰ [Begroting 2025 - Gemeente Amsterdam](#)

²¹ <https://onderzoek.amsterdam.nl/artikel/bevolking-in-cijfers-2024>

²² [Gemeente Amsterdam in cijfers en grafieken | AlleCijfers.nl](#)

3.1.1 Legal and Institutional Framework of Public Finances

In the Netherlands, public finance operates within a decentralised unitary state framework, offering municipalities like Amsterdam considerable fiscal autonomy. The Dutch Constitution forms the backbone of this system. Article 105 mandates legal regulation of financial management, while Article 124 guarantees municipalities the freedom to manage their internal affairs.

However, this autonomy is counterbalanced by the principle of co-governance (*medebewind*), which allows the national government to delegate tasks to local authorities with legally binding expectations. This often results in Amsterdam being responsible for implementing nationally-defined tasks without adequate corresponding funding – a tension that may challenge the city's fiscal sustainability.

Key national laws and regulations include:

- ◆ Government Accounts Act (2016) – Provides a framework for public financial management, with particular focus on accounting practices.
- ◆ Sustainable Public Finances Act – Enforces sound financial management and budget balance by establishing expenditure ceilings.
- ◆ Financial Relations Act – Governs financial transfers via the Municipal Fund, from the central government to municipalities.
- ◆ Municipalities Act – Establishes local budgeting, accountability, and co-governance mechanisms.
- ◆ Treasury Banking Regulations – Allows the Dutch State Treasury Agency to offer financial services to local authorities while maintaining some local autonomy over financial management, as well as mandates surplus funds be deposited with the State Treasury.

Oversight is primarily provided by the provinces, which assess municipal budgets annually. If financial instability is detected, the province may impose ex ante supervision. Despite this tool, provincial oversight remains relatively light due to general municipal compliance.

In addition, Amsterdam also benefits from internal and external audit mechanisms:

- ◆ Amsterdam Control Audit Service (ACAM) – Semi-independent, reports to the City Council. It helps to identify risks, improve internal controls, and often collaborates with external auditors for specific projects or financial statement audits.
- ◆ Ombudsman – Handles public complaints and oversight at the metropolitan level.
- ◆ *Rekenkamer Metropool Amsterdam* (Court of Audit) – As a second layer of external control, it evaluates effectiveness and efficiency.

Although Amsterdam enjoys discretion in how resources are allocated, around 80% of the city's responsibilities stem from national mandates. These mandates often do not come with

proportionate funding, requiring the city to make difficult trade-offs to balance service provision and fiscal sustainability. About half of Amsterdam's municipal income comes from the national government, mainly via the stated Municipal Fund. This misalignment has intensified since the 2015 decentralisations in social domains such as youth care, eldercare, and employment.

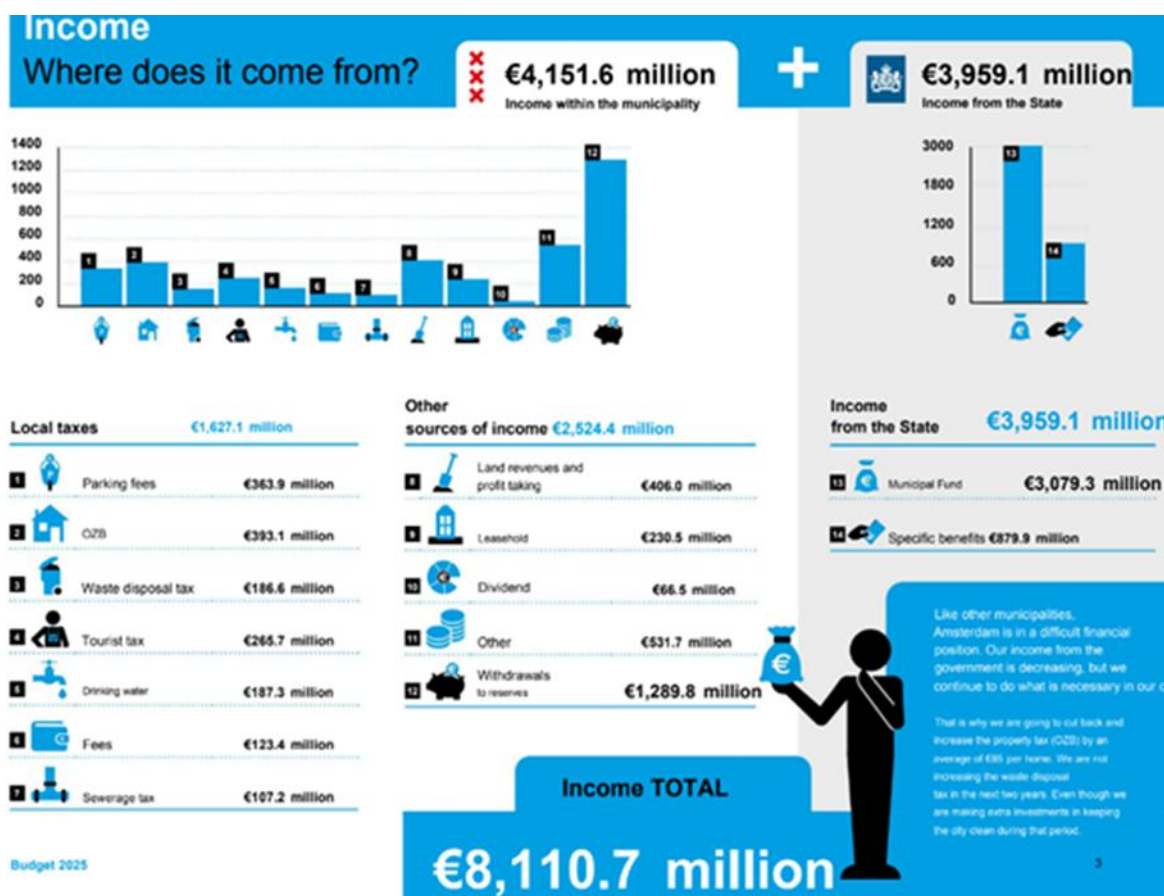
Municipalities must manage their revenues prudently. They are required to deposit surplus funds with the State Treasury and must obtain permission to borrow externally. Amsterdam primarily uses Treasury services but also works with commercial banks like Rabobank for day-to-day operations. Amsterdam benefits from significant own-source revenues, but still relies heavily on national grants.

Municipalities have the fiscal autonomy to levy taxes independently, providing local governments latitude to decide on their financial strategies, buffer for unexpected financial setbacks, and compensate for insufficiencies in the allocation of national grants. Property taxes serve as the most significant own-source revenue, accounting for over four billion euros in total in 2024.

Amsterdam stands out for its balanced revenue structure:

- 2024 own revenues: €4.0 billion
- 2024 national grants: €4.1 billion
- 2024 total revenue: €8.1 billion

Figure 4: Amsterdam’s Revenue Sources in the 2025 budget



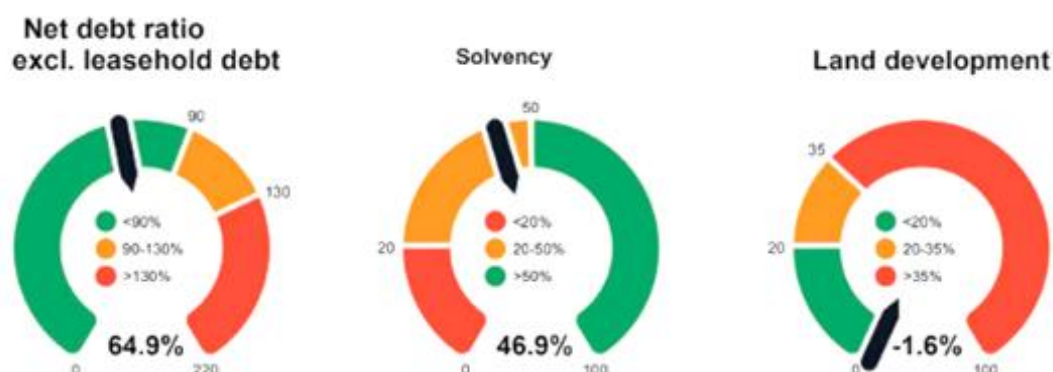
Source: City of Amsterdam, 2024²³

As illustrated in Figure 4, the Municipal Fund (*Gemeentefonds*) remains the largest single revenue source (approximately 38% in 2025), complemented by decentralisation and integration grants, as well as Specific-Purpose Grants (*Specifieke Uitkering: SPUK*). The SPUK grants cover specific initiatives like sustainability, education, and health. Yet, upcoming challenges loom – especially the so-called “ravine year” in 2026, when temporary grants expire, threatening fiscal balance and long-term investment continuity. Without replacements, this could trigger service cutbacks and/or an increasing pressure on residents with higher taxes. Amsterdam’s fiscal strength may buffer some impact, but the pressure to rebalance its spending will increase. National financial indicators are used to monitor local fiscal health:

- Net Debt Ratio
- Solvency
- Tax Capacity
- Liquidity
- Land development
- Structural open space

²³ Begroting 2025. Municipality of Amsterdam. Retrieved August 1 2025, from <https://www.amsterdam.nl/bestuur-organisatie/begroting/begroting-2025/>

Figure 5: Financial Indicators of Amsterdam’s 2025 Budget



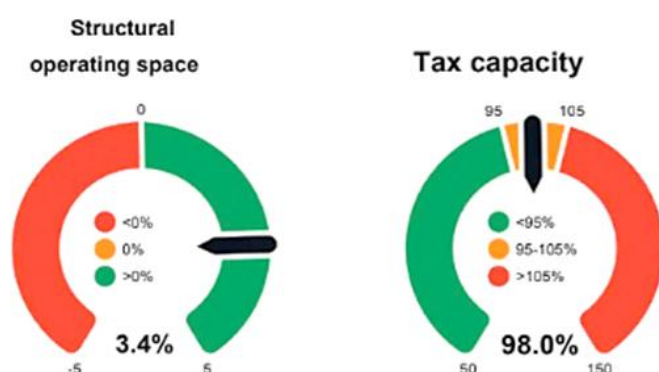
Source: City of Amsterdam, 2024²⁴

Fiscal health is monitored through these national indicators, which are fed into a risk classification model (ABC) that determines whether additional oversight is necessary. Although Amsterdam's high level of land assets permits a higher debt ratio, continued monitoring ensures financial resilience.

Revenue Autonomy and Local Sources

Amsterdam’s revenue model is notable for its balance between local sources and national grants, with relatively high financial autonomy compared to other Dutch municipalities. The city has significant capacity to raise revenue through its own taxes and fees, including parking charges, property and tourist taxes, waste and water levies, and leasehold income. In addition, non-tax income, such as land sales, dividends, and the use of reserves, plays an important role in financing operations. This diversified base enhances the city’s ability to absorb financial shocks and invest flexibly in local priorities.

Figure 6: Financial Indicators of Amsterdam’s 2025 Budget



Source: City of Amsterdam, 2024²⁹

²⁴ Begroting 2025. Municipality of Amsterdam. Retrieved August 1 2025, from <https://www.amsterdam.nl/bestuur-organisatie/begroting/begroting-2025/>

A key constraint in Amsterdam's financial planning lies in the mismatch between short-term, project-based funding and long-term policy ambitions. Temporary grants often support promising initiatives but lack continuity, making it difficult to sustain systemic investments, particularly those linked to long-term objectives such as the Sustainable Development Goals (SDGs). Amsterdam presents a mature and well-coordinated local finance system, marked by institutional clarity, financial autonomy, and strong political-financial integration. The city's experience illustrates how local governments can combine strategic oversight with operational discipline while also underscoring the need for more sustainable funding approaches to meet long-term urban challenges.

3.1.2 Budget Cycle Process and Practices of Amsterdam

Amsterdam's budgeting cycle is anchored to the city's four-year political term. At the beginning of each term, the City Council sets strategic priorities, which guide subsequent annual budgets. Budget formulation involves a multi-stage process led by the Department of Financial Resources and Control (DMC) and the College of Mayor and Alderpersons (*College van burgemeester en wethouders: B&W*).

Each spring, municipal departments submit their "wish lists," which are reviewed and negotiated internally. Programmatic budgets are updated in September when national grant figures are finalised. The Council must approve the final version by mid-November. Once passed, B&W and relevant alderpersons oversee implementation.

The Directorate of Finance and Procurement ensures fiscal control and advises on procurement, budgeting, and compliance. Together with the DMC, this unit forms the backbone of Amsterdam's financial governance.

While Amsterdam predominantly uses a historical budgeting approach, the city incorporates elements of:

- Performance-based budgeting – Links objectives to output indicators.
- Activity-based budgeting – Ties costs to actions under the "goal tree" structure.
- Accrual accounting – Investments are amortised, allowing for capital planning alongside balanced operating budgets.

At the core of Amsterdam's budget architecture is the Goal Tree (Doelenboom)—a structured system used to link financial decisions with policy objectives. Every programme and sub-programme are arranged hierarchically, from strategic goals at the top, down to operational objectives, indicators for goals, concrete activities, and indicators for activities, and finally, budget allocations linked to each goal. This framework ensures traceability and enables department heads and political leaders to evaluate whether spending supports the city's declared aims. The tree is built around the MECE principle- "mutually exclusive, collectively exhaustive."

While this fosters clarity and avoids overlaps, it also introduces rigidity. Each subprogramme must belong to only one goal, while the SDGs are crosscutting on several programmes, thus limiting the system’s ability to track initiatives that span multiple sectors—such as projects that simultaneously contribute to education, green space, and climate resilience. This structure is not currently compatible with SDG integration, which inherently demands cross-cutting strategies. Although effective for internal clarity, adapting the Goal Tree to sustainability budgeting will require institutional innovation and technical changes. See below an example of a policy objective linked to a financial decision.

Table 4: Example from the “Goal Tree” of a Goal, its Associated Activities and Budget Allocation

Goal	Related activity	Amount (million €)
Amsterdam is a clean city and prevents waste	We collect waste disposal charges	3,4
	We clean the streets	69,1
	We collect waste	127,2
	We process collected waste	40,8
	We manage and process commercial waste	7,5
	We grant exemptions for municipal taxes	20,5

Source: DMC Team, 2025

Budgets are divided into ten programmes aligned with alderperson portfolios and cover three horizontal priority themes in Amsterdam: sustainability, circular economy and equal opportunities.

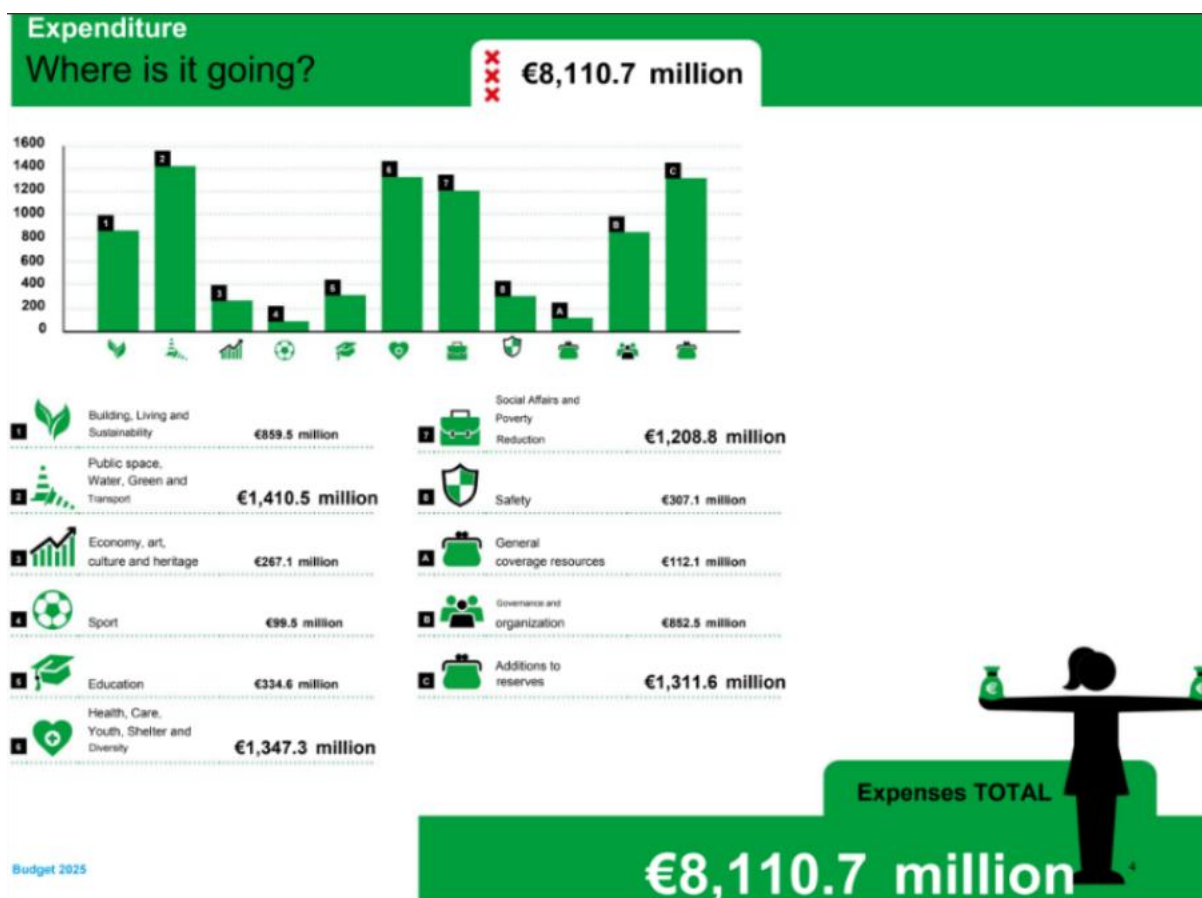
Figure 7: Example of Programmes and Associated Goals



Source: Regenalzye, 2025

While this structure provides internal clarity, it also limits flexibility to shift funds across programmes. Investment ceilings, set around 3% of total income, are enforced to manage long-term debt and expenditure risk. Following Figure 8, the largest expenditures in the 2025 budget are allocated to public space, water management, urban greenery, and transportation (€1,410.5 million in the 2025 budget), Health, care, youth, shelter, and diversity (€1,347.3 million), and social affairs and poverty reduction (€1,208.8 million).

Figure 8: Amsterdam's Expenditures in the 2025 Budget



Source: City of Amsterdam, 2024²⁶

Decision-Making and Data Use

The budgetary decision-making process for Amsterdam's operating budget (*exploitatie*) relies on a comprehensive mix of financial and non-financial data, as well as strategic and operational insights drawn from both internal (the Research and Statistics department) and external sources.

Budgeting decisions are informed by:

- ➔ Financial forecasts and historical data
- ➔ Demographic and socioeconomic indicators
- ➔ Strategic policy documents and political priorities
- ➔ Cost-benefit analysis and risk assessments

Regarding investments, the city assesses major projects such as bridges or metro lines primarily through qualitative analysis, supported by some quantitative elements. In most cases, a business case is developed, and expenditures are carefully forecasted to understand the financial implications. Table 4 shows an example of such a business case.

²⁶ Begroting 2025. Municipality of Amsterdam. Retrieved August 1 2025, from <https://www.amsterdam.nl/bestuur-organisatie/begroting/begroting-2025/>

Table 5: Amsterdam's Major Investments in 2024

Investment Area	Amount (€ million)
Bridges and Quays Program, including Oranje Loper Bridge	85,9
Pavements Program	29,4
Tunnels Program	22,5
Public Lighting Program	15,5
The Entrance Project	10,0
Traffic Systems Program	8,0
Singelgracht Garage Marnix	7,3
Civil Engineering Program	7,0
Total	185,7

Source: DMC Team, 2025

The budgeting process is undergoing technical reform. In 2025, Amsterdam began transitioning from its legacy system (AFIS) to SAP. This shift aims to streamline financial consolidation and improve transparency across departments.

To summarise, despite its institutional strengths, Amsterdam faces certain systemic budget constraints. The dominance of fixed allocations and short-term project funding limits the city's ability to make long-term investments, especially in sustainability. Moreover, the current goal tree system, while methodically structured, is not easily compatible with the transversal nature of SDGs, making integration a future reform priority.

3.1.3 Key Enablers, Levers, and Drivers in SDG Budgeting

Amsterdam stands at a pivotal moment in its transition toward integrating SDGs into its financial planning, supported by a political will to drive SDG-oriented financial reforms: shifting the focus from activities to outcomes. While the city has taken first concrete steps, such as its ambitious initiative to introduce a Climate (CO₂ and Climate) budget, it continues to face some institutional, political, and operational challenges in widely embedding SDG principles into its budgeting practices.

Integrating SDGs and the Emergence of CO₂ Budgeting

To date, the SDGs are not systematically embedded in Amsterdam's legal or financial frameworks. The city conducted a one-off Voluntary Local Review (VLR) in 2022²⁷ that retroactively linked existing policy goals to the SDGs. However, this review was not followed by structural changes to the budget or governance mechanisms. The city's "goal tree" system – while effective for internal clarity and drawing indirect inspiration from the SDGs – is designed on the MECE (Mutually Exclusive, Collectively Exhaustive) principle, which limits the capacity to reflect the interconnected and cross-cutting nature of SDG targets.

²⁷ https://sdgs.un.org/sites/default/files/vlrs/2022-12/vlr_amsterdam.pdf

In contrast, Amsterdam is making significant strides with Green Budgeting through the development of a CO₂ budget. This approach treats emissions like a financial resource: limited, measurable, and subject to allocation. Departments will receive emission ceilings aligned with the Paris Agreement, and political leadership will determine which sectors must reduce emissions most rapidly. Beginning in 2026, this budgeting framework is expected to guide decision-making from 2027 onward.

The innovation has sparked internal collaboration between the finance and sustainability teams, who are working to align data systems, accountability tools, and reporting standards. The idea of introducing an internal CO₂ trading system is also being explored, where departments with surplus reductions may transfer allowances to others.

Challenges in Operationalising Sustainability

Despite these promising developments, several obstacles remain. As highlighted earlier, the goal tree's rigidity hampers its ability to map SDGs, and its single-goal linkage model fails to accommodate multiple, overlapping impacts. While internal discussions are underway to revise or replace the framework, such reform would require significant institutional investment.

Political sensitivity is another key challenge. Treating CO₂ as a budget constraint is still a novel concept, and resistance persists both from some political leaders and departmental staff. Data accuracy is also a concern. Although the city partners with the Technical University of Delft for emissions accounting, current data remains insufficiently granular to guide detailed decisions.

Furthermore, the city lacks mechanisms to prevent greenwashing. While sustainability is a stated objective across many programs, there is no consistent framework to validate environmental claims or track contributions to long-term climate targets. In addition, biodiversity and non-CO₂ environmental impacts are measured, but not clearly linked yet to financial decision-making.

Budget Allocations and SDG Prioritisation

Currently, there is no clear link between Amsterdam's funding decisions and specific SDG outcomes. Although themes such as social inclusion, equal opportunity, and sustainability are embedded in city policy, they are not tagged within the budget, making it difficult to assess spending alignment.

This issue is compounded by the siloed nature of municipal programming. For example, sustainability investments are spread across various departments, from housing to urban greenery, without a unified tracking system. Political priorities continue to drive resource allocation, with trade-offs resolved informally during internal negotiations. There is no comprehensive framework to systematically assess trade-offs or synergies between competing objectives such as economic growth and climate action.

Monitoring, Evaluation, and Transparency

Amsterdam lacks a formal monitoring system to assess budgetary performance against SDG targets, despite it is acknowledged that the SDGs can bring more accountability and transparency in the city's finances. While performance indicators exist under the goal tree structure, they are not explicitly aligned with the SDGs. Evaluation tends to be ad hoc, driven more by political interest than institutionalised learning.

Initiatives like the Dutch *Brede Welvaart* (broad welfare) Monitor²⁸ assess broader social and ecological well-being, such as health, education, housing and environment, but are not linked to municipal financial data. Consequently, even if SDG-aligned activities occur and the Monitor offers insight into societal performances, their impact cannot be clearly traced back to budgetary inputs. Evaluation is also hindered by organisational dynamics, with some departments reluctant to expose underperformance. Independent evaluations do occur, particularly through ACAM and the *Rekenkamer*, but these bodies focus on general efficiency rather than SDG alignment.

Stakeholder Engagement and Participation

Public participation in budgeting remains rather limited. The city has piloted neighbourhood budgets that allow citizens to vote on local initiatives. Since 2019, over 230,000 residents have engaged with this process, and 700 proposals have been submitted. However, these efforts remain disconnected from the citywide budget and SDG strategy.

Formal consultation with citizens and stakeholders on SDG-related spending is currently lacking. There is little awareness among the public of the role of budgeting in achieving the SDGs, and the complexity of the system makes it difficult for laypersons to engage meaningfully. Expanding participatory frameworks to include SDG priorities remains a future ambition.

Political and Institutional Enablers

Despite these hurdles, Amsterdam benefits from a relatively high level of political support for financial reform. The SDGs provide a neutral, globally uncontested framework that can foster cross-party dialogue. Their emphasis on outcomes rather than activities resonates with a growing desire for performance-oriented governance.

Nonetheless, institutional capacity is stretched. The focus on CO₂ budgeting risks diverting attention from broader SDG integration unless coordination is improved. Pragmatic decisions will be necessary to prioritise reforms that offer the greatest value without overwhelming municipal resources.

Crucially, while Amsterdam possesses legal autonomy, many responsibilities are defined at the national level. Without coordinated national support, particularly in funding and legislation, local SDG integration may remain constrained.

Conclusion

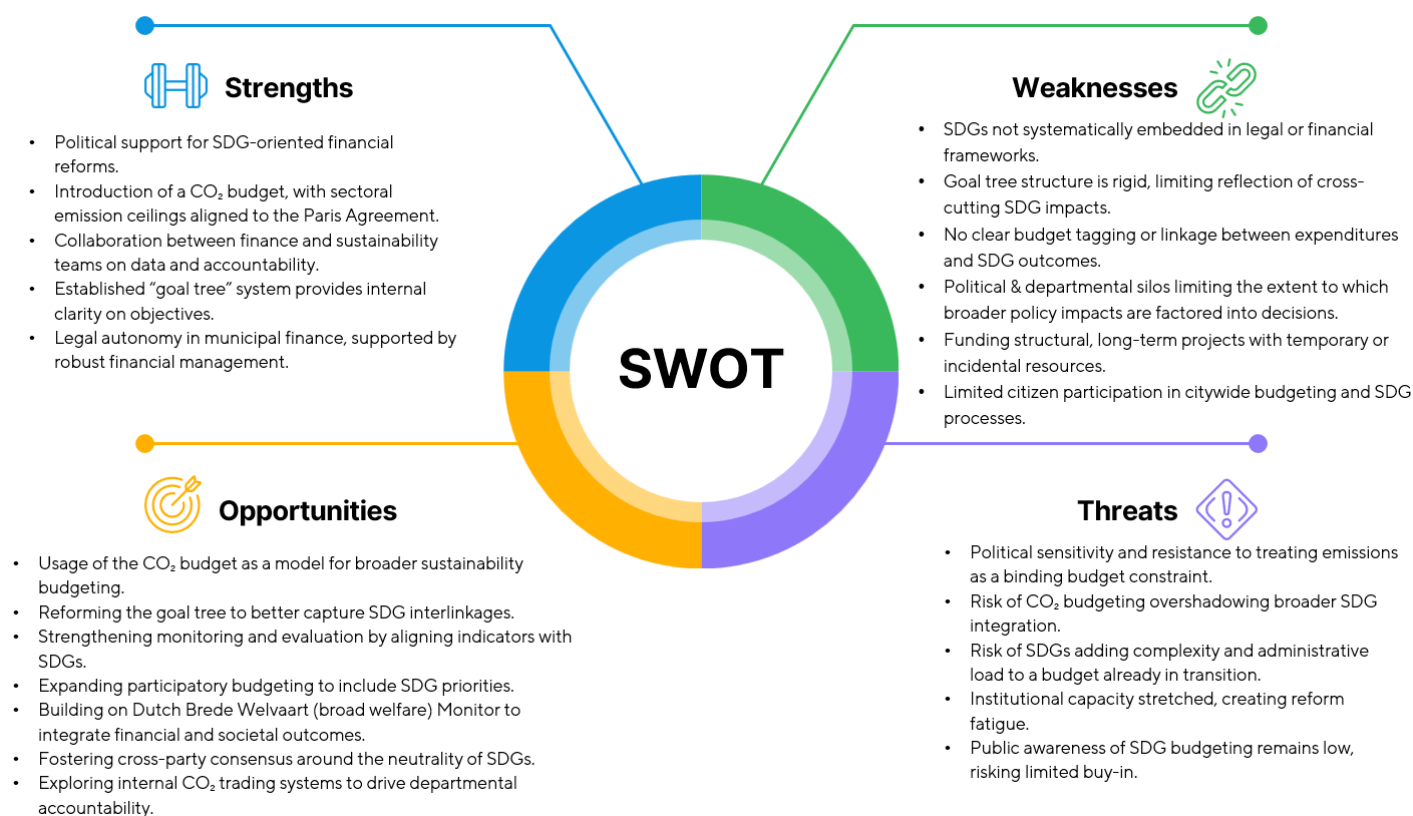
Amsterdam's public finance system reflects a complex interplay between legal autonomy and national mandates. The city has developed a mature budgeting process, supported by strong institutions and robust financial management. Yet, the challenge of aligning long-term sustainability goals with short-term fiscal realities persists.

To move forward, Amsterdam shall reform its financial structures to better integrate cross-cutting frameworks like the SDGs. The emerging CO₂ budgeting system offers a promising model that could pave the way for broader sustainability integration. However, success will depend on

²⁸ <https://onderzoek.amsterdam.nl/interactief/brede-welvaart-mra>

sustained political commitment, institutional adaptation, and a concerted effort to engage citizens and stakeholders in shaping the city’s financial future.

Figure 9: SWOT Amsterdam



Source: KDZ own elaboration, in collaboration with Local Experts and Beneficiary, 2025

3.2 The City of Barcelona

The city of Barcelona is the capital of Catalonia, located on the northeastern Mediterranean coast of Spain, covering about 101 km² within the municipal boundaries. In 2025, the population of Barcelona amounted to nearly 1,69 million residents, with over 5 million people in the wider metropolitan area. The municipal annual budget for 2025 is around €3,7 billion, making it one of the largest among Spanish cities. Barcelona is a leading economic, cultural, and innovation hub in southern Europe, with global recognition for its urban planning, tourism, creative industries, and technology sectors.

Table 6: Financial Portrait of Barcelona

City of Barcelona	2024	2025 (forecast)
Own Revenues	€ 1 647.2 million	€ 1 742.1 million
National grants or transfers (revenues coming from the central budget)	€ 1 718.0 million	€ 1 788.3 million
Other revenues	€ 381.2 million	€ 389.6 million
Total revenues	€ 3 746.4 million	€ 3 748.3 million
Total debt (with figures, not percentages)	€ 1 035.7 million	€ 941.7 million
Number of inhabitants	1 686 208	1 686 208

3.2.1 Legal and Institutional Framework of Public Finances

Spain's system of local public finance is rooted in the 1978 Constitution, which guarantees municipal autonomy (Article 140) and requires that municipalities be provided with sufficient resources to perform their functions (Article 142). However, Articles 149.1.14 and 149.1.18 assign exclusive control over public finance and administrative legislation to the central government. This results in a centralised model where local governance is highly regulated at the national level, unlike in federal systems where local entities often enjoy greater autonomy.

The primary legislation governing municipal finance includes:

- ◆ Law 7/1985 on the Foundations of Local Government, establishing the general framework for municipal responsibilities.
- ◆ Royal Legislative Decree 2/2004, consolidating tax regulations and municipal finance rules.
- ◆ Royal Decree 500/1990, detailing the procedures for budget formulation, approval, and execution.

These laws define not only the structure and procedures for municipal budgeting and financial control but also regulate the local tax system. Municipalities in Spain may levy five main taxes, such as the Property Tax, Vehicle Tax and the Economic Activities Tax, but they have limited control over tax bases and rates. Additionally, state transfers supplement municipal revenues through formulas based on population, fiscal effort, and tax capacity, particularly for larger cities like Barcelona.

National Fiscal Rules and Limits on Local Finances

Spain's municipalities operate under strict fiscal rules, primarily codified in Organic Law 2/2012 on Budgetary Stability and Financial Sustainability. This legal framework enforces a balanced budget requirement, limits the growth of public spending to GDP trends, and caps public debt. These rules were introduced in response to the 2008 financial crisis and Spain's commitments under the European Fiscal Compact.

- ◆ The Expenditure Rule limits municipal spending growth to medium-term GDP forecasts (e.g. 2.6% for 2024, 3.2% for 2025).
- ◆ Budgetary Stability rules require municipalities to maintain balanced budgets or surpluses. From 2024 to 2026, the local government target is a surplus of 0.1%–0.2% of GDP.
- ◆ Public Debt rules restrict local borrowing to 1.4% of GDP in 2024. Additionally, local entities must maintain an average supplier payment period of under 30 days.

Exceptions to these rules are only permitted in extraordinary circumstances. Though the rules were suspended during the COVID-19 pandemic, they have been reinstated with the approval of Spain's 2025–2028 Medium-Term Fiscal and Structural Plan, offering slightly greater flexibility while retaining core constraints.

National Institutional Framework

Spain's oversight framework for local public finance comprises a complex interplay of national, regional, and local institutions. Each has distinct functions related to budgetary oversight, control, compliance, and enforcement. The system is structured to ensure legal conformity, fiscal sustainability, and accountability in the use of public funds.

The main actors and their responsibilities include:

- ◆ The Court of Auditors (*Tribunal de Cuentas*) at the national level conducts external audits to assess legality, efficiency, and accountability in local government finances.
- ◆ Regional audit bodies such as the *Síndic de Comptes* in Catalonia perform similar functions within their territories.
- ◆ Municipal Internal Auditors (*Interventores*) are tasked with ensuring the legality and regularity of all municipal financial operations.
- ◆ The General Controller of the State Administration (IGAE) monitors the execution of public budgets, oversees accounting accuracy, and contributes to national fiscal statistics.
- ◆ The Ministry of Finance, through its General Secretariat for Regional and Local Financing, ensures that municipalities adhere to fiscal rules and, when breached, oversees the formulation of corrective plans.
- ◆ The Independent Authority for Fiscal Responsibility (AIReF) evaluates financial sustainability and offers recommendations on fiscal strategy.
- ◆ Judicial bodies such as the Court of Auditors in its jurisdictional role and High Courts of Justice at the regional level may sanction mismanagement or financial misconduct.

This institutional framework provides vertical oversight and cross-checks across levels of government. However, it does not facilitate proactive support or discretionary autonomy for municipalities aiming to implement innovative or strategic policy agendas.

Table 7: Summary of Supervisory Functions and Responsible Institutions

Function	Responsible Institution	Level of Government
External Audit	Court of Auditors (<i>Tribunal de Cuentas</i>)	National
	Regional Audit Offices (e.g., <i>Síndic de Comptes</i> , <i>Cámara de Cuentas</i>)	Regional
Internal Control (within municipalities)	Municipal Internal Auditors (<i>Interventores</i>)	Local
National Oversight of Accounting and Budget Execution	General Comptroller (IGAE)	National
Enforcement of Fiscal Rules	Ministry of Finance – General Secretariat for Regional and Local Financing	National
	Regional Financial Oversight Bodies (e.g., <i>Generalitat de Catalunya</i>)	Regional
Macro-Fiscal Assessment	Independent Authority for Fiscal Responsibility (AIReF)	National
Judicial Oversight	Court of Auditors – Jurisdictional Role	National
	High Courts of Justice of the Autonomous Communities	Regional

Source: Paula Salinas, 2025

Challenges in Managing Local Public Finances in Spain

Despite a comprehensive legal and institutional setup, local governments in Spain, including major cities like Barcelona, face persistent challenges. Chief among them is an outdated financing model that has not evolved in over two decades. While local responsibilities have expanded significantly (even if they have not been formally assigned any additional specific competences) –especially into complex policy domains such as education, social services, and employment – the corresponding revenue autonomy has not kept pace.

Key issues include:

- ◆ The revenue framework remains misaligned with modern service delivery needs, especially in large urban areas with dense populations.
- ◆ Municipalities have limited capacity to adjust tax bases or rates, as these are centrally regulated.
- ◆ Transfers are calculated based on historic criteria, failing to reflect current needs or financial capacity.
- ◆ Co-financing arrangements and unclear responsibilities with autonomous communities complicate effective budgeting.
- ◆ Long delays in transfer settlements (up to two years) introduce volatility and planning uncertainty.

Although reform efforts, including a 2017 expert commission's proposal, have outlined principles such as equity, solidarity, and co-responsibility, none have been implemented. This has led to mounting calls for a 'Second Decentralisation', a shift in both fiscal and institutional power toward cities like Barcelona.

Organisational Structure of Barcelona's City Council and Finance Department

Barcelona's municipal governance is defined by its Municipal Charter, which separates the political and executive levels. The political level, comprising the Municipal Council, Mayor, and Government Commission, sets city strategy and approves key instruments such as the Municipal Action Programme, Investment Plan, ordinances, and the annual budget. Budget proposals are drafted by the government team and reviewed by the Economy and Finance Committee before submission to the full Council.

The executive level, led by the Municipal Manager, oversees seven Sectoral Directorates, including the Directorate of the Economy and Economic Promotion Area, responsible for financial planning and oversight. Within this structure, the Budget and Treasury Directorate (organised into three departments) manages budget preparation, execution, and compliance with fiscal rules.

Barcelona follows a decentralised model, with each of its 10 districts and 7 sectoral areas managing its own budget. The Budgets and Taxation Directorate ensure coordination and fiscal consistency across these units, while also managing the central economic promotion budget.

The Municipal Tax Institute, which handles tax collection and financial operations, and the Directorate of Resources and Digital Transformation, which includes the Municipal General Intervention (auditing and legal control of spending) and the General Treasury (liquidity and payments), play supporting roles in financial governance.

Barcelona enjoys a special financial regime under Royal Legislative Decree 2/2004, extended by Law 22/1998 and Law 1/2006, which grants broader powers than those of typical Spanish municipalities. These include the authority to act in areas of general interest—even if not explicitly delegated—and to complement regional or national competences.

The city also holds exclusive authority in key areas such as housing, urban planning, and infrastructure, and participates in joint consortia (e.g., for education, health, and social services). However, despite its expanded responsibilities, Barcelona's fiscal autonomy remains limited, constrained by national regulations on taxation and revenue distribution.

In 2024, tax revenues made up 46.8% of Barcelona's total income, consisting of:

- ◆ Five local taxes, which together accounted for 29.3%. The Property Tax alone contributed 20.3%, underscoring its fiscal significance.
- ◆ Shared taxes, including a territorial share of national taxes (4.4%) and the Tourist Tax (2.2%), with a city surcharge of up to €4 per night (introduced in 2021).
- ◆ Public fees and service charges, representing 11%.

While diversified, the tax system offers limited local discretion. Rates and bases are set by the state, and municipalities have very little control over shared taxes like income tax or VAT. Still, cities like Barcelona manage, collect, and inspect their own taxes.

Intergovernmental transfers represented 49.6% of revenue in 2024:

- ◆ The main source is the unconditional Complementary Fund from the central government (41.6%), calculated using a historical base that favours Barcelona.
- ◆ Conditional transfers supported policy areas such as ecological transition, digitalisation, and social welfare, with Next Generation EU funds playing a prominent role.
- ◆ The Catalan Government contributed 4.5% for co-financed services (e.g., health, education).
- ◆ Capital transfers, mostly from the state, represented 2.3% and are awarded either competitively or on a discretionary basis.

Other revenue sources accounted for 3.5% of income, including property income (1.5%), financial income (2%), largely from a €75 million loan, asset sales and capital gains. Table 6 summarises the different sources of revenue for the Barcelona City Council, detailing their components, share of total income in 2024, and the degree of fiscal autonomy associated with each.

Table 8: Revenue Sources for Barcelona

Source of Revenue	Components	Revenue Share	Autonomy Level
Local Tax Basket	Property Tax, Tax on Vehicles, Economic Activities Tax, Tax on Increase in Urban Land Value, Tax on Constructions	29,3% (Property tax alone: 20.3%)	High autonomy, but limited within state-defined legal parameters
Participation in State Taxes	Personal Income Tax, VAT, Excise Taxes (beer, wine, spirits, hydrocarbons, tobacco)	4,4%	No autonomy; percentages fixed centrally
Tourist-related Taxes	Share from Tax on Stays in Tourist Establishments (50%), plus surcharge specific to Barcelona	2,2%	Moderate autonomy; surcharge set locally within legally capped rates
Transfers (Total)	Current Transfers: Complementary Fund (state), other state transfers, transfers from Generalitat of Catalonia Capital Transfers: Mainly state-provided	49,6% (total)	Limited autonomy; mostly conditional or externally defined
• Current Transfers (State)	Complementary Fund, primarily general funding, small share of other purposes	42,7%	No autonomy; unconditional within purpose, but amount externally determined
• Current Transfers (Catalonia)**	Primarily earmarked for delegated responsibilities, minor unconditional transfer	4,5% (earmarked); 0,1% (unconditional)	Very limited autonomy, mostly earmarked purposes
• Capital Transfers (Mainly State)**	Capital investment funds for specific infrastructure and projects	2,3%	No autonomy; tied to specific investment projects determined externally
Financial Resources (Loans)	Debt financing via loans	2,0%	Moderate autonomy; subject to fiscal and regulatory controls

Source: Paula Salinas, own illustration, 2025

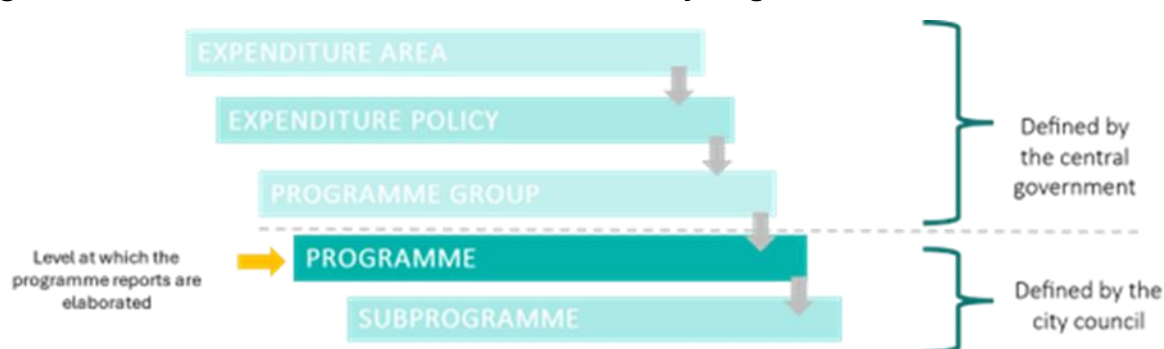
3.2.2 Budget Cycle Process and Practices of Barcelona

Executive Budgeting System: Design and Structure

The City of Barcelona introduced an Executive Budgeting system in 2015 to move beyond traditional line-item budgeting toward a more strategic and results-oriented framework. The objective was to align budget allocations with the city's strategic planning tools, most notably the Municipal Action Plan (PAM) and the UN 2030 Agenda.

The budgeting model is organised by programmatic structures, with 117 programs subdivided into 238 subprograms. These programs group related public services and actions intended to produce tangible benefits for residents. Each subprogram corresponds to a discrete policy area or line of service provision.

Figure 10: Levels of Breakdown of the Classification by Programmes



Source: Paula Salinas, own illustration, 2025

A critical element of this system is the 'program report', an annual document required for each budgetary program. These reports provide comprehensive information, including:

- ◆ The objectives and activities associated with the program;
- ◆ Key performance indicators and expected outputs;
- ◆ Budget allocations and justification;
- ◆ SDG linkages (up to three per program, with weighted relevance), offering a notable advantage over conventional budget tagging, as it links current expenditure to the SDGs based on detailed information about the program's expected outputs and activities

Program reports serve as the primary tool for aligning operations with strategic goals. Also, it is important to highlight that these reports are limited to current expenditures. Their actual use has diminished over time. Many municipal staff view them as administrative requirements rather than strategic instruments. This has reduced their effectiveness in guiding decision-making or reshaping resource allocations.

Originally, the system included a mechanism known as 'decision packages', which allowed departments to propose reallocations, either new initiatives or budget reductions, based on strategic priorities. These proposals were meant to introduce flexibility and responsiveness. However, in recent years, the use of decision packages has ceased, limiting the ability to adjust budgets based on performance or changing needs.

Budget Preparation Process and Stakeholders

The budget preparation process follows a detailed and participatory cycle, involving both political and administrative actors. The process starts with strategic planning, followed by the establishment of expenditure ceilings. Ideally, these ceilings should reflect the city's strategic priorities as defined by the municipal government.

In practice, however, this is one of the most complex stages of the process. Due to the decentralised structure of municipal governance, adjustments between sectors or programs are rare. Each district and directorate generally receives a budget allocation based on the previous year's figures, adjusted marginally for overall expenditure trends. This reinforces a path-dependent budgeting logic that limits innovation.

Key actors involved in the process include:

- ◆ The Mayor and Deputy Mayors, who lead the political definition of priorities;
- ◆ The Government Commission and Municipal Council, which review and approve proposals;
- ◆ The General Intervention Office, responsible for legal compliance and financial oversight;
- ◆ Directorates and districts, which draft their own subprogram budgets;
- ◆ The Budget and Treasury Directorate, which consolidates and coordinates the city-wide budget;
- ◆ Citizens and civil society, engaged through consultation processes, hearings, and the Decidim platform (www.decidim.barcelona)²⁹.

Public consultation is a key feature of the process. Once a draft budget is provisionally approved, it is published online and in the provincial gazette for public scrutiny. Citizens can submit feedback or attend public hearings. A portion of the budget, around €30 million, which is close to 1% of the city budget, is subject to participatory budgeting, allowing residents to propose and vote on local investment projects.

Functional and Economic Classification of the Budget

Barcelona's municipal budget reflects both the wide scope of services delivered by the city and its role as a regional hub for innovation, economic activity, and social services. The 2024 budget totals approximately €3,65 billion and is functionally distributed to address both traditional local government responsibilities and increasingly complex socio-economic challenges.

Functionally, the budget is divided into five major areas:

- ◆ Basic Services (43%): Includes housing, mobility, waste management, public space maintenance, and energy transition efforts.
- ◆ Provision of Public Goods of a Preferential Nature (13%): Covers education, health, culture, sports, and welfare programs for vulnerable populations.
- ◆ Economic Development (12%): Encompasses support to SMEs, employment promotion, tourism, and innovation projects.

²⁹ Decidim.barcelona has 120,000 active participants, with 27,000 citizen proposals and 3,500 physical meetings as part of over 50 participatory processes. The recent participatory budgeting process involved more than 45,000 people participating with proposals and voting.

- ◆ General Administration (17%): Supports internal governance functions such as human resources, IT systems, legal services, and tax collection.
- ◆ Public Debt (2,3%): Allocated to servicing outstanding loans and financial obligations.

This distribution indicates the city's dual emphasis on physical infrastructure and social equity. Basic services and infrastructure development continue to dominate capital investments, while current spending is more prominent in education, social care, and cultural services.

From an economic classification perspective, the budget comprises the following components:

- ◆ €2,9 billion (80%) in current expenditures: Including personnel costs, service delivery contracts, subsidies, and administrative operations.
- ◆ €658 million (18%) in capital investments: Primarily directed toward new infrastructure, urban redevelopment, and climate resilience.
- ◆ €58 million (2%) in financial expenditures: Comprising interest payments and refinancing of public debt.

This classification provides a clearer picture of how resources are distributed between maintaining ongoing services and investing in the future. Notably, Barcelona adheres to internal fiscal discipline by maintaining low debt levels and allocating only a limited share of resources to borrowing.

SDG Integration in Budgeting - Methodology for SDG Alignment

Barcelona has implemented a pioneering approach to SDG budgeting by embedding the 2030 Agenda into its programmatic budgeting system. Each budget program must be tagged with up to three Sustainable Development Goals (SDGs), assigning a weighting to each to reflect its relative relevance.

This system allows the city to track the alignment of budget allocations with specific global goals. The tagging is applied to both current expenditure (through program reports) and to investment projects (through the Municipal Investment Plan). While this method is innovative, and all public spending is aligned with one of the SDGs, it is not without challenges. The tagging relies on the discretion of program managers, and there is no centralised verification or quality control to ensure consistency.

Common limitations include:

- ◆ Superficial or symbolic tagging that lacks substantive impact analysis.
- ◆ Inconsistent application of weightings across departments.
- ◆ No clear distinction between direct and indirect contributions to SDGs.
- ◆ Minimal linkage between SDG tags and performance indicators or funding decisions.

Monitoring and Reporting Instruments

Despite the limitations in implementation, Barcelona has developed several supporting tools to monitor and report on SDG alignment. These include:

- ◆ **Annexe on Budget Alignment with SDGs:** A comprehensive report that lists the weight-adjusted contributions of all budget items to each of the 17 SDGs.
- ◆ **Climate Budget Assessment Report:** Analyses spending contributions to climate mitigation, adaptation, citizen engagement, and social justice.
- ◆ **Gender Impact Report and Child Investment Report:** Provide insights into the alignment of specific expenditure with SDG 5 (gender equality) and SDG 10 (reduced inequalities).

These instruments are presented alongside the annual budget and are publicly available. However, they are not yet fully integrated into the decision-making process. Departments are not systematically using this data to adjust budgets or evaluate program effectiveness based on SDG performance.

SDG-Based Budget Distribution

Analysis of the 2024 budget shows that the largest share of both current and capital expenditure is allocated to SDG 11 (Sustainable Cities and Communities), with 29.3% and 31.8% respectively. This reflects Barcelona's commitment to inclusive urban development, affordable housing, and public transportation.

Other significant SDGs receiving budget allocations include:

- ◆ **SDG 16 (Peace, Justice, and Strong Institutions):** Emphasising transparent governance, citizen participation, and institutional effectiveness.
- ◆ **SDG 4 (Quality Education):** Focused on school facilities, educational equity, and cultural programs.

Environmental SDGs such as SDG 7 (Affordable and Clean Energy), SDG 13 (Climate Action), and SDG 14 (Life Below Water) receive comparatively smaller shares, typically under 5% each. This suggests the need for greater investment in climate-related goals if Barcelona is to achieve its carbon neutrality target by 2030.

Table 9: Classification of Barcelona City Council Expenditure According to the SDGs, Financial Year 2024

SDG	Current Expenditure Millions of euros	%	Capital Expenditure Millions of euros	%
SDG 1. No poverty	143,3	5,0%	7,8	1,0%
SDG 2. Zero hunger	27,5	1,0%	0,2	0,0%
SDG 3. Good Health and Well-being	65,2	2,3%	6,0	0,8%
SDG 4. Quality Education	319,6	11,2%	56,8	7,3%
SDG 5. Gender Equality	25,8	0,9%	0,9	0,1%
SDG 6. Clean Water and Sanitation	29,4	1,0%	0,6	0,1%
SDG 7. Affordable and Clean Energy	16,8	0,6%	0,5	0,1%
SDG 8. Decent Work and Economic Growth	88,7	3,1%	21,5	2,8%
SDG 9. Industry, Innovation and Infrastructure	142,8	5,0%	164,9	21,2%
SDG 10. Reduced Inequalities	244,2	8,6%	28,6	3,7%
SDG 11. Sustainable Cities and Communities	833,6	29,3%	247,1	31,8%
SDG 12. Responsible Consumption and Production	90,8	3,2%	23,9	3,1%
SDG 13. Climate Action	63,2	2,2%	38,9	5,0%
SDG 14. Life Below Water	10,5	0,4%	0,5	0,1%
SDG 15. Life on Land	31,6	1,1%	0,1	0,0%
SDG 16. Peace, Justice and Strong Institutions	526,4	18,5%	178,4	22,9%
SDG 17. Partnerships for the Goals	190,0	6,7%	0,9	0,1%
Total Expenditure	2.849,5	100,0%	777,6	100,0%

Source: Barcelona's Budget Annexe on Alignment with the Sustainable Development Goals, 2024

3.2.3 Key Enablers, Lever and Drivers in SDG Budgeting

Challenges and Barriers to SDG-Aligned Budgeting

Barcelona has made commendable progress in aligning its budgeting practices with the Sustainable Development Goals (SDGs), particularly through transparency initiatives, climate budget tagging, and participatory processes. However, significant barriers continue to hinder the full integration of SDG priorities into the financial system. These challenges span political, technical, financial, and institutional dimensions.

Political Dimensions

Although there is political commitment to the 2030 Agenda at the leadership level, this is not always reflected in day-to-day budget negotiations. In many cases, the SDG alignment of budget items remains secondary to other political considerations, such as coalition agreements, public opinion, or administrative inertia. This weakens the link between declared priorities and actual resource allocation.

- ◆ SDG alignment is often not a decisive factor in political prioritisation of programs.
- ◆ Policy focus may shift with electoral cycles, reducing continuity in long-term commitments.
- ◆ There is limited use of SDG-based performance data in political decision-making.

Technical Dimensions

Technically, the integration of SDGs into the budget is still in a formative stage. While budget tagging is widespread, it lacks a robust verification system. Performance indicators are often output-oriented and rarely tied to actual outcomes or long-term societal impacts. Moreover, decision packages, once a promising tool to support budget flexibility, are no longer used.

- ◆ Lack of institutionalised mechanisms to evaluate the real impact of SDG-linked spending.
- ◆ Overreliance on self-assessment by departments in SDG tagging.
- ◆ Weak feedback loops between monitoring reports and future budget planning.

Financial Dimensions

Barcelona's financial autonomy remains limited. Although it receives significant intergovernmental transfers, the city has restricted control over key revenue levers. National fiscal rules impose strict constraints on spending growth and debt accumulation. Additionally, the city has self-imposed limits on borrowing, further narrowing its fiscal space.

- ◆ Over 50% of the city's revenues are determined by national laws and formulas.
- ◆ Borrowing is restricted by both legal and self-imposed debt limits.
- ◆ There is no earmarked funding stream for SDG or climate-related expenditures.

Institutional Dimensions

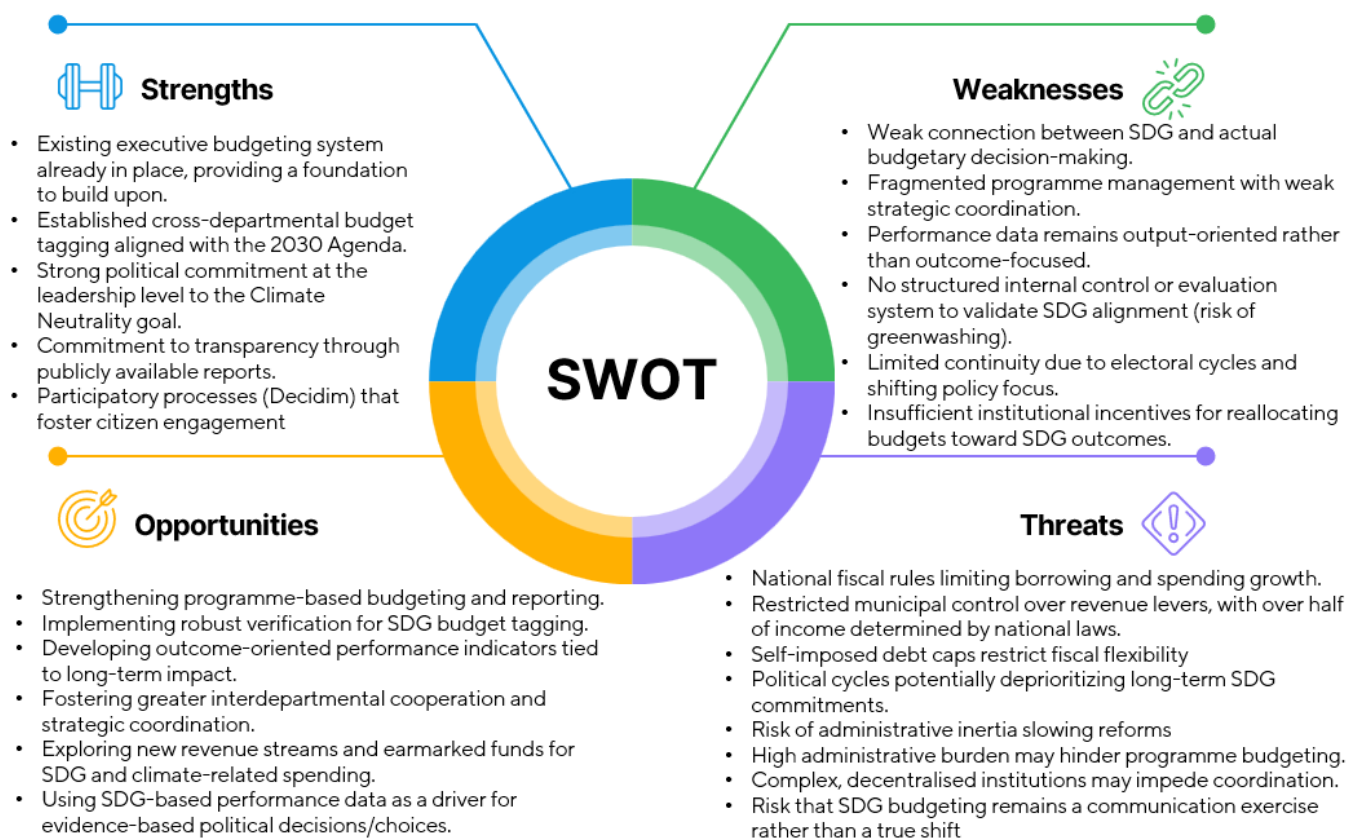
The institutional setup within the city also presents structural obstacles. Budgeting responsibilities are spread across multiple directorates and districts, each with its own priorities and operating procedures. While decentralisation enhances responsiveness, it also makes strategic coordination more complex. Furthermore, horizontal cooperation across departments remains underdeveloped.

- ◆ Fragmentation between central services and districts complicates cross-cutting policy implementation.
- ◆ Lack of a centralized strategy unit to oversee SDG budget integration across departments.
- ◆ Limited institutional incentives to adjust or reallocate budgets based on SDG outcomes.

Conclusion

Addressing these multifaceted challenges will be essential if Barcelona is to make meaningful progress toward achieving its climate neutrality goals and broader 2030 Agenda targets. Institutional reforms, enhanced coordination, and strategic use of performance data will play a critical role in shaping a more sustainable and inclusive urban financial system.

Figure 11: SWOT Barcelona



Source: KDZ own elaboration, in collaboration with Local Experts and Beneficiary, 2025

3.3 The Bordeaux Métropole

Bordeaux Métropole is located in southwestern France around the City of Bordeaux, spans approximately 578 km² and comprises 28 municipalities in the heart of the Gironde department. As of early 2025, its population is estimated at around 854,000 residents. The municipal/metropolitan total budget for 2025 is around €2 billion. Bordeaux Métropole shines through sustainable urban development, digital growth, academic excellence, viticulture and gastronomy, and a robust energy transition.

Table 10: Financial Portrait of Bordeaux Métropole

Bordeaux Metropole	2024 (final)	2025 (budget)
Own Revenues	€756 million of tax revenue ³⁰ €112 million of municipal compensation allocation ³ €505 million of loans	€762 million of tax revenue €125 million of compensation allocation ³¹ €608 million of loans
National grants or transfers (revenues coming from the central budget)	€271 million of state grants	€263 million of state grants
Other revenues	€343 million	€355 million
Total revenues	€2 003 million	€2 093 million
Total debt (with figures, not percentages)	€1 510 million of outstanding debt	€1 902 million of outstanding debt
Number of inhabitants	842 622 ³²	854 949 ³³

³⁰ Part of the revenue is in fact dependent on the State (e.g. the compensatory portion of VAT allocated to local authorities is set by the State), but this is not recorded as such in the budget documents since it compensates for former local tax products.

³¹ This is the allocation paid by the member municipalities of the metropolitan area to the metropolitan area under the delegation of some of its powers to the inter-municipal level. It already existed in the 2024 but was probably included in another category. It amounted to €112 million.

³² January 1st, 2024 (DGCL/INSEE)

³³ January 1st, 2025 (DGCL/INSEE)

3.3.1 Legal and Institutional Framework of Local Public Finance

National Regulations and Local Particularities

The legal and institutional framework of public finance in France combines state-level regulations with local-level principles and procedures. At the national level, budgetary governance is structured around the Public Finance Programming Act - *Loi de programmation des finances publiques (LFPF)*, which sets multi-year fiscal trajectories, and the annual *Lois de finances*, which authorise and regulate the use of state resources. Since the 2001 reform through the *Loi organique relative aux lois de finances (LOLF)*, the central government budget follows a performance-based management model, organised into missions, programmes, and actions with corresponding objectives and indicators. This model emphasises transparency and accountability, though it is not binding for local authorities, who retain constitutional autonomy.

Local public finance is governed by the General Code of Local Authorities - *Code général des collectivités territoriales (CGCT)*, which establishes key principles such as annularity, universality, unity, speciality, and real balance. Local budgets must be presented as consolidated documents covering both operating and investment sections, with strict balance rules preventing the financing of operating expenses through debt.

A distinctive feature of French local finance since 2025 is the requirement for municipalities with more than 3,500 inhabitants to attach an environmental appendix (*annexe environnementale*) to their accounts. This appendix is aligned with the European taxonomy and requires local governments to classify expenditures against six environmental objectives: climate change mitigation, climate change adaptation, sustainable use of water and marine resources, transition to a circular economy, pollution prevention, and protection of ecosystems. Methodologies developed by the Institute for Climate Economics (I4CE) and CDC Biodiversité have been tested to support implementation, grading expenditures as very favourable, favourable under conditions, neutral, unfavourable, or requiring further analysis. By 2028, all six taxonomy objectives will be mandatory in local accounts, progressively expanding the scope of environmental reporting (see Figure 12).

Figure 12: Focus on the I4CE methodology for climate budget evaluation

I4CE methodology for environmental budget evaluation

The methodology developed by the Institute for Climate Economics (I4CE) aims to assess the climate impact of local authorities' budgets. It has been tested by and implemented gradually by some communalities. It is expected to be broadly used to answer the environmental annex requirement.

This approach qualifies the effects of expenditures on climate neutrality. On a defined scope, expenditures are classified under five categories: “Very favourable” if it has a direct positive impact on the analysed component; “Favourable under conditions” if it has a positive impact but comes with certain limitations to be addressed ; “Neutral” if it has no significant impact; “Unfavourable” if it contributes to a negative impact ; “To be further analysed” if there is a lack of information and “Methodologically undefined in case of scientific controversies, lack of regulations or robust methodologies.

Evaluation of results is intended to be detailed by domain or commission to identify progress margins and inform budgetary decisions (I4CE and CDC Biodiversité, 2022).

Source: Source: EcoAct, 2025, based on I4CE and CDC Biodiversité, 2022

Exemplification

Alongside this environmental obligation, some pioneering initiatives have attempted to integrate the Sustainable Development Goals more directly into local budgeting. Since 2020, the City of Pessac, in the Bordeaux Metropolis, and the Eurometropolis of Strasbourg have applied following approaches:

- Pessac’s approach, developed in collaboration with the French Association for Standardisation (AFNOR), evaluates municipal projects and actions against SDG targets to identify both best practices and areas for improvement. The process is grounded in self-assessment, supported by AFNOR as a neutral third party, to ensure comprehensive engagement across all departments. Projects are scored on a simple scale – ranging from “not addressed” to “fully addressed” – and results are presented through SDG summaries and radar charts organised by theme, project, or policy. Importantly, Pessac treats SDG budgeting as a decision-making tool, rather than a mere communication device.
- The Eurometropolis of Strasbourg applies a variant of the SDG budget model by mapping local public policies and linking each budget credit line to one or more SDG targets. The city has identified 125 SDG targets implemented locally, representing 74% of the 169 international targets, and has added local targets specific to its territorial context. Each

budget credit line is associated with a primary target, which receives 50% of the allocation, and one or more secondary targets, which share the remaining 50%.

Example: If a €100,000 project is linked to SDG 11 (“Sustainable Cities”) as primary, and SDGs 3 (“Health”) and 13 (“Climate Action”) as secondary:

- €50,000 goes to SDG 11.
- €25,000 goes to SDG 3.
- €25,000 goes to SDG 13.

This method is used to map synergies between projects, present annual financial priorities in relation to global objectives, and apply climate and social evaluation filters.

The experiences of Pessac and Strasbourg contributed to the AFNOR white paper whose title translates as “*Towards a Sustainable Budget?³⁴ The City of Pessac, a Pilot Area*”. The document provides methodological guidelines for implementing SDG-based budgeting. The approach covers multi-annual investment plans and annual budgets, assesses both current and foreseeable contributions to SDG targets, and applies scoring at the target level. It recommends the use of standardised, shared evaluation tools, the involvement of elected representatives and department directors, and, where applicable, validation by a neutral third party. The methodology links budget evaluation results to the development of action plans, associating each action with specific SDG targets and related indicators.

However, SDG budgeting is not the method most commonly used by French local authorities. Under the 2024 Finance Act, municipalities with more than 3,500 inhabitants (representing 80% of French municipalities, 20% of the population or approximately 13 million people) are required to include in their year-end budgets a statement on the environmental impact of their capital expenditure and may identify the proportion of debt financing investments that contribute to environmental objectives. This requirement uses the European Taxonomy, which is indirectly related to the SDGs but does not directly include them. As a result, the I4CE and French state methods for local authorities are more widely applied, and the regulatory framework may limit the adoption of SDG-based methods.

In parallel, the concept of sustainable development itself is being re-examined. Alternative frameworks such as regenerative development and the Doughnut theory³⁵ are gaining visibility, with the latter applied by the City of Grenoble to integrate planetary boundaries and social needs into territorial planning, project evaluation, citizen engagement, and systemic diagnostics.

Critics, including Raymond J. Cole and Bill Reed, argue that sustainable development often focuses on minimising harm rather than actively improving ecological and social systems, proposing regenerative development as a more transformative approach aimed at restoring and enhancing the vitality of ecosystems and communities. In France, regenerative concepts are increasingly present in corporate CSR practices, as seen in the Convention des Entreprises pour le Climate and AFNOR’s pre-standard on regenerative companies, though they are not yet part of national legislation or policy frameworks.

³⁵ <https://doughnuteconomics.org/>

Overall, the institutional framework situates Bordeaux Métropole within a national system characterised by strong state guidance, increasing regulatory requirements for environmental reporting, and limited but noteworthy experimentation with SDG-budgeting approaches.

An Increasing Dependence of Local Authorities on State Financing and Political Priorities

Over the past two decades, French local authorities have experienced a gradual decline in fiscal autonomy. Local authorities are becoming increasingly reliant on State financing, a trend amplified by the reduction of local taxes and recent decreases in financial support under the 2025 Finance Laws. This dependence complicates long-term planning and investment within a complex architecture of transfers, comprising around 150 funding channels divided into operating revenues (including the Dotation Globale de Fonctionnement, equalisation grants, and various shared tax revenues) and investment revenues (notably the Fonds de Compensation pour la TVA, earmarked investment grants, and competitive calls for projects). Since the 1990s, the shift from unrestricted to project-based allocations has increased the role of prefects and national thematic priorities in funding decisions, with contractual arrangements such as the Recovery and Ecological Transition Contracts (Contrats de Relance et de Transition Ecologique) linking investment eligibility to alignment with State objectives.

Major tax reforms between 2018 and 2023 – abolishing the residence tax on primary homes, the elimination of three-quarters of the value-added tax on businesses, and lowering industrial property tax bases – have replaced direct local tax revenues with state transfers, mainly through VAT allocations, making about one-third of local budgets dependent on national fiscal policy.

In 2025, the state will freeze the share of VAT revenue transferred to local authorities and introduce a short-term “smoothing” levy, DILICO - *Dispositif de lissage conjoncturel*, which will reclaim €500 million from municipalities and intermunicipal bodies, resulting in a total reduction of €2,2 billion in state financial support for local budgets across France.

Additionally, cut investment grants and raised local contributions to the pension fund is adding to fiscal pressure. Combined with declining gross savings, prudential debt limits, and opaque grant criteria, these changes heighten uncertainty and constrain investment capacity.

Dialogue between sub-national and national remains limited. The *Comité des Finances Locales*, despite its mandate to advise on finance bills and allocate major grants, faces late consultations, inadequate documentation, and frequent quorum failures. The *Conseil National d’Evaluation des Normes*, tasked with assessing the impact of legislation, is hindered by rushed procedures and insufficient early consultation. Local authorities and their representative associations stress the need for earlier, more meaningful engagement and for funding mechanisms that better reflect territorial priorities, noting that targeted taxation and national project calls often exclude relevant local initiatives in favour of nationally defined priorities.

Structuring Elements of Local Public Finance Management in Bordeaux-Métropole

Bordeaux-Métropole is a group of 28 municipalities, including the City of Bordeaux, which collaborate to manage local services and projects of metropolitan scope. These include public transport systems, housing policy, environmental protection measures, and economic development initiatives. In many policy areas, the City of Bordeaux and Bordeaux-Métropole operate under a unified financial management framework, enabling coordinated planning and

execution of budgets. However, certain municipalities within the Métropole retain their own autonomous budgetary processes, reflecting a mixed model of pooled and independent financial governance.

The 2024 revenue structure shows a decline in local taxes and state allocations, increasing reliance on borrowings to finance investments. Operating revenues total €1,302 million, of which €816 million comes from taxation and €266 million from State allocations. Gross savings stand at €181 million. Investment revenues total €794 million, with loans representing €618 million (over 75%). Annual borrowings have risen sharply since 2015–2016, reaching over €500 million in 2024 and bringing the debt stock to €1,9 billion. Debt-reduction capacity is at 7,2 years, below the 12-year threshold, but maintaining financial capacity is essential to preserve the Métropole's Moody's rating and market access.

State allocations have decreased, generating a scarcity of resources for co-financing and investments. In parallel, national regulations have led to a decrease in local taxation, thereby limiting the capacity for self-financing, leading to a set of challenges for revenue collection.

Consequently, borrowing has become the primary mechanism for funding the metropolitan investment programme, particularly as the 2026–2027 investment effort is projected to remain high. While European financing programmes such as InvestEU promote green investment by requiring that 30% of financing supports climate objectives, they also make it harder to fund essential but non-green projects, such as road maintenance, creating a risk of imbalance in infrastructure upkeep.

3.3.2 Budget Cycle Process and Practices of Bordeaux Métropole

Bordeaux Métropole follows a multi-layered budgeting process that operates at annual, infra-annual, and multi-year levels. The process begins with the *budget primitif* (initial voted budget), usually adopted in February, though national political circumstances occasionally delay this timeline. During the fiscal year, adjustments are made through a supplementary budget in June to July, which incorporates the results of the previous year, and modifying decisions in October to November, often reducing investment credits as year-end approaches. This staged process is complemented by the *Plan Pluriannuel d'Investissement* (PPI), a rolling four-year investment plan that consolidates strategic roadmaps and provides financial visibility for large-scale projects.

The system is underpinned by the M57 accounting standard, which introduces accrual accounting for local authorities. This framework strengthens budgetary transparency and predictability by recording obligations when they are incurred, rather than at the moment of cash flow. It provides tools such as fungibility of credits (allowing limited reallocation between chapters), multi-annual authorisations, and systematic depreciation of fixed assets, offering both flexibility and long-term financial discipline. The budget is structured into two main sections — operating (day-to-day services) and investment (infrastructure and capital projects) — further broken down into functional dimensions such as transport, environment, housing, education, and general services, with transport consistently absorbing the largest share of resources.

Preparation and execution involve strong stakeholder coordination. The Finance Directorate consolidates needs identified by thematic general directorates, administrative departments, and the Human Resources Directorate, while elected officials validate priorities. External actors, such

as the Subsidy Review Commission, also play a role in evaluating subsidies to associations and private bodies. Decision-making relies on a broad set of internal and external data, including state finance bills, inflation rates, demographic trends, housing statistics, and activity reports from general directorates. Financial forecasting tools guide decisions by monitoring debt ratios, fiscal effort, and cash flow sustainability.

While Bordeaux does not operate a formal SDG-based budgeting framework, it has emerged as an inspiring practice in green budgeting. Since 2021, the Métropole has retrospectively classified expenditures by their climate impact using the I4CE methodology, supported by digital tools like Power BI. This has been extended into a Green PPI, which colors multi-year investments to highlight alignment with the city's Climate Plan (PCAET). Although the approach is currently retrospective rather than prospective, it provides an important basis for integrating ecological transition objectives into long-term financial planning. At the same time, the city faces structural constraints: declining state allocations and rising reliance on borrowing make debt a crucial source of funding for green and infrastructure investments.

Overall, Bordeaux's budgeting system reflects a balance between regulatory compliance, operational flexibility, and strategic foresight. While not yet aligned with the SDGs, innovations such as green budgeting and multi-annual investment planning position the Métropole to progressively integrate environmental and social priorities into financial governance, even amid fiscal pressures.

3.3.3 Key Enablers, Lever and Drivers in SDG Budgeting

Structural Challenges of SDG Integration

Integrating a formal SDG budgeting framework into Bordeaux-Métropole's financial processes presents both structural challenges and strategic opportunities. Currently, there is limited political will and technical interest in SDGs, and existing instruments, particularly the Plan Climat Air Énergie Territorial (PCAET) and the mandatory environmental annexe, do not directly align with the SDG matrix. These frameworks focus on climate mitigation and adaptation rather than the broader scope of the 17 Goals, making retroactive integration complex. Furthermore, implementing the green budget tool already places significant demands on the finance department, leaving little capacity for an additional SDG layer.

Institutional and Regulatory Constraints

Institutionally, Bordeaux-Métropole's environmental public policy operates under national regulatory requirements and the European Taxonomy, whose six environmental pillars overlap only partially with the SDGs. The PCAET, as the umbrella policy for ecological transition, sets priorities in carbon reduction, air quality, and resilience, but omits broader socio-economic dimensions embedded in the SDG framework. This thematic narrowing reflects both political choices and the practical difficulty of embedding such a wide-ranging matrix into an investment- and project-oriented governance model.

Strategic Opportunities for SDG Alignment

Despite these constraints, some stakeholders see potential in using the SDGs to complement existing decision-making tools by incorporating socio-economic indicators alongside

environmental criteria. Such an approach could strengthen investment prioritisation, align resource allocation with long-term sustainability objectives, and open access to diversified funding sources. In a context of budgetary restrictions – driven by declining state transfers, increased reliance on national taxation, and rising investment needs – the SDGs could provide a cross-functional framework to guide both macro-level investment strategies and micro-level project decisions.

Bordeaux-Métropole is already recognised for its leadership in Green Budgeting and is co-developing, with I4CE and national associations, a climate-aligned multi-year investment plan methodology. This tool seeks to integrate climate targets into the Plan Pluriannuel d'Investissement (PPI), quantify the cost of achieving these objectives, and identify financing options. Such work could serve as a platform for introducing SDG-linked criteria in future budgetary processes. Other relevant innovations include the City of Bordeaux's gender-sensitive budgeting, Pessac's SDG-based budget evaluation, linking operating and investment items to specific Goals and integrating them into budget conferences, and Lyon Métropole's multi-criteria PPI scoring grid inspired by the European taxonomy.

Taken together, these practices highlight a clear pathway: aligning SDGs with Bordeaux-Métropole's evolving climate-oriented budget tools could enhance political legitimacy, facilitate access to sustainable finance, and support a more holistic, resource-efficient investment strategy. The challenge lies in bridging the current disconnect between technical evaluation frameworks and political budgetary arbitration, while ensuring that any new tool is both operationally feasible and integrated into the decision-making cycle.

Political Priorities and Investment Challenges

There is strong political interest in developing a climate investment plan for the 2026–2032 term, particularly given investment challenges in areas such as public building energy renovation under the *décret tertiaire*. However, cost estimation remains uneven across departments, and existing tools do not fully support comprehensive investment planning. Current Green Budgeting instruments, including budget colouring and the green PPI, monitor climate-related spending but have limited influence on budgetary trade-offs or project design. The forthcoming expansion of the environmental annexe to include biodiversity, circular economy, water resources, pollution prevention, and adaptation will require significant administrative mobilisation and could provide a more holistic environmental perspective.

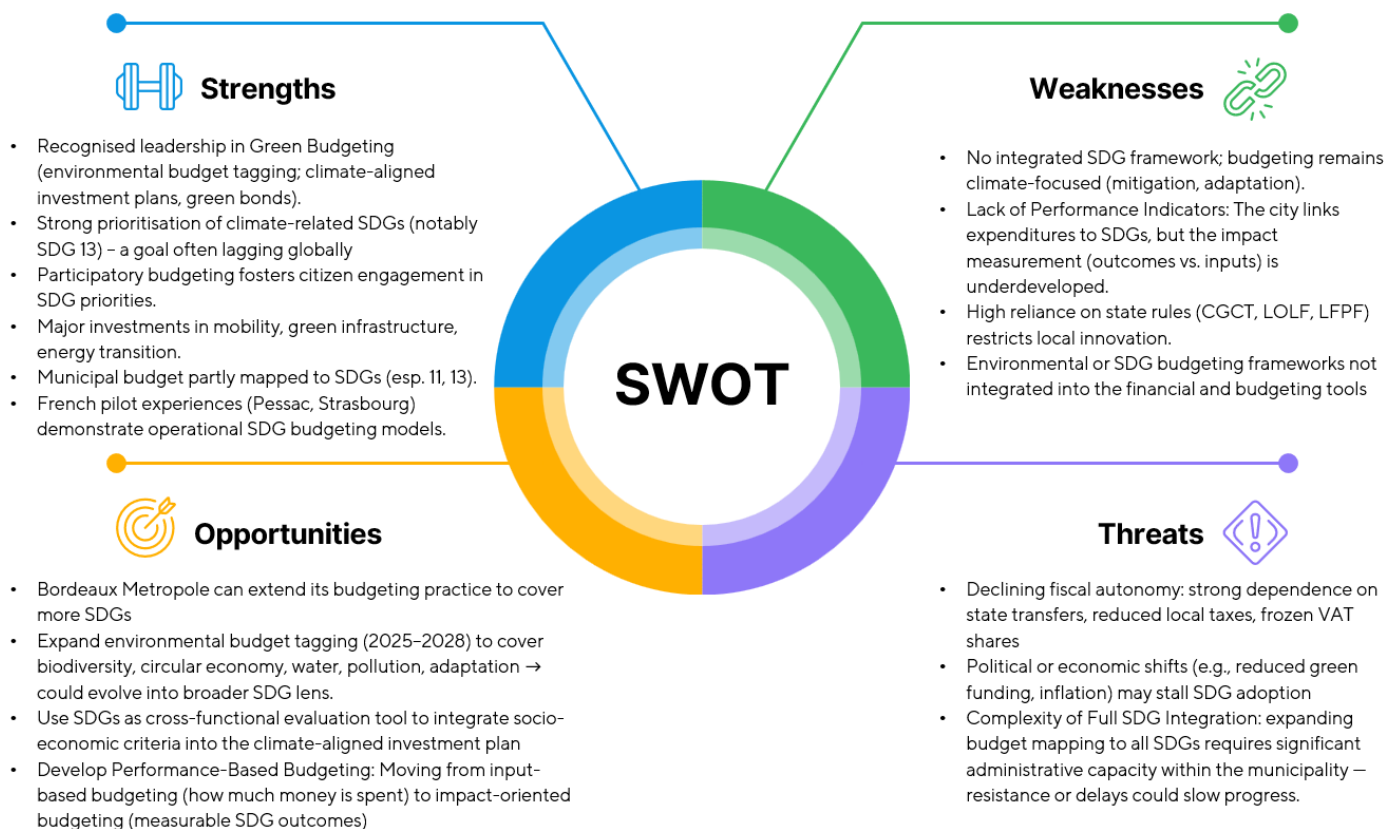
Financial Context and Need for Prioritisation

The financial context, marked by increased dependence on national taxation, limited local resources, and growing reliance on loans, underscores the need for robust prioritisation tools at both the macro level (major investment priorities) and micro level (individual projects). Standardised evaluation criteria, potentially supported by the SDGs, could guide decisions based on factors such as project risk, financial return, emissions reduction, avoided costs, and positive externalities.

Conclusion

The assessment finds that SDGs are not yet integrated into Bordeaux Métropole’s budgeting, which remains focused on mitigation and resilience under the PCAET. While some view the framework as too broad, others see value in linking socio-economic and environmental indicators to improve investment prioritisation and attract funding. Strong political interest in a 2026–2032 climate investment plan provides momentum, but uneven cost estimates, limited tools, and fiscal constraints hinder progress. Existing green budgeting instruments and the forthcoming environmental annex broaden environmental perspectives but require significant administrative effort. Embedding SDGs selectively – targeting major programmes, simplifying indicators, and aligning with existing tools like the climate PPI – could strengthen decision-making, reinforce climate investment strategies, and facilitate access to sustainable finance without adding excessive complexity.

Figure 13: SWOT Bordeaux



Source: KDZ own elaboration, in collaboration with Local Experts and Beneficiary, 2025

3.4 The Free and Hanseatic City of Hamburg

The Free and Hanseatic City of Hamburg, a city-state in northern Germany along the Elbe River, covers around 755 km², making it one of Germany’s largest municipalities. As of late 2024, it is home to around 1,91 million residents, with its broader metropolitan area exceeding 5 million. Its double budget for 2025/26 projects total expenditures of around €21,4 billion for 2025. Hamburg is an international actor in Europe, distinguished by its world-class port, leadership in logistics, aviation, and creative industries, and a thriving innovation ecosystem anchored in research excellence and smart-city developments.

Table 11: Financial Portrait of the Free and Hanseatic City of Hamburg

Free and Hanseatic City of Hamburg	2024
Own Revenues	€ 16 940 million
National grants or transfers (revenues coming from the central budget)	€ 2 223 million
Other revenues	€ 2 022 million
Total revenues	€ 21 185 million
Total debt (with figures, not percentages)	€ 22 027 million
Number of inhabitants	1 910 160 (2023) ³⁶

3.4.1 Legal and Institutional Framework of Public Finance

National and Subnational Context

The legal and institutional structure of public finance in Hamburg is embedded in Germany’s federal system, as defined by the Basic Law for the Federal Republic of Germany (*Grundgesetz*, GG, 1949) Article 20 of the Constitution establishes Germany as a federal state, and Article 30 stipulates that governmental functions fall primarily to the states (Länder) unless otherwise regulated. The Free and Hanseatic City of Hamburg holds a unique position as both a municipality and a Land, allowing it to integrate municipal and state functions within a single administrative and budgetary system. This configuration enables the city to exercise significant autonomy in financial matters under its own Budget Code (*Landeshaushaltsordnung* – LHO, 2021) using accrual-based and performance-oriented budgeting methods.

Under Article 109 of the Basic Law (GG, 1949), both the federal and state governments are required to maintain structurally balanced budgets in accordance with the debt brake. While limited exceptions to this rule exist, such as for specific infrastructure projects, these do not constitute a general “golden rule” allowing broad borrowing for public investment.

³⁶ Freie und Hansestadt Hamburg 2025; Statistisches Bundesamt (Destatis) 2024.

In most cases, long-term investments must still be financed within balanced budgets unless explicitly exempted by constitutional provisions. In 2025, targeted constitutional amendments introduced such exemptions for defence and climate-related investments. However, these changes did not alter the underlying framework of fiscal discipline, as the core principles and structure of borrowing remain unchanged.

Hamburg adheres to both national fiscal rules and its constitutional debt limitations, as outlined in Article 72 of the Hamburg Constitution (HV, 1952). It bases its annual budget on a 14-year average of tax revenues to ensure long-term stability, rather than relying on short-term forecasts. Surpluses must be saved in a reserve fund, which can be used during economic downturns. If reserves are insufficient, shortfalls may be recorded as cyclical burdens. In exceptional emergencies, spending may exceed revenues, but only if approved by a two-thirds majority in the Hamburg Parliament, as outlined in Article 72(3) of the Constitution (HV, 1952).

The following legal framework shapes Hamburg's financial governance:

- ◆ The Budgetary Principles Act (*Haushaltsgrundsätze-gesetz*, HGrG 1969) provides a harmonised framework for public financial management across Germany's governmental levels.
- ◆ The Stability and Growth Promotion Act (*Gesetz zur Förderung der Stabilität und des Wachstums der Wirtschaft*, StabG 1967) introduced macroeconomic management as a budgetary function in the 1960s, establishing the notion of fiscal policy as a tool to stabilize the economy.
- ◆ Hamburg's Budget Code (LHO 2021) regulates the detailed planning and execution of the city's budget within the framework set by the HGrG.

These legal foundations have allowed Hamburg to innovate in budgeting practices, particularly through a 2009 amendment initiated by Hamburg and Hessen, enabling product-based budgeting and accrual accounting.

Hamburg's financial governance is led by the Hamburg Parliament (Bürgerschaft), which approves the budget and authorises the Senate, Hamburg's state government, to carry out expenditures and investments. The Ministry of Finance and Districts manages budget planning, implementation, and reporting, while the independent Hamburg Court of Auditors ensures transparency and fiscal accountability. At the federal level, the Stability Council, a joint body of national and state representatives established under Article 109a GG, monitors compliance with the debt brake and identifies financial risks early. It issues an annual report evaluating fiscal discipline and recommending measures for maintaining economic stability.

Financial Autonomy and the Budgetary System

Hamburg's public finance system operates within the broader framework of Germany's federal fiscal architecture. Under Article 106 GG, tax revenues are distributed vertically among the federal government, the Länder, and municipalities. A significant portion of these revenues comes from joint taxes, such as income tax, corporate tax, and VAT, distributed according to legally defined shares, based on Article 107 I GG (joint taxes). The federal government also collects specific taxes like the energy and tobacco taxes, while the Länder levy taxes such as inheritance and real estate

transfer taxes. Municipalities, in turn, rely primarily on business and property taxes, which form their most important autonomous sources of revenue.

Federal laws often have budgetary implications for Länder and municipalities, especially since the Länder implement many of these laws. When federal funding fails to cover resulting costs, such as with recent reforms in disability support, subnational governments face financial strain. This challenges the constitutionally protected Connexity Principle (*Konnextätsprinzip*, Article 104a GG), which requires that the level of government mandating a task must also finance it. To defend their interests, the states participate in federal legislative decisions through the Upper House (*Bundesrat*).

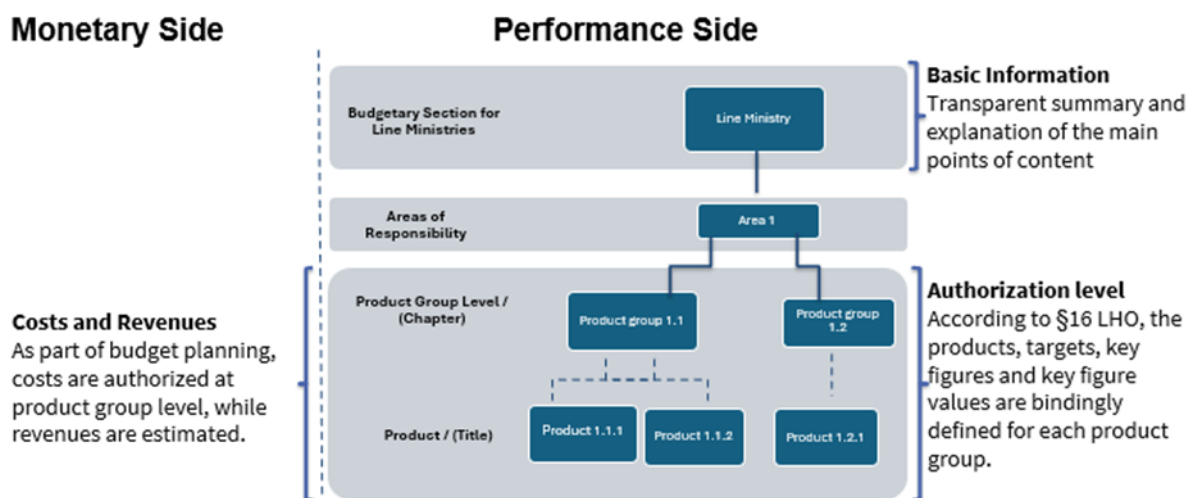
To balance regional economic disparities, Germany employs a state financial equalisation system (Article 107 2 GG), adjusting VAT shares and providing federal grants (*Bundesergänzungszuweisungen*, BEZ) to weaker states. As a financially strong “donor state,” Hamburg contributes to this redistribution but may still receive compensation if revenues fall below average. Targeted federal funding also supports specific initiatives like digital education and childcare expansion, typically for limited periods and often implemented through VAT adjustments.

Hamburg meets most of its financial obligations from current revenues but may use short-term liquidity loans (*Kassenverstärkungskredite*) to manage temporary gaps. These loans, capped annually at €5,3 billion for 2025, must be repaid within six months after the financial year ends. Liquidity is further optimised through a centralised cash-pooling system coordinated via Germany’s national bank, the *Deutsche Bundesbank*. This mechanism redistributes surplus funds among state entities, reducing borrowing costs. In 2025, Hamburg also founded the Financial Service Agency (FSA - *FinanzServiceAgentur*) to oversee all public financing activities. The city’s prudent financial management is reflected in its AAA credit rating from Fitch in 2024 (Fitch, 2024).

As Hamburg functions as both a state and a municipality, with no separate municipal governments within its territory, all municipal responsibilities are organised within the city administration, allowing for streamlined governance. Seven district offices carry out delegated responsibilities from the Senate, while the central administration oversees policy and finance. Budgeting is guided by Hamburg’s Budget Code (LHO 2021) and applies accrual accounting based on the German Commercial Code (*Handelsgesetzbuch* HGB, 1987), using a standardised double-entry accounting system (*Doppik*). In addition, the Hamburg District Administration Act (BezVG, 2006) governs how district offices plan their budgets and allocate funds for specialised tasks under the responsibility of the relevant line ministries. This system enables Hamburg to report on long-term financial obligations, although figures must be converted to meet national accounting requirements aligned with the cash-based logic of the debt brake.

The budget of Hamburg is structured by products and product groups, each tied to defined responsibilities, objectives, and Key Performance Indicators (KPIs). Each ministry and district office maintains its budgetary section under the supervision of designated officers. Since 2021, Hamburg has mandated performance-based budgeting that incorporates sustainability, gender equality, and strategic planning principles.

Figure 14: Budget Structure of Hamburg



Source: FiFo, own illustration, 2025

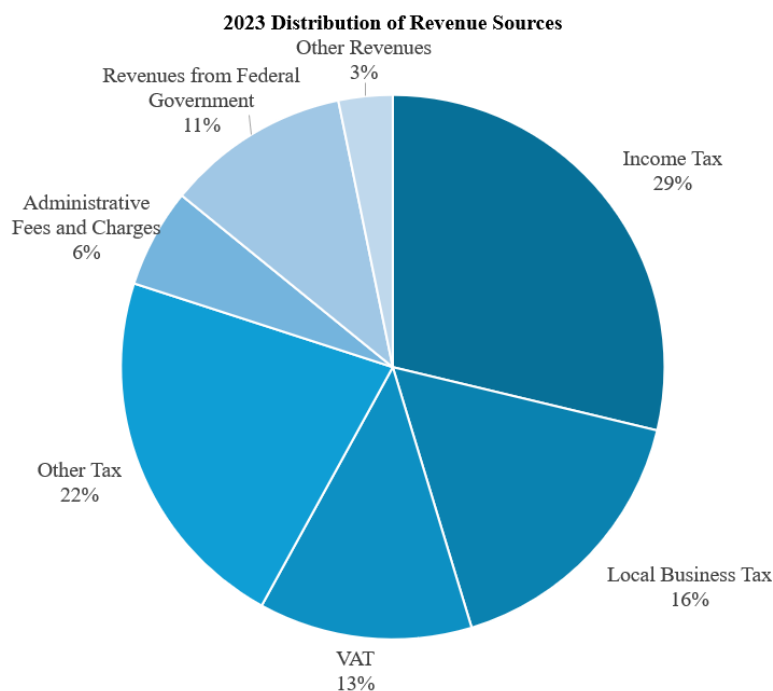
The graph illustrates the hierarchical structure of Hamburg’s budget, starting with “basic information” published for each budgetary section (*Einzelplan*) of the line ministries. This information outlines areas of responsibility, technical priorities, and links to overarching strategies, but carries no legal weight for budget figures. The first functional subdivision within each section is the “areas of responsibility,” often aligned with specific offices or authorities, where investments are budgeted, staffing is planned, and legally mandated services such as education, health, and social welfare are defined. Below this, “product groups” form the authorisation level, where costs are approved, revenues estimated, and the performance purpose is legally set in accordance with §16 LHO. Each product group specifies the services to be provided, their objectives, targets, key figures, and indicator values, creating a direct link between allocated resources and expected results.

Transparency is ensured through regular Senate reporting. Quarterly and semi-annual reports provide updates on implementation, deviations, and KPI performance, enabling public and parliamentary oversight. Alongside the fourth-quarter report, an annual report on gender-related budget targets and KPIs is submitted. At year-end, the Senate submits a detailed budget account and consolidated financial statement, covering both the core administration and roughly 400 affiliated entities. These documents form the basis for parliamentary approval following audit review, reinforcing accountability in public financial management.

Revenue Generation

Hamburg’s public revenues are primarily driven by taxes. In 2023, the city-state generated approximately €16,5 billion in tax revenues, with the largest share, around €5,9 billion, coming from income tax. This was followed by revenues from business tax and Hamburg’s share of VAT. State-specific taxes, such as inheritance tax and the real estate transfer tax, contributed roughly €1 billion. In addition to tax income, Hamburg received €2,3 billion in federal transfers and collected €1,2 billion in fees for public services.

Figure 15: Allocation of Hamburg's Revenue Sources 2023



Source: FHH, Finanzbehörde, 2024a

As both a city and a Land, Hamburg also enjoys a higher degree of fiscal flexibility compared to other municipalities. Under Article 105 GG, all German local governments are permitted to levy certain local consumption taxes, such as dog taxes or tourism fees, as long as they do not overlap with taxes regulated at the federal level. Hamburg, however, has the additional authority, as a Land, to define the tax base and set rates for certain state-level taxes, including the real estate transfer tax. This dual role strengthens Hamburg's fiscal autonomy and enables more strategic control over its tax policy.

Fee-based revenues, while smaller in scale than taxes, also play a notable role in Hamburg's budget. The levels of fees for public services are set according to state law, based on § 6 of the Hamburg Fees Act (*Gebührengesetz*, GebG 2017). These fees must be calculated in accordance with business management principles, ensuring that the charges reflect the actual costs of providing the respective public service.

3.4.2 Budget Cycle Process and Practices in the Free and Hanseatic City of Hamburg

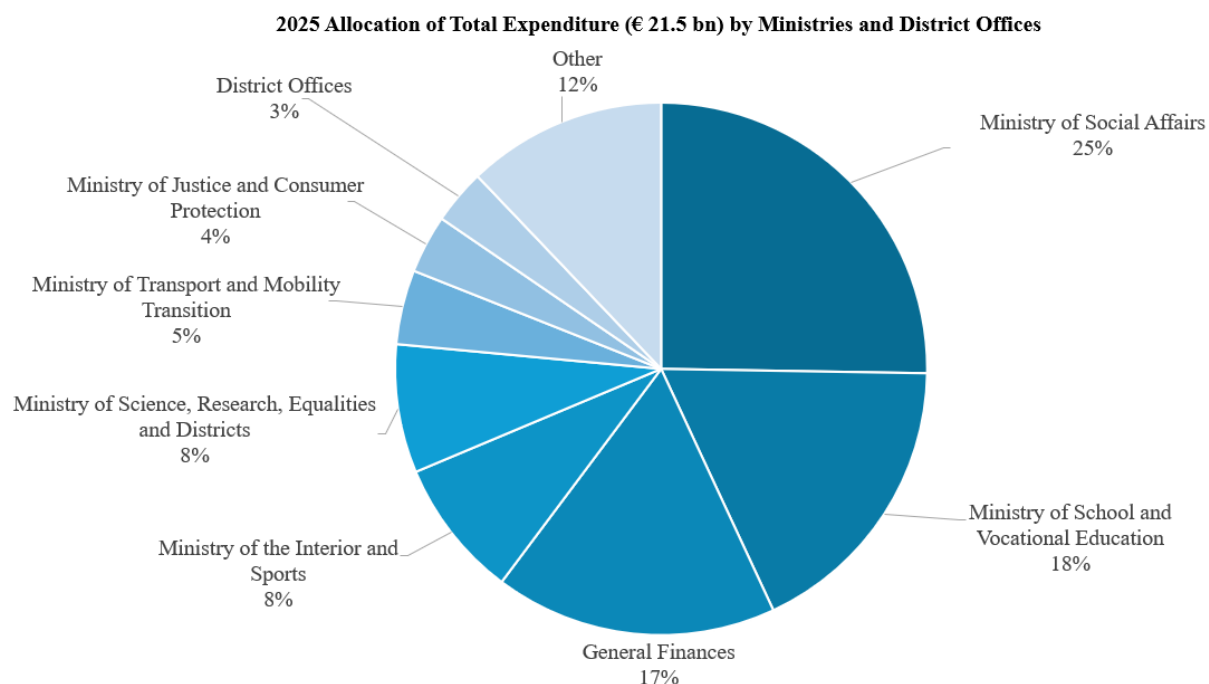
The formulation and execution of Hamburg's budget follow a structured, recurring process rooted in decentralised management. While the budget is adopted annually, it is often planned for two fiscal years, with each year implemented separately. The Senate sets the overall financial framework, prepared by the Ministry of Finance in collaboration with line ministries and based on historical data. Each ministry, led by a Senator, then develops its own budget estimates under decentralised responsibility, defining strategic objectives and KPIs for its product groups. These estimates are reviewed by the Ministry of Finance, which drafts the overall budget in consultation

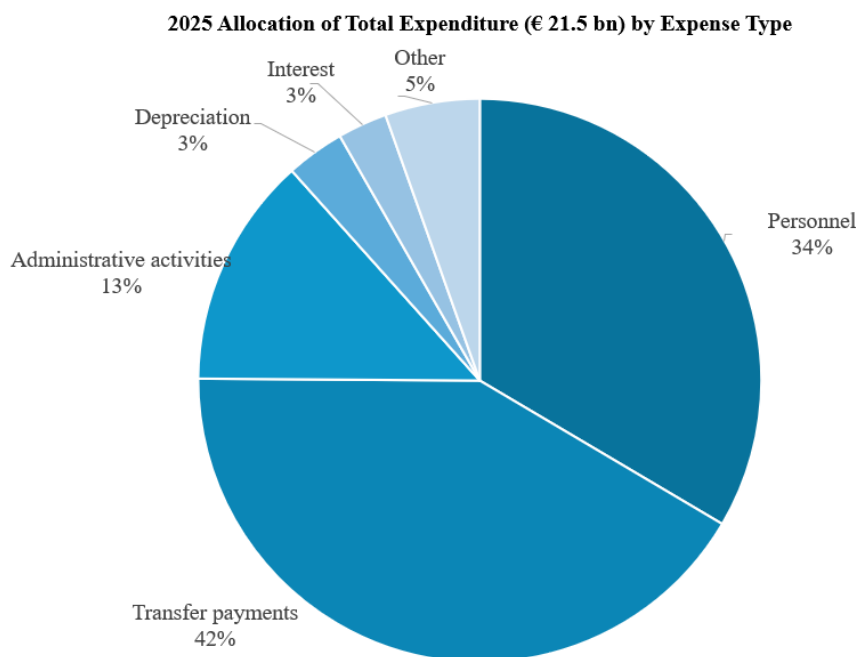
with ministries and submits it to the Senate for approval. The final draft is typically presented to Parliament in September for debate and formal adoption before the fiscal year begins.

Throughout the year, ministries execute their budgets autonomously within approved limits. However, changes to the adopted budget plan within a running year have to be decided by the Senate and approved by Parliament (§ 35 LHO). Furthermore, major financial measures and specific budgetary transactions such as provisions exceeding €100,000 require approval from the Ministry of Finance. While ministries have operational independence, they must align with broader government policies set by the First Mayor. Supporting this complex process is Hamburg’s advanced SAP-based digital system, which integrates budgeting, accounting, and reporting to ensure transparency, oversight, and performance monitoring across government operations.

Hamburg’s 2025 budget totals approximately €21,5 billion and is available to the public both online and in print via its digital budget portal (<https://haushalt.digital/>). The largest share of spending is allocated to budgetary sections of the Ministry of Social Affairs, followed by the Ministry of School and Vocational Education and General Finances. Significant funding also goes to the Ministries of the Interior, and Science, Research and Equalities. Transfer payments make up €9,0 billion, or 42 % of the total budget, of which €5.3 billion is directed toward social benefits paid to the private sector, and €3,8 billion supports public institutions such as universities and public enterprises. Personnel costs account for 34 % of the budget, amounting to €7,3 billion, including €3,3 billion earmarked for pensions and pension reserves. The remaining expenditures are allocated to administrative operations, depreciation, and interest payments.

Figure 16: Allocations of Hamburg's total expenditures by Ministries & District Offices, and by Expense Types





Source: FHH, Finanzbehörde, 2024b

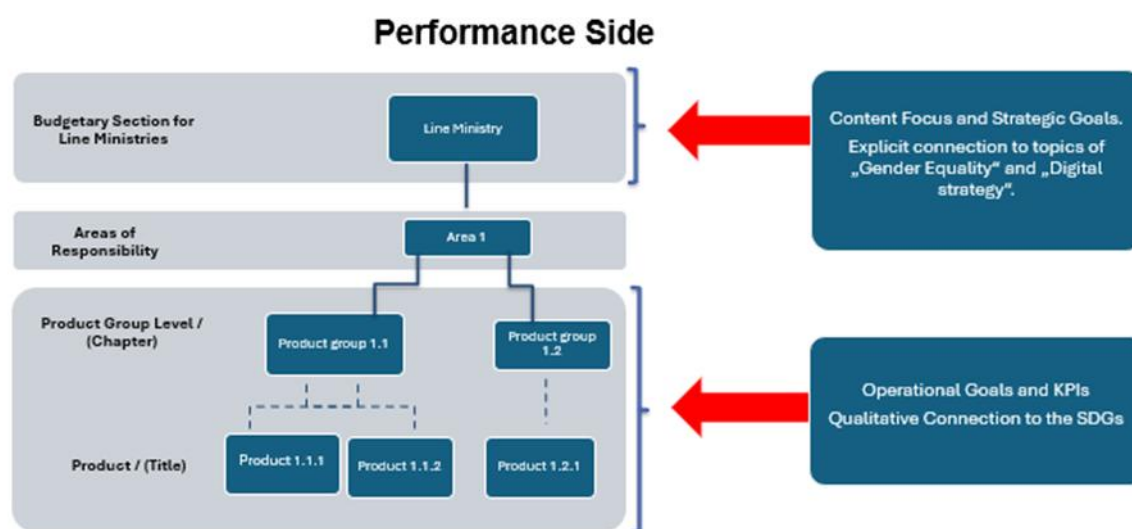
Performance Budgeting and SDG Integration

Hamburg's budget is structured to reflect both financial planning and the intended outcomes of government action. As mentioned before, each section of the budget is organised by product groups, which are bundles of services or activities linked to strategic objectives and measurable targets. These objectives are drawn from political priorities, legal mandates, and overarching city strategies, including sustainability and gender equality goals. The budget law requires every group of expenditures to be tied to a clearly defined purpose, shifting the focus from input (how much money is spent) to output and impact (what results are achieved).

Hamburg also integrates performance budgeting through the use of KPI that track progress toward these goals. These indicators are assigned at various levels, from broad strategic aims to specific operational targets. For example, the Department of Education focuses on improving school quality and access, especially for disadvantaged students, while ensuring that new school buildings meet environmental standards. Similarly, the Authority for Environment and Climate includes indicators for species protection, biodiversity, and gender balance in ecological programs.

The figure illustrates how Performance Budgeting connects goals, indicators, and sustainability to the budget, with each ministry's section organised by political and functional responsibilities into product groups that define objectives, KPIs, and allocated resources.

Figure 17: Performance Budgeting Structure in Hamburg



Source: FiFo, own illustration, 2025

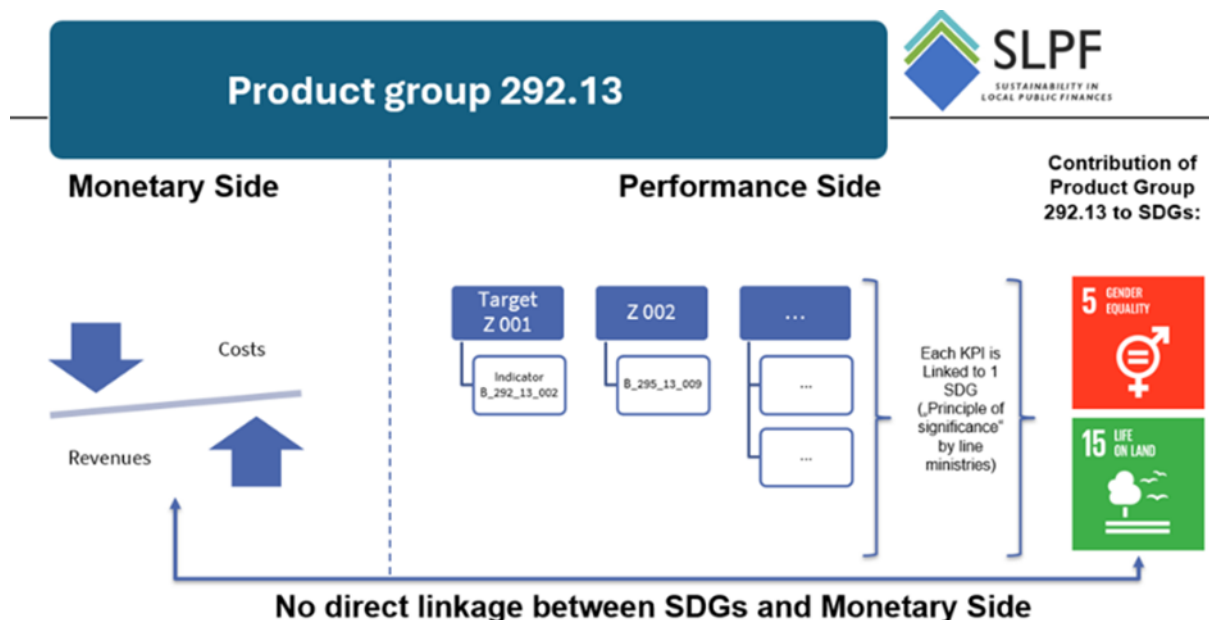
Hamburg’s performance budgeting begins with establishing a “target culture” within each ministry’s budget section. Basic information for each section outlines strategic priorities, political goals, and contributions to cross-cutting themes such as gender equality or sustainability. Examples include the Ministry of School, Family and Vocational Education, which links its budget to economic, ecological, and social sustainability through measures like improving educational quality, supporting disadvantaged pupils, and constructing climate-friendly school buildings. Another example is the Authority for Environment, Climate, Energy and Agriculture, which introduces gender indicators to track balanced participation in ecological programs and representation in management positions. While this “presentational budgeting” does not directly control fund allocation, it reinforces a culture of goal-setting and impact awareness across all levels of budget responsibility.

Though some indicators are more focused on outputs than outcomes, Hamburg’s budget includes nearly 1,200 KPIs linked to 455 objectives across 250 product groups. These efforts make Hamburg one of the most advanced cities in Europe for integrating performance goals into its budgeting process, as confirmed by positive international assessments such as PEFA and OECD reviews.

For example, Product Group 292.13 “Nature Conservation,” Hamburg’s budget links general constitutional and political goals to specific operational targets and KPIs. These include protecting species and habitats under international and EU law, expanding and maintaining protected areas, compensating for environmental damage, and promoting environmental education. Social dimensions are also addressed, such as achieving gender balance in the Voluntary Ecological Year program. Indicators measure outputs like the number of species protection licences issued, the share of habitats in favourable condition, renaturalised areas, gender participation rates, and the total area of protected habitats.

However, challenges remain. Many KPIs do not directly connect to specific budgetary allocations, which makes it more difficult to assess the impact of spending. This is especially true when KPIs are linked to broader targets like the UN Sustainable Development Goals (SDGs). While each KPI is assigned to an SDG, the relationship is often indirect, reflecting general contributions rather than clear cause-and-effect.

Figure 18: Performance Budgeting in Hamburg with SDG Linkages



Source: FiFo, own Illustration, 2025

Although the legal framework, in particular Hamburg’s Budget Code (LHO, 2021), mandates results-oriented budgeting with attention to gender equality and ecological, economic, and social sustainability, there is no binding legal obligation to implement the SDGs. Nevertheless, Hamburg has voluntarily begun aligning parts of its budgeting system with them. Since 2018, selected SDG-related KPIs have been included in annual financial reports, and since the 2025/2026 budget cycle, all KPIs have been assigned to one of the 17 SDGs. This linkage is shown at the product group level in the budget plan but does not yet extend to specific expenditure items, as illustrated in the Figure above.

Hamburg’s reporting on the SDGs reflects a fragmented landscape. Although the city has taken important steps, such as publishing its first Voluntary Local Review (VLR) in 2023 and including selected SDG-relevant indicators in its annual financial statement, there is currently no unified or validated indicator system that integrates all reporting instruments. Differences in indicator sets across the VLR, the budget system, and external platforms like the Bertelsmann Foundation’s SDG Portal hinder the ability to conduct comprehensive and coordinated performance assessments with respect to the SDGs.

Despite these limitations, Hamburg’s SDG-related publications offer valuable insights into progress on key issues such as climate action and social equity. Momentum for a more cohesive approach is growing, driven by increasing stakeholder engagement. Civil society, political parties, and government institutions are playing a more active role in shaping the sustainability agenda. The Hamburg Parliament, led by the SPD and Green Party, has called for a more structured

sustainability strategy, while initiatives like the Hamburg Sustainability Conference, launched in 2024, signal rising political commitment. Although the integration of SDGs into the budgeting process remains mostly indicative at this stage, there is clear institutional and political will to strengthen these linkages going forward. Hence, in the 2024 financial statement, Hamburg will expand its integration of sustainability goals by systematically linking all budget KPIs to one of the 17 SDGs and is going to undertake an analysis showing how the 2025/2026 budget's KPIs are assigned to specific SDGs across ministries and district offices.

The figure below illustrates how SDG references are allocated to budgetary KPIs in the 2025/2026 budget plan for the 2024 fiscal year financial statement.

Figure 19: Allocation of SDG References to Budgetary KPIs in the 2025/2026 Budget of Hamburg

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
	SDG01	SDG02	SDG03	SDG04	SDG05	SDG06	SDG07	SDG08	SDG09	SDG10	SDG11	SDG12	SDG13	SDG14	SDG15	SDG16	SDG17	
Bürgerchaft																		
Verfassungsgericht																		1
Rechnungshof																		2
HmbBfDI					2				1									3
Senat und Personalamt			4	3	4				5	1								7
Bezirksämter	5		17	1	1			2	15	8	11				2		10	72
Justiz und Verbraucherschutz			18	2	13			2	3									170
Schule und Berufsbildung				122	15					11								148
Wissenschaft, Forschung, Gleichstellung, Kultur und Medien			2	53	17				5	5	13							95
Sozialbehörde				88	5			3		5	4						25	108
Stadtentwicklung und Wohnen	28		64	15	10			15		19							2	156
Umwelt, Klima, Energie und Agrar					5						21							26
Wirtschaft und Innovation		2	4		2	3	2				4		3	1	9			30
Verkehr und Mobilität					6				11	20				1	2			42
Inneres und Sport				34	28	14			7	1	7			10				28
Finanzbehörde									1	20	11						35	144
Allgemeine Finanzwirtschaft	4			14	2			1	3		6	4					39	69
	37	2	145	306	97	3	2	46	60	70	78	4	14	1	13	254	12	1144

Source: FHH, Behörde für Finanzen und Bezirke (2025)

3.4.3 Key Enablers, Levers, and Drivers in SDG Budgeting

Hamburg has made notable progress in linking its performance-based budgeting system to the SDGs, mainly through the formal association of KPIs with individual goals. However, these connections serve transparency and reporting purposes rather than actively shaping political negotiations, fiscal priorities, or resource allocation. The SDGs are not fully integrated into the logic of objective-oriented budget planning and are not tied to concrete fiscal targets or expenditure-linked indicators.

A significant barrier is the inherent complexity and occasional contradictions within the SDG framework. Goals often interact, compete, or involve long-term effects that are difficult to align with annual budget cycles. Therefore, a deeper understanding of how different SDG targets interact, as well as a clearer mapping of trade-offs and timelines, is needed. Although Hamburg's KPIs are highly differentiated and can be linked indirectly to budget areas, these associations become increasingly blurred at higher levels of aggregation, particularly with global sustainability goals.

Hamburg’s current efforts correspond to the first two stages of SDG integration: political signalling (through legal frameworks, parliamentary engagement, and public declarations) and technical tagging (linking KPIs to SDGs within the budget system). However, the third stage, analytical evaluation, remains underdeveloped. There is still no system in place to assess how public spending actually contributes to the achievement of SDG targets.

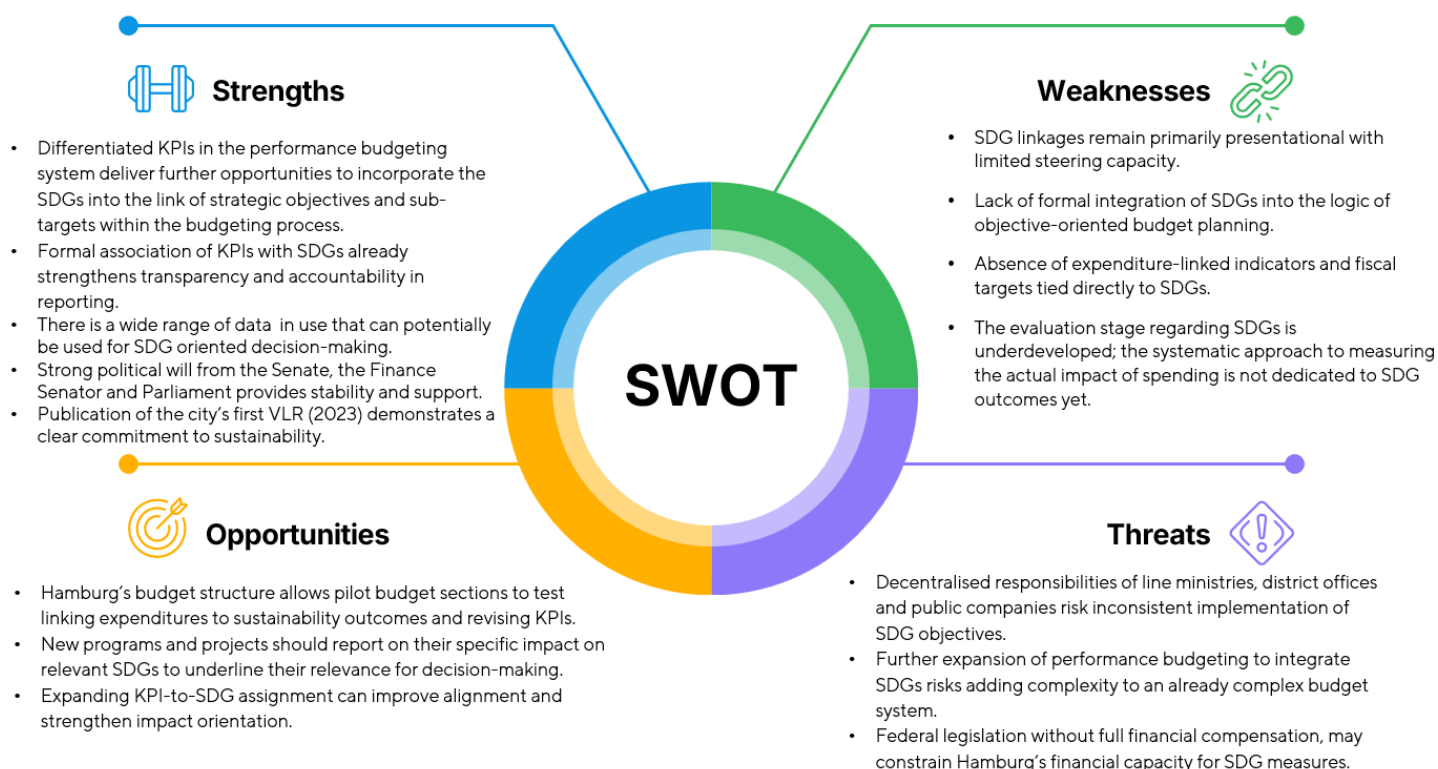
Conclusion

Hamburg’s budgeting system provides a solid foundation for advancing SDG integration, supported by strong political will from the Senate, the Finance Senator, and Parliament. Initial steps, such as the publication of the city’s first VLR in 2023 and the SDG tagging of KPIs in the budget, reflect an emerging commitment to align fiscal policy with sustainability.

Moving forward, the city aims to deepen this alignment by comparing all KPIs to specific SDG targets and launching pilot projects in selected budget sections to examine high-impact interactions. These efforts, supported by the SLPF project, will help test methodologies for connecting objectives, expenditures, and sustainability outcomes more effectively.

While a fully comprehensive and seamless link between all expenditures and SDGs may not be feasible, the focus should shift toward leveraging existing data to inform meaningful decision-making. Strengthening impact orientation, without overcomplicating the system, can help ensure that sustainability considerations move from symbolic gestures to operational tools that guide Hamburg’s budgetary priorities pragmatically and transparently.

Figure 20: SWOT Free and Hanseatic City of Hamburg



Source: KDZ own elaboration, in collaboration with Local Experts and Beneficiary, 2025

4 First Key Findings and Lessons Learnt in SDG Budgeting across the SLPF Cities

The successful integration of the Sustainable Development Goals (SDGs) into local budgeting practices hinges not only on technical reforms but also on deeper structural, political, and cultural conditions. Across the European Union, the administrative histories, political traditions, and governance systems of Member States continue to shape the appetite for reform and the nature of public sector modernisation. These underlying factors are evident in the findings from the first assessment phase of the SLPF project, which are presented in this report.

Following the examination of how Amsterdam, Barcelona, Bordeaux Métropole, and Hamburg are directing to integrate the SDGs into their budgetary processes, this chapter adopts a broader analytical lens, aiming to consolidate the findings from these four case studies, identifying overarching trends, cross-cutting challenges, and emerging practices. This comparative perspective underscores opportunities for mutual learning among cities and provides preliminary lessons (learnt) for strengthening SDG budgeting as a strategic instrument within European local governments.

A first key insight is the significant heterogeneity among the four participating cities, particularly regarding their legal and strategic frameworks guiding the path to SDG-oriented budgeting. This divergence has substantial implications for how effectively the SDGs can be embedded within local public finance systems and related reform initiatives.

At the same time, generally, efforts to measure and compare public sector performance often remain hampered by the continued lack of robust, comparable data, especially at the local level. Despite decades of initiatives by international, European, and national actors to develop performance indicators for public administration, this gap persists. The drive for comparative assessment is increasingly seen as essential, given the critical role that governance and public finance play in advancing sustainable development. The SDG agenda is no exception: its effective integration into budget cycles calls for both measurable outcomes and commonly applicable frameworks.

Local governments are central to this process. In their recognised role as investors, service providers, employers, and policy-makers, they are responsible for shaping inclusive, well-functioning communities. They oversee major infrastructure projects, contract out key services, manage large public workforces, and cooperate with national and regional authorities to deliver core public goods such as transportation, infrastructure, and public safety. Their ability to successfully balance these responsibilities is directly linked to how well they are governed and financed.

However, regulatory environments for local public finance and the frameworks guiding SDG implementation differ widely, even among the SLPF cities. While the degree of centralisation or federalisation is a relevant factor, as we can observe in this project, it does not alone determine success or failure. Instead, as this report highlights, local realities, institutional flexibility, and the capacity to adapt play equally important roles.

In this light, advancing SDG-oriented budgeting requires more than isolated reforms. It demands the development of comprehensive, long-term municipal strategies that are anchored in the SDGs, yet remain flexible enough to adapt to diverse institutional contexts.

Moreover, aligning these strategies with reformed and harmonised public financial management systems is essential to realising the ambitions of Agenda 2030 at the local level. More details are discussed in the following sub-sections.

4.1 Enabling Conditions for Starting SDG Budgeting in Local Public Finances

Before municipalities can effectively implement SDGs in their budgeting, a solid foundation must be in place. It demands a deliberate and comprehensive approach to institutional readiness, a kind of readiness framework outlining the essential enabling conditions municipalities should establish before embarking on SDG-aligned budgeting. These foundational elements – political, strategic, organisational, legal, technical, and data-related—create the environment necessary for SDG budgeting to take root and deliver meaningful results.

Hereunder, the authors try to summarise and cluster these enabling conditions and then assess them in light of the four SLPF city-specific reports to provide a structure to check where each city stands in terms of readiness and what elements are critical to initiate the transition toward SDG-aligned budgeting. It is based on the work carried out so far within the SLPF project, including a specifically joint co-design workshop held in July 2025, and providing a valuable forum for discussion. In Brussels, an expert group with 20 participants from the four SLPF cities together with the European Commission SG Reform, examined these enabling factors, identifying several key success factors that local governments should consider when preparing to implement SDG budgeting.

For example, political leadership, such as a mayor publicly endorsing the SDGs and linking them to the municipal vision, can catalyse the entire process. Similarly, having a clear and strategic policy framework that aligns municipal priorities with the 2030 Agenda helps ensure coherence and continuity across electoral cycles. Without such alignment, budgeting efforts risk becoming fragmented or purely symbolic.

The most relevant success factors stemming from this workshop and in-depth discussion, along with the recommended stages or sequence for their incorporation into a budgeting methodology, are highlighted and included in the categorisation below.

1. Legal, Procedural, and Technical Frameworks

A supportive legal and procedural environment is crucial, regardless of whether it comes from the national or local level. Municipalities may need to revise existing financial regulations, budget guidelines, and administrative procedures to accommodate SDG principles. Technical standards and tools, such as program-based or performance-based budgeting systems or SDG tagging methodologies as described earlier, should be adapted and institutionalised to support implementation.

2. Political Commitment and Vision

Strong political leadership is crucial for initiating and sustaining SDG budgeting. A clear commitment from elected officials and senior municipal executives not only signals the importance of aligning local finance with the SDGs but also builds institutional momentum. A shared vision for sustainable development fosters ownership and provides the political backing needed to drive reforms, allocate resources, and maintain continuity across electoral cycles.

3. Integration into Strategic Planning

To ensure relevance and coherence, SDG budgeting must be embedded within existing municipal strategic and development plans. This alignment enables municipalities to prioritise SDG-related objectives within their broader policy agenda, thereby avoiding fragmentation and ensuring that sustainability goals are reflected in long-term planning and annual budget cycles.

4. Design of Responsible Structures

Clear governance and coordination structures are vital for operationalising SDG budgeting. Municipalities should designate specific departments or coordination units to lead the process, define roles and responsibilities across institutions, and establish accountability mechanisms. These structures, whether as dedicated task forces or as existing organisational units (budgeting office, management control units, or similar) adapted to the new mandate, serve as the backbone for managing complexity and maintaining focus throughout implementation.

5. Interdepartmental Cooperation

Sustainable development is inherently cross-cutting. Achieving SDG alignment in budgeting requires strong interdepartmental collaboration to ensure coherence across policy areas. Mechanisms for joint planning, regular communication, and coordinated decision-making help break down silos and encourage integrated approaches to resource allocation.

6. Internal Capacity and Skills

Building internal capacity is a prerequisite for effective SDG budgeting. Municipal staff must be equipped with the necessary skills in areas such as performance-based budgeting, SDG localisation, and results monitoring. Investment in training, knowledge sharing, and capacity development ensures that the workforce can adapt to new processes and methodologies.

7. Data and Indicator Infrastructure

Reliable data and a robust indicator (KPI) framework are foundational to evidence-based budgeting. Municipalities must invest in data collection, management, and analysis systems capable of tracking progress against SDG targets. Timely and relevant data enable informed decision-making, enhance transparency, and support the monitoring and evaluation of outcomes.

From the seven 'key enablers' identified, the SLPF city experts stressed above all the importance of political commitment and vision (2), interdepartmental cooperation (5), internal capacity and skills (6), and data and indicator infrastructure (7). The presence of robust political endorsement bestows legitimacy and continuity, while the collaborative integration of diverse departments ensures that sustainability objectives are systematically integrated into all policy domains. Concomitantly, the presence of well-trained staff is imperative for the implementation of SDG

budgeting, while reliable local data with clearly defined indicators serves as the foundation for evidence-based decision-making.

4.2 SDG-Oriented Budgeting in the SLPF cities: A Comparative Perspective

The status quo analysis gives an interesting insight into the progress of SDG-oriented budgeting in four important cities/local governments of Europe. This assessment aims to shed light on how far each city has progressed in establishing the necessary foundations or conditions, where gaps remain, and what preliminary lessons can be drawn for others embarking on similar efforts. From it, the authors can not only identify strengths, progress and perhaps even some omissions, but can also see where current good practice and innovation could well be expanded and help facilitate the development of SDG budgeting in order to support the Agenda 2030 both within the beneficiary countries and beyond.

Generally, it was seen how time and resource-intensive the implementation of SDGs in the cities, done properly, is. The experiences of the four beneficiary cities in this project clearly illustrate both the challenges and the significant, albeit varied, progress achieved in a relatively short time. At the same time, these experiences offer valuable opportunities for reflection on the way forward.

Absence of Legal Frameworks for SDG Budgeting

A key insight is the absence of (specific) dedicated legal frameworks for SDG budgeting in all four cities. A partial exception is encountered in Bordeaux, which, through national legislation, is required for environmental spending and to append an environmental annexe to its budget. This annexe aligns with the six environmental axes of the EU Taxonomy. While this approach is limited in scope, it provides a regulatory starting point that others lack.

Similar is the situation in Hamburg. Although the legal framework, in particular the City's Budget Code (LHO), mandates performance-based budgeting with attention to gender equality and ecological, economic, and social sustainability, there is no binding legal obligation to implement the SDGs.

Varying Strategic Anchors for SDG Implementation

Only Barcelona and Hamburg have adopted dedicated SDG strategies. In Hamburg, strong political leadership is evident, with the Senate defining clear SDG policy guidelines and prioritisations within the planning process. Barcelona combines its SDG and Climate strategy with a sophisticated Indicator Platform, comprising over 200 KPIs for Agenda 2030 tracking.

Amsterdam does not have a formal SDG strategy, but its longstanding focus on social and political priorities – framed around sustainability, circular economy, and equal opportunities- shaped a strong strategic narrative. These priorities have contributed to place-branding and institutional focus.

The Role of Budgeting Perspectives

Longer-term (multi-annual) budget planning, such as that practised in Amsterdam and Hamburg, serves as an enabling condition for integrating SDG strategies. It embeds political priorities

beyond the constraints of traditional, annual budget cycles and allows for greater coherence with sustainability goals. In three cities, Barcelona, Bordeaux, and Hamburg, this strategic orientation has also led to the development of voluntary or mandatory SDG or green annexes submitted alongside the annual budget. These documents represent a significant step in operationalising SDG commitments within financial frameworks.

In Amsterdam, an interesting “Goal Tree” (Doelenboom) model is used to structure long-term objectives, assess budget business cases qualitatively, and align cross-programme priorities. In practice, this model employs an activity-based budgeting approach, directly linking costs to specific subprogrammes, activities and their goals. The defined goals, discussed and approved by the College of Mayor and Alderpersons (*College van burgemeester en wethouders, B&W*), can draw inspiration from the SDGs. However, the model's potential for fully integrating the SDGs remains limited. This is primarily due to its MECE (Mutually Exclusive, Collectively Exhaustive) design, where each activity and budget item is assigned to one distinct goal. In contrast, the SDGs are inherently cross-cutting, with many activities contributing to multiple goals simultaneously.

Voluntary Local Reviews (VLRs) as a Monitoring Tool

Three of the four cities (excluding Bordeaux) have undertaken VLRs. These exercises help monitor SDG progress and provide a structured framework for reporting and reflection, reinforcing transparency and accountability. This reporting exercise also engages external stakeholders by prompting discussion and building awareness, bringing forward topics that can be linked to the policy debate and, in turn, lay the groundwork for greater attention to SDG budgeting.

Shared Practices and Local Variations

Despite clear city-specific approaches, several commonalities emerged in all four cities:

- ◆ Use of performance-based budgeting practices.
- ◆ Application of tailored technical and digital tools, such as SAP, in budget management.
- ◆ Existence of cross-sectoral sustainability teams or (political) commissions within city government.

While the first two are largely technical enablers, the third, a governance innovation, is increasingly vital. In traditionally siloed city administrations, where budgeting and planning often operate in isolation, these teams promote collaborative, bottom-up approaches essential for SDG integration.

For example, Amsterdam has established a dedicated in-house sustainability team acting as a knowledge task force, notably to set up the climate budgeting. Barcelona has created a cross-sectoral municipal SDG commission at the political level, designed to coordinate planning and communication, though its current use remains a bit limited.

Linking Budgets with (SDG) Indicators

There is growing momentum to connect budgetary decisions with performance indicators. While sectors like health and education already use established metrics (e.g., PISA), other areas of local administration – the machinery of government – have, however, long been a statistical wasteland, except for budget data and the national accounts, and thus remained under-measured. The SDGs

now provide a globally accepted framework to address this gap, while localising them remains a huge challenge.

Hamburg exemplifies this shift, with a performance-based budgeting model incorporating gender, economic, ecological and social sustainability. While its indicators are not yet directly linked to expenditures, they form a strong foundation for SDG budgeting, with a number of respective products and indicators.

Barcelona's annual Annex on Budget Alignment with the SDGs allows the city to report and track current expenditures related to the Agenda 2030. Additionally, its Climate Budget Assessment Report evaluates the CO₂ impact of major capital investments, especially under SDG 13 (Climate Action).

Financing the SDG Agenda: A Diverse Landscape

A central challenge remains: Where will the funding come from? Here, city-specific financial structures diverge: Hamburg, as a city-state, enjoys higher fiscal autonomy and relies less on national transfers, though it does receive federal grants for specific purposes such as sustainable mobility (e.g. zero-emission buses) or childcare investments, even if these are not directly linked to the SDGs.

In contrast, Bordeaux faces increasing centralisation of fiscal policy, with national incentives (e.g., for green transitions) replacing direct financial authority. This has led Bordeaux and other French municipalities to explore alternative funding sources, such as green bonds and municipal loans, and increasingly pursue EU funding, especially when tied to climate-related objectives.

Barcelona depends heavily on intergovernmental transfers; almost 50% of its 2024 income came from such sources, primarily via the Complementary Fund, from the national government. This raises the critical question frequently voiced by some local leaders: Can national financing mechanisms be better tailored to support SDG implementation?

Amsterdam similarly receives approximately 40% of its revenue from the national Municipal Fund for financing their local responsibilities and political priorities but maintains a high degree of fiscal autonomy through own-source revenues and land ownership. The Dutch SPUK grant (*Specifieke Uitkering*) offers targeted funds for specific policy areas or when financial resources are insufficient to cover essential needs, including sustainability and social inclusion, two core pillars of the SDG agenda. These earmarked grants provide valuable flexibility while ensuring alignment with national priorities.

Figure 21 provides a comparative overview of the common features and practices identified across the four SLPF cities in their progress toward SDG budgeting, based on the enabling conditions (EnC) as explained above in Chapter 4.1.

Figure 21: Overview of First Common Features & Practices following the Identified Enabling Conditions in the Four Cities

EnC	Common identified features & practices	Amsterdam	Barcelona	Bordeaux	Hamburg
1.	Legal framework for SDGs available	⊖	⊖	⊖ / ✓	⊖ / ✓
	Performance-based budgeting in use	✓	✓	✓	✓
2.	Political commitment / leadership / visión	🔍	⊖ / ✓	✓	✓
3.	Own SDG Strategy (local – and/or national) in place	⊖	✓	🔍	✓
	Mid- to long term city budgets embedding political priorities	✓	⊖	🔍	✓
4./5.	Existence of cross-sectorial municipal commission / sustainability team and cooperation	✓	✓	✓	✓
7.	(SDG) KPIs/Indicators for tracking	🔍	✓	🔍	✓
	Use of (tailored) digital tools to support process	✓	✓	✓	✓
	Specific tool/methodology (own or external) to support/facilitate SDG delivery	🔍	🔍	✓	✓
	Mandatory/voluntary SDG/ “green” appendix produced	⊖	✓	✓	✓
Other features:					
	EU funding “influence”	🔍	✓	✓	⊖ / ✓
	National (specific) funds for local authorities issued	✓	🔍	✓	✓
	Voluntary Local Review (VLR)	✓	✓	⊖	✓

Source: KDZ, own illustration, 2025

Legend:

EnC=enabling conditions, ✓ confirms the presence of a given feature, ⊖ marks its absence, ⊖/✓ means partially, and 🔍 signals that the feature could not be fully verified or that attention is given to it, though not to a clearly defined extent

4.3 Conclusions

Given the enabler criteria mentioned above, together with the key findings of the cities' SDG-related budgeting approaches, the following main takeaways for further developments can be identified:

Using the SDGs as a Shared Strategic Compass, but Tailored to the Context

- The SDGs are already central to city strategies across the board, yet they rarely determine ceilings, reallocations or spending reviews. They guide direction more than they govern finances and are not yet applied comprehensively, and their broad “scope” continues to be a challenge.
- Cities need flexible, context-sensitive SDG-approaches rather than “one-size-fits-all” models. The SDGs should anchor long-term municipal strategies and public financial management reforms, rather than sit alongside them. Because governance traditions and fiscal systems vary widely, success depends on local realities, institutional flexibility, and adaptive capacity, rather than merely on centralisation versus localisation.

Evolving SDG Tagging into Steering the Budget

- Cities differ in how they integrate the SDGs into their budgets, mainly due to varying budget cycles, competencies and legal backgrounds, as well as political leadership. While SDG tagging is becoming common practice, it remains primarily descriptive and is not yet systematically linked to budget planning or used as a governing tool. The established performance-based budgeting and management systems in place provide a strong foundation for deeper SDG integration, offering a solid entry point.
- The next step should go beyond tagging and leverage existing performance and budgeting tools, such as budget calls, ceilings, reprioritisation processes, and spending reviews, to systematically embed the SDG framework. This will allow SDGs to evolve from a reference point into an integrated part of the genuine steering instruments for financial decisions.

Anchoring SDG Implementation in Core City Services and Responsibilities

- Cities apply the SDGs primarily through their concrete services and products, e.g. waste management, mobility, housing, social services, education, and environmental protection. This service-based entry point makes the SDGs tangible and relevant to citizens' daily lives. However, this means that the broader potential of the SDG framework often remains underutilised, as the focus stays confined to specific sectors or projects.

- Moving forward, it will be crucial to treat city services and responsibilities as the anchor point for SDG implementation, while at the same time determining how broadly the SDG framework should guide budgetary decisions. Cities will need to reflect whether to focus on a selected set of SDGs that are most directly linked to municipal mandates and core service delivery, ensuring a stronger and more realistic alignment with local competences. Or cities decide to use the full set of SDGs, embedding them across all functions and financial processes to promote a holistic vision of sustainable development. This choice will determine the depth and breadth of SDG integration into local budgeting and governance and will shape how the SDGs may evolve from being a strategic reference to becoming a practical, governing tool that guides financial priorities.

Strengthening Enablers Before Scaling SDG Integration

- Cities have already taken steps to integrate the SDGs into their budgeting processes. These efforts often build on existing governance structures, performance-based budgeting systems, and data practices, and they demonstrate a growing recognition of the SDGs as a guiding framework. At the same time, approaches are still in their early stages and differ in scope and depth. In most cases, integration is not yet comprehensive across departments or fully embedded in budget governance, but the foundations are in place to build upon.
- To expand and consolidate these initiatives, it is important to strengthen a set of enabling conditions so that SDG approaches can evolve from pilots to established routines, with particular attention to:
 - ➔ Political commitment and vision – providing long-term leadership and continuity across electoral cycles.
 - ➔ Interdepartmental cooperation – fostering collaboration so that SDGs become a unifying framework across municipal functions.
 - ➔ Internal capacity and skills – equipping staff to link SDG objectives with budgeting and performance management systems.
 - ➔ Data and indicator infrastructure – developing robust, decision-relevant information to connect SDG priorities with spending and results.

Harnessing the Potential of Digital, Open and Interoperable Data

- Relevant data for SDG monitoring and budgeting is already often being collected, but often in separate systems and formats across departments. While first steps toward digitalisation, open data platforms, and indicator dashboards have been taken, the information is not yet consistently available in integrated data warehouses or fully interoperable systems. As a result, the available data provides important insights for

reporting, yet its potential to systematically support evidence-based financial decision-making is only partly realised.

- This requires strong attention to data provision, accessibility and digitalisation. Reliable and up-to-date information must be systematically collected and stored that allow consistent use across departments. Open data policies and interoperable systems are essential to ensure that information can be shared easily between different actors, from municipal departments to regional and national levels. Close cooperation between statistical offices, finance departments, and sectoral units is needed to align indicators with budget structures. In this way, measurement systems become not only technically robust but also transparent and collaborative, providing a solid foundation for evidence-based SDG budgeting.

Building Coherent Measurement Systems that Link Indicators to Financial Decisions

- The SDGs provide cities with a shared language of outcomes that enables them to align local strategies with global goals. Yet, this potential can only be realised if measurement systems are designed to be both locally relevant and flexible enough to reflect different municipal responsibilities. Indicator frameworks therefore need to be localised and tailored to the specific context, services, and priorities of each city as well as modular, so that they can be expanded and refined over time.
- A key future task is to ensure that these indicators are not only tracked as part of monitoring exercises or KPI systems but are also progressively connected to budget appropriations and financial processes. This means linking outcome indicators with concrete budget lines, allocations, and spending reviews. Only by creating such a coherent system can cities move from reporting on SDG progress to actually steering resources in line with SDG objectives, thereby closing the gap between measurement and financial decision-making.

Integrating the SDGs Through Multi-Annual Budgeting and Investment Planning

- In many local contexts, budgets are still prepared mainly on an annual cycle, which makes it more challenging to fully align financial decisions with long-term SDG objectives. Multi-annual frameworks are already in place in several cases and provide an important reference, though they are often used mainly for expenditure forecasts rather than serving as comprehensive tools for steering investment. At the same time, promising practices have emerged: for example, sustainability annexes attached to capital budgets, climate assessments of large infrastructure projects, and investment programmes aligned with international standards such as the EU taxonomy. These examples illustrate how a longer-term perspective can strengthen the link between financial decisions and sustainability goals.
- Embedding the SDGs more effectively in budgeting calls for a stronger multi-annual perspective and a systematic focus on investments. Medium-term budget frameworks

can provide stability and predictability for sustainability-related spending, while investment planning becomes the arena where trade-offs between social, economic, and environmental objectives are made visible. Applying blended assessment lenses that balance financial, social, ecological, and governance impacts makes it possible to evaluate investments in a more holistic way. In this way, major projects in areas such as infrastructure, housing, mobility, or the green transition can become powerful drivers of SDG implementation.

Aligning Financing Strategies with SDG Delivery

- Local governments operate under very different financing conditions. Some rely heavily on transfers from higher levels of government, while others benefit from stronger fiscal autonomy and broader revenue-raising powers. These variations influence the extent to which SDG priorities can be integrated into budget decisions and investment planning.
- Strengthening the link between financing strategies and SDG delivery will require a diversified and forward-looking mix of funding sources. Earmarked grants, national transfers designed with SDG objectives in mind, EU or international funds, and instruments such as green or sustainability bonds can all provide fiscal space for SDG-related investments. By combining these sources strategically, financing can be stabilised over the medium term and aligned more directly with the long-term sustainability outcomes set out in the SDGs.

From Today's Goals to Tomorrow's Frameworks: Keeping SDG Budgeting Adaptive

- SDG budgeting is evolving in a broader international and political environment that is itself in transition. Current debates around the EU taxonomy and sustainable finance standards, the ongoing struggle to balance economic competitiveness with climate protection, and the emerging global discussion on the Agenda beyond 2030 will have direct consequences for how local budgets are designed and justified in the future. These shifts may alter the weight given to certain goals, redefine reporting requirements, and introduce new expectations for transparency and accountability.
- Against this backdrop, it is essential that SDG governance and budgeting systems remain flexible and adaptive. At minimum, local governments must stay aware of these international and European developments and design their systems so they can integrate new priorities and frameworks without losing continuity. Building such adaptive capacity will ensure that SDG budgeting not only reflects today's strategic objectives but also remains resilient and relevant in the face of tomorrow's policy shifts.

These initial insights highlight the need for tailored context-sensitive approaches and recommendations. In the context of the SLPF project and its current stage of development, it is likely still too early to draw broad, overarching recommendations, which will follow in the next

phase with the designing and drafting of individual Action Plans for the four SLPF cities. However, some lessons learnt have already been articulated throughout the various chapters of this report.

Readers of this first report are therefore encouraged to reflect on the findings presented and begin forming their own conclusions based on the enabling factors, challenges, and opportunities discussed. Progress will be reported and can be followed on the SLPF website (<https://www.kdz.eu/en/slpf>).

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References

- Afdeling Buitengewone Zaken. (2024, September 11). *Evaluatie buurtbudgetten*. Gemeente Amsterdam. <https://openresearch.amsterdam/nl/page/112105/evaluatie-buurtbudgetten>
- AFNOR. (2023). *Livre blanc : Vers un budget soutenable ? La ville de Pessac, territoire démonstrateur*
- Allers, M. A., & de Natris, J. G. (2021). Preventing local government defaults: No-bailout policy and its alternatives. In R. Geissler, G. Hammerschmid, & C. Raffer (Eds.), *Local public finance: An international comparative regulatory perspective* (pp. 187–208). Springer.
- Allers, M., & Merkus, E. (2013). *Soft budget constraint but no moral hazard? The Dutch local government bailout puzzle* (SOM Research Report No. 13014-EEF). University of Groningen, SOM Research School. https://www.coelo.nl/images/rapporten/Soft_budget_constraint_but_no_moral_hazard_the_dutch_local_government_bailout_puzzle.pdf
- Alonso-Morales, N., Gil-García, P., Sáez-Martín, A., & Haro-de-Rosario, A. (2024). Analysis of the influence of financial sustainability on the achievement of SDG 2 in public sector. In M. del Carmen Valls Martínez & J. Santos-Jaén (Eds.), *Environmentally sustainable production: Research for sustainable production* (pp. 155–171). Springer Nature.
- AMF & Banque des Territoires. (2020). *Analyse financière des communes et des EPCI : Les leviers de l'investissement*
- Banque des Territoires. (2023, March 14). *Quels sont les changements apportés par l'instruction M57 du point de vue budgétaire ?* <https://www.banquedesterritoires.fr/quels-sont-les-changements-apportes-par-linstruction-m57-du-point-de-vue-budgetaire>
- Banque des Territoires. (2024, December 16). *Versement des fractions de TVA aux collectivités locales : Quels enjeux pour les années à venir ?* <https://www.banquedesterritoires.fr/versement-des-fractions-de-tva-aux-collectivites-locales-quels-enjeux-pour-les-annees-venir>
- Banque des Territoires. (2025, January 27). *La santé financière de l'ensemble des collectivités s'est dégradée en 2024*. <https://www.banquedesterritoires.fr/la-sante-financiere-de-lensemble-des-collectivites-sest-degradee-en-2024>
- Banque des Territoires. (2025, February 17). *La loi de finances pour 2025 est publiée, avec ses 2,2 milliards de ressources en moins pour les collectivités*. <https://www.banquedesterritoires.fr/la-loi-de-finances-pour-2025-est-publiee-avec-ses-22-milliards-de-ressources-en-moins-pour-les>
- Banque des Territoires. (2025, March 5). *Soutien à l'investissement local, fonds vert : Une circulaire fixe la doctrine de l'État pour 2025*. <https://www.banquedesterritoires.fr/soutien-linvestissement-local-fonds-vert-une-circulaire-fixe-la-doctrine-de-letat-pour-2025>
- Banque des Territoires. (2025, May 7). *Budget 2026 : Le gouvernement ouvre le débat avec les collectivités*. <https://www.banquedesterritoires.fr/budget-2026-le-gouvernement-ouvre-le-debat-avec-les-collectivites>
- Bartram, J., Brocklehurst, C., Bradley, D., Muller, M., & Evans, B. (2018). Policy review of the means of implementation targets and indicators for the sustainable development goal for water and sanitation. *NPJ Clean Water, 1*(1), 3. <https://doi.org/10.1038/s41545-018-0003-0>
- Bascher, J., & Pantel, G. (2023, June 13). *État et collectivités territoriales : Les bons comptes feront les bons amis ! Rapport d'information n° 729 (2022–2023)*. Sénat. <https://www.senat.fr/rap/r22-729/r22-729.html>
- Bekkers, H. (2024). Gemeentegeld stallen bij rijk ongunstiger. *Binnenlands Bestuur*. <https://www.binnenlandsbestuur.nl/financien/klimaatadaptatie/gemeentegeld-stallen-bij-rijk-ongunstiger>

- Benito, B., Guillamón, M. D., & Ríos, A. M. (2023). The sustainable development goals: How does their implementation affect the financial sustainability of the largest Spanish municipalities. **Sustainable Development, 31*(4), 2836–2850.* <https://doi.org/10.1002/sd.2551>
- Bericht des Rechnungshofes: Nachhaltige Entwicklungsziele der Vereinten Nationen, Umsetzung der Agenda 2030 in Österreich; Follow-up–Überprüfung. (2030).
- Bertelsmann Stiftung (Hrsg.). (2025, August 14). SDG-Indikatoren für Kommunen – Vierte Auflage: Indikatoren zur Abbildung der Sustainable Development Goals der Vereinten Nationen in deutschen Kommunen (4. Auflage) [PDF-Publikation; 89 Seiten]. Bertelsmann Stiftung. <https://www.bertelsmann-stiftung.de/de/publikationen/publikation/did/sdg-indikatoren-fuer-kommunen-vierte-auflage>
- BezVG. (2006). **Bezirksverwaltungsgesetz** [District Administration Act]. <https://www.landesrecht-hamburg.de/bsha/document/jlr-BezVwGHA2006V24P28>
- BHO. (1969). **Bundeshaushaltsordnung** [Federal Budget Code]. <https://www.gesetze-im-internet.de/bho/>
- Bischof, G., & Karlsrufer, F. (Eds.). (2015). **Austrian federalism in comparative perspective**. University of New Orleans Press. <https://doi.org/10.2307/j.ctt1n2txpf>
- Bisogno, M., Cuadrado-Ballesteros, B., Manes-Rossi, F., & Peña-Miguel, N. (2024). Financial sustainability and sustainable development in local governments: Empirical insights. **Public Performance & Management Review**. <https://doi.org/10.1080/15309576.2024.2340116>
- Bordeaux Métropole. (2024). **Climate City Contract—Investment plan**.
- Bordeaux Métropole. (2024). **Rapport de présentation du budget 2024**.
- Bordeaux Métropole. (2025). **Comptes administratifs 2024**.
- Bordeaux Métropole. (n.d.). **Budget participatif : À vous de voter !** <https://www.bordeaux-metropole.fr/actualites/budget-participatif-a-vous-voter>
- Bouley, D., Jacobs, D., & Héris, J.-L. (2009). **Budget classification** (Technical Notes and Manuals 2009/06). International Monetary Fund. <https://doi.org/10.5089/9781462343478.005>
- Calmel, M.-P. (2017, April 26). France supports accrual accounting for the public sector. **Accounting, Economics, and Law: A Convivium, 7*(2), 125–129.*
- Caruana, J., Brusca, I., Caperchione, E., Cohen, S., & Manes-Rossi, F. (2019). Exploring the relevance of accounting frameworks in the pursuit of financial sustainability of public sector entities: A holistic approach. In J. Caruana, I. Brusca, E. Caperchione, S. Cohen, & F. Manes-Rossi (Eds.), **Financial sustainability of public sector entities** (pp. 1–18). Palgrave Macmillan.
- City of Amsterdam. (2024, September 19). **Begroting 2025**. Municipality of Amsterdam. <https://www.amsterdam.nl/bestuur-organisatie/begroting/begroting-2025/>
- CNEN. (2024). **Rapport public d’activité 2023**.
- Cohen, S., Manes-Rossi, F., & Brusca, I. (2023). Are SDGs being translated into accounting terms? Evidence from European cities. **Public Money & Management, 43*(7), 669–678.* <https://doi.org/10.1080/09540962.2023.2243543>
- Congress of Local and Regional Authorities. (2021, December 17). **Netherlands—Monitoring report**. Council of Europe. <https://www.congress-monitoring.eu/en/9-pays.html>
- Cordery, C. J., & Hay, D. C. (2022). Public sector audit in uncertain times. **Financial Accountability & Management, 38*(3), 426–446.*
- Corte dei Conti. (2024). **Relazione sulla gestione finanziaria degli enti locali—Comuni, Province e Città metropolitane. Esercizi 2021–2023**. <https://www.corteconti.it/Download?id=d829a9c3-96c7-460b-8994-7e96a5ed9603>
- Cour des comptes. (2022). **Le financement des collectivités territoriales : Des scénarios d’évolution**.

- Cour des comptes. (2023). *Les transferts financiers de l'État aux collectivités territoriales : Des objectifs et instruments à redéfinir ? Contribution à la revue des dépenses publiques*.
- Cuadrado-Ballesteros, B., Mordán, N., & García-Sánchez, I. M. (2014). Is local financial health associated with citizens' quality of life? *Social Indicators Research, 119*, 559-580.
- Cubel, M., Durán, J. M., Espasa, M., Esteller, A., de Gispert, C., Hortas, M., Salinas, P., Sorribas, P., & Vilalta, M. (2015). *Autonomía y equidad en la financiación municipal: dos principios compatibles* (M. Vilalta, Ed.). Universitat de Barcelona.
- Data and methods for measuring consumption-related spillover effects. (n.d.). [author? publisher? URL?]
- de Jong, E., & Vijge, M. J. (2025). Institutionalizing leaving no one behind: Operationalizing and analyzing worldwide national efforts. *Globalizations, 22*(4), 652-670.
<https://doi.org/10.1080/14747731.2024.2401702>
- De la Fuente, A. (2022). *La evolución de la financiación de las comunidades autónomas de régimen común, 2002-2020* (EEr 2022-22). FEDEA.
<https://documentos.fedea.net/pubs/eee/2022/eee2022-22.pdf>
- Decentralization Net. (2023, December). Municipal finance in the Netherlands and worldwide.
<https://decentralization.net/2023/12/municipal-finance-in-the-netherlands-and-worldwide/>
- Deslatte, A., & Swann, W. L. (2017). Context matters: A Bayesian analysis of how organizational environments shape the strategic management of sustainable development. *Public Administration, 95*(3), 807-824.
- DGCL — Statistique publique. (2025). *Les collectivités locales en chiffres 2024*.
https://www.collectivites-locales.gouv.fr/files/Accueil/DESL/2024/Collectivit%C3%A9s%20locales%20en%20chiffres%202024/BAT2web-CL_en_chiffres_2024.pdf
- DGCL. (2024). *Guide pratique—La dotation globale de fonctionnement*. <https://www.collectivites-locales.gouv.fr/files/Finances%20locales/Dotations%202024/Guide%20DGF%20maj%2019%20mars.pdf>
- DGCL. (n.d.). *Budget vert des collectivités : Foire aux questions*. <https://www.collectivites-locales.gouv.fr/finances-locales/budget-vert-des-collectivites-foire-aux-questions>
- DGCL. (n.d.). *Gestion de trésorerie*. <https://www.collectivites-locales.gouv.fr/finances-locales/gestion-de-tresorerie>
- Direction du Budget. (2025). *Rapport sur la situation des finances publiques locales. Annexe au projet de loi de finances pour 2025*.
- Direction Générale des Finances Publiques & Direction Générale des Collectivités Locales. (2023, August). *L'amortissement linéaire au prorata temporis*. https://www.collectivites-locales.gouv.fr/files/finances-locales/M57/fiches%20pratiques%20M57/M57_prorata_temporis.pdf
- Direction Générale des Finances Publiques & Direction Générale des Collectivités Locales. (2023, November). *Les subventions d'équipement versées*. https://www.collectivites-locales.gouv.fr/files/finances-locales/M57/fiches%20pratiques%20M57/M57_Fiche_SEV.pdf
- Drucksache 22/10947. (2023, February 14). *Mitteilung des Senats an die Bürgerschaft: Bericht über die gleichstellungswirksamen Haushaltsplanziele und -kennzahlen 2022*.
https://www.buergerschaft-hh.de/parldok/dokument/82803/22_10947_bericht_ueber_die_gleichstellungswirksamen_haushaltsplanziele_und_kennzahlen_2022_gemaess_drucksache_22_7028
- Drucksache 22/15906. (2024, July 26). *Eine umfassende Nachhaltigkeitsstrategie für Hamburg*.
https://www.buergerschaft-hh.de/parldok/dokument/88121/22_15906_eine_umfassende_nachhaltigkeitsstrategie_fuer_hamburg

- Drucksache 22/17568. (2025, January 15). *Unterrichtung durch die Präsidentin der Bürgerschaft: Bürgerschaftliches Ersuchen vom 6. Dezember 2023 ...*
- Drucksache 22/3643. (2023, March 23). *Evaluation des Gesetzes zur Strategischen Neuausrichtung des Haushaltswesens der Freien und Hansestadt Hamburg (SNHG): Erfahrungsbericht des Senats*. https://www.buergerschaftthh.de/parldok/dokument/74943/evaluation_des_gesetzes_zur_strategischen_neuausrichtung_des_haushaltswesens_der_freien_und_hansestadt_hamburg_snhg_erfahrungsbericht_des_senats.pdf
- Drucksache 504/06. (2006, July 18). *Gesetzesantrag der Länder Hamburg, Hessen: Entwurf eines Gesetzes zur Änderung des Haushaltsgrundsätzegesetzes*. <https://dserver.bundestag.de/brd/2006/0504-06.pdf>
- Durán, J. M. (2013). Els impostos municipals: Anàlisi i proposta de millora. *Nota d'Economia, 101*, 66–78.
- Dutch State Treasury Agency. (n.d.). *Schatkistbankieren voor decentrale overheden*. <https://www.dsta.nl/schatkistbankieren/klanten/decentrale-overheden>
- European Commission, Directorate-General for Economic and Financial Affairs. (2023). *How green budgeting is embedded in national budget processes*. Publications Office. <https://data.europa.eu/doi/10.2765/285408>
- Federal Ministry of Finance. (2024a). *Financial relations between the Federation and Länder on the basis of constitutional financial provisions*. https://www.bundesfinanzministerium.de/Content/EN/Standardartikel/Press_Room/Publications/Brochures/financial-relations-federation-2024.pdf
- Federal Ministry of Finance. (2024b). *What are taxes and what are they used for?*. https://www.bundesfinanzministerium.de/Content/EN/Standardartikel/Press_Room/Publications/Brochures/what-are-taxes-and-what-are-tey-used-for.pdf
- Feitz, A. (2023, October 28). Transition écologique : Une « dette verte » pour les collectivités locales. *Les Échos*. <https://www.lesechos.fr/politique-societe/societe/transition-ecologique-une-dette-verte-pour-les-collectivites-locales-2025576>
- Fetet, M. (2025, February 11). *Anticiper le financement de la transition climat : Un outil au service des collectivités*. I4CE. <https://www.i4ce.org/anticiper-financement-transition-climat-outil-service-collectivites/>
- Freie und Hansestadt Hamburg, Behörde für Umwelt, Klima, Energie und Agrarwirtschaft (Ed.). (2023). *Voluntary local review 2023 Hamburg*. <https://www.hamburg.de/resource/blob/170236/77823dc051a71020c3cb594a37058da2/d-vlr-hamburg-english-version-data.pdf>
- Freie und Hansestadt Hamburg, Finanzbehörde. (2024a). *Geschäftsbericht der Freien und Hansestadt Hamburg 2023*. <https://www.hamburg.de/resource/blob/963634/e77152ac6a60cee69be023eb259f0802/geschaeftsbericht-2023-data.pdf>
- Freie und Hansestadt Hamburg, Finanzbehörde. (2024b). *Hamburger Finanzbericht 2025/26: Allgemeiner Vorbericht ... Mittelfristiger Finanzplan 2024–2028*. <https://www.hamburg.de/resource/blob/952314/126b2aef0f97833c617530496ecbcd7d/25-26-finanzbericht-2025-2026-data.pdf>
- Freie und Hansestadt Hamburg, Behörde für Finanzen und Bezirke. (2025). *Geschäftsbericht der Freien und Hansestadt Hamburg 2024*. <https://www.hamburg.de/resource/blob/1097668/62a7443123ebeb1b38849ce01a5df6c1/dl-geschaeftsbericht-2024-data.pdf>
- Fitch. (2024, August 30). *Fitch affirms State of Hamburg at 'AAA'; Outlook stable*. Fitch Ratings. <https://www.fitchratings.com/research/international-public-finance/fitch-affirms-state-of-hamburg-at-aaa-outlook-stable-30-08-2024>

- Forestier, O., & Kim, R. E. (2020). Cherry-picking the Sustainable Development Goals: Goal prioritization by national governments and implications for global governance. *Sustainable Development*, 28*(5), 1269–1278. <https://doi.org/10.1002/sd.2082>
- France Urbaine. (2024, October 24). **Budgetisation sensible au genre : Une mobilisation des villes pour l'égalité**. <https://franceurbaine.org/actualites/budgetisation-sensible-au-genre-une-mobilisation-des-villes-pour-egalite/>
- GebG. (2017). **Gebührengesetz* [Fees Act]*. <https://www.landesrecht-hamburg.de/bsha/document/jlr-GebGHA1986V6P6>
- GG. (1949). **Grundgesetz für die Bundesrepublik Deutschland* [Basic Law]*. <https://www.gesetze-im-internet.de/gg/BJNR000010949>
- Gil-García, P., Alonso-Morales, N., Haro-de-Rosario, A., & Sáez-Martín, A. (2024). Budget policies versus Sustainable Development Goal in the main Spanish municipalities. In M. del Carmen Valls Martínez & J. Santos-Jaén (Eds.), **Environmentally sustainable production: Research for sustainable production** (pp. 141–154). Springer Nature.
- Gouvernement. (2025, May 7). **Conférence financière des territoires**. <https://www.info.gouv.fr/communiqué/conference-financiere-des-territoires>
- Government of the Netherlands. (n.d.). **Decentralisation of government tasks**. <https://www.government.nl/topics/municipalities/decentralisation-of-government-tasks>
- Guarini, E., Mori, E., & Zuffada, E. (2022). Localizing the Sustainable Development Goals: A managerial perspective. **Journal of Public Budgeting, Accounting & Financial Management*, 34*(5), 583–601. <https://doi.org/10.1108/JPBAFM-02-2021-0031>
- Guerreiro, O. A., Guariso, D., & Castaneda, G. (n.d.). **Automatic SDG budget tagging: Building public financial management capacity through natural language processing**.
- Guené, C., & Raynal, C. (2022, July 20). **Rapport d'information ... sur les dotations d'investissement aux collectivités territoriales**. Sénat. <https://www.senat.fr/rap/r21-806/r21-8061.pdf>
- Hege, E., & Brimont, L. (2018). *Integrating SDGs into national budgeting processes* (Study No. 05/18). IDDRI. https://www.iddri.org/sites/default/files/PDF/Publications/Catalogue%20Iddri/Etude/2018-07-ST0518-SDGs-budget-EN_1.pdf
- HGB. (1897). **Handelsgesetzbuch* [German Commercial Code]*. <https://www.gesetze-im-internet.de/hgb/BJNR002190897.html>
- HGrG. (1969). **Haushaltsgrundsatzgesetz* [Budgetary Principles Act]*. <https://www.gesetze-im-internet.de/hgrg/BJNR012730969.html>
- HIW. (n.d.). **Key factors about Hamburg as a business location**. Hamburg Invest Wirtschaftsförderungsgesellschaft mbH. <https://hamburg-business.com/en/why-hamburg/top-facts-hamburg>
- Hogenstijn, M., Morel, M., de Nijs, K., van Winden, W., den Boer, G., Grujic, T., Goilo, J.-C., Gimbrère, S., & Buurma, O. (2022, October). **Sustainable Development Goals—Voluntary Local Review Amsterdam**. City of Amsterdam / Centre for Applied Research Economics and Management. <https://onderzoek.amsterdam.nl/publicatie/sustainable-development-goals-voluntary-local-review-amsterdam>
- HV. (1952). **Verfassung der Freien und Hansestadt Hamburg* [Constitution]*. <https://www.landesrecht-hamburg.de/bsha/document/jlr-VerfHApG7>
- I4CE & CDC Biodiversité. (2022). **Évaluation environnementale des budgets des collectivités territoriales: Guide méthodologique**.
- I4CE. (2024). **Panorama des financements climat des collectivités locales**. [URL?]

- Jandrevska, M. (2023, December 13). Municipal finance in the Netherlands and worldwide. *Decentralization.net*. <https://decentralization.net/2023/12/municipal-finance-in-the-netherlands-and-worldwide/>
- Jossin, J., & Peters, O. (2022). Sustainable Development Goals (SDG) indicators for municipalities: A comprehensive monitoring approach from Germany. *Journal of Urban Ecology, 8*(1), juac020. <https://doi.org/10.1093/jue/juac020> *Journal of Urban Economics, 65*(3), 279–293.
- Kaur, A., Argento, D., Sharma, U., & Soobaroyen, T. (2025). “Everything, everywhere, all at once”: The role of accounting and reporting in achieving Sustainable Development Goals. *Journal of Public Budgeting, Accounting & Financial Management, 37*(2), 137–155. <https://doi.org/10.1108/JPBAFM-01-2025-0011>
- Kim, R. E. (2023). Augment the SDG indicator framework. *Environmental Science & Policy, 142*, 62–67. <https://doi.org/10.1016/j.envsci.2023.02.004>
- Kraak, M., Ricker, B., & Engelhardt, Y. (2018). Challenges of mapping Sustainable Development Goals indicators data. *ISPRS International Journal of Geo-Information, 7*(12), 482. <https://doi.org/10.3390/ijgi7120482>
- LHO. (2021). *Landeshaushaltsordnung der Freien und Hansestadt Hamburg* [Budget Code]. <https://www.landesrecht-hamburg.de/bsha/document/jlr-HOHA2014V7IVZ>
- Llanos, A. O., Raven, R., Bexell, M., Botchwey, B., Bornemann, B., Censoro, J., Christen, M., Díaz, L., Hickmann, T., Jönsson, K., Scholz, I., Scobie, M., Sun, Y., Thompson, J., Thwaites, J., & Yunita, A. (2022). Implementation at multiple levels. In F. Biermann, T. Hickmann, & C.-A. Sénit (Eds.), *The political impact of the Sustainable Development Goals* (pp. 59–91). Cambridge University Press. <https://doi.org/10.1017/9781009082945.004>
- Lobo, F. C., Ramos, P., & Lourenço, O. (2011). Causes of financial distress of Portuguese municipalities: Empirical evidence. *International Journal of Monetary Economics and Finance, 4*(4), 390–409.
- Lucci, P. (n.d.). ‘Localising’ the post-2015 agenda: What does it mean in practice?
- Luhtala, M., Welinder, O., & Vikstedt, E. (2025). Glocalizing sustainability: How accounting begins for sustainable development goals in city administration. *Journal of Public Budgeting, Accounting & Financial Management, 37*(2), 196–223. <https://doi.org/10.1108/JPBAFM-06-2023-0097>
- Mang, P. R. (2013). *Regenerative development and design*. In V. Loftness & D. Haase (Eds.), *Sustainable built environments*. Springer.
- Mang, P., & Reed, B. (2012). *Regenerative development and design*.
- Methodology for assessing the EU Member States’ status and progress towards the SDGs. (n.d.).
- Ministerie van Binnenlandse Zaken en Koninkrijksrelaties. (2015, July 9). *Regeling vaststelling wijze waarop kengetallen worden vastgesteld ...* <https://wetten.overheid.nl/BWBR0036853/2019-04-01>
- Ministerie van Binnenlandse Zaken en Koninkrijksrelaties. (2019, July 1). *Besluit begroting en verantwoording provincies en gemeenten*. <https://wetten.overheid.nl/BWBR0014606/2019-07-01/>
- Ministerie van Binnenlandse Zaken en Koninkrijksrelaties. (2024, January 1). *Financiële-verhoudingswet*. <https://wetten.overheid.nl/BWBR0008290/2024-01-01>
- Ministerie van Binnenlandse Zaken en Koninkrijksrelaties. (2025, February 12). *Gemeentewet*. <https://wetten.overheid.nl/BWBR0005416/2025-02-12/>
- Ministerie van Economische Zaken, Ministerie van Infrastructuur en Waterstaat, & Ministerie van Buitenlandse Zaken. (2024, May 15). *Monitor Brede Welvaart & de Sustainable Development Goals 2024*. <https://www.rijksoverheid.nl/documenten/rapporten/2024/05/15/monitor-brede-welvaart-de-sdg-2024>

- Ministerie van Financiën. (2013, December 15). *Wet financiering decentrale overheden*. <https://wetten.overheid.nl/BWBR0011987/2013-12-15/>
- Ministerie van Financiën. (2023, September 26). *Comptabiliteitswet 2016*. <https://wetten.overheid.nl/BWBR0039429/2023-09-26/>
- Ministerie van Financiën. (2023, October 5). *Regeling schatkistbankieren decentrale overheden*. <https://wetten.overheid.nl/BWBR0034336/2023-10-05>
- Municipality of Amsterdam. (n.d.). *Auditdienst ACAM*. <https://www.amsterdam.nl/bestuur-organisatie/organisatie/overige-organisatieonderdelen/auditdienst-acam/>
- Municipality of Amsterdam. (n.d.). *Ombudsman Metropool Amsterdam*. <https://www.amsterdam.nl/bestuur-organisatie/organisatie/overige-organisatieonderdelen/ombudsman/>
- Municipality of Amsterdam. (n.d.). *Rekenkamer Metropool Amsterdam*. <https://www.amsterdam.nl/bestuur-organisatie/organisatie/overige-organisatieonderdelen/rekenkamer/>
- NL Times. (2025, February 18). Sharp increases in property taxes expected across Dutch municipalities. <https://nltimes.nl/2025/02/18/sharp-increases-property-taxes-expected-across-dutch-municipalities>
- OECD. (2019). *OECD good practices for performance budgeting*. <https://doi.org/10.1787/c90b0305-en>
- OECD (2020), A Territorial Approach to the Sustainable Development Goals: Synthesis report , OECD Urban Policy Reviews, OECD Publishing, Paris, <https://doi.org/10.1787/e86fa715-en>.
- OECD. (2021). *Green budget tagging: Introductory guidance & principles*. <https://doi.org/10.1787/fe7bfcc4-en>
- OFGL & DGCL. (2025). *Les finances des collectivités locales—Édition 2025*. Observatoire des Finances et de la Gestion Publique Locales. <https://www.collectivites-locales.gouv.fr/files/Accueil/DESL/2025/ofgl/2025/rapport%202025/Rapport%20OFGL%202525%201%20vue%20d%20ensemble.pdf>
- Okitasari, M., & Kandpal, R. (2022). Budgeting for the SDGs: Lessons from the 2021 voluntary national reviews.
- Padovani, E., Iacuzzi, S., Poljasevic, J., & Valle de Souza, S. (2025). A multicountry analysis of local government financial vulnerability during the 2020 pandemic considering systemic factors. *Financial Accountability & Management* 41(1). <https://doi.org/10.1111/faam.12403>.
- Padovani, E., Scorsone, E., Iacuzzi, S., & Valle de Souza, S. (Eds.). (2022). *Local Governments' Financial Vulnerability: Analysing the Impact of the Covid-19 Pandemic* (1st ed.). Routledge. <https://doi.org/10.4324/9781003274278>.
- Pays de Brest Pôle Métropolitain. (2021). Annexe n° 3—Récapitulatif des financements État au titre du plan de relance 2020–2021. In *Contrat de relance et de transition écologique—Territoire du Pays de Brest* (p. 99).
- Peters, O., & Neu, J. (2025). *SDG-Indikatoren für Kommunen: Indikatoren zur Abbildung der Sustainable Development Goals der Vereinten Nationen in deutschen Kommunen*. <https://doi.org/10.11586/2025065>
- Platform on Sustainable Finance. (2022, February). Final report on social taxonomy. European Commission. <https://commission.europa.eu/system/files/2022-03/280222-sustainable-finance-platform-finance-report-social-taxonomy.pdf>
- Raffer, C., Scheller, H., & von Zahn, F. (Eds.). (2025). *KfW-Kommunalpanel 2025*. KfW Bankengruppe.
- Redactie Binnenlands Bestuur. (2019, December 7). Amsterdam vervangt na 100 jaar huisbankier. *Binnenlands Bestuur*. <https://www.binnenlandsbestuur.nl/financien/huisbankier-amsterdam-na-100-jaar-vervangen>

- Rijksoverheid. (2018, December 21). *Grondwet voor het Koninkrijk der Nederlanden*. <https://wetten.overheid.nl/BWBR0001840/2018-12-21>
- Rijksoverheid. (2019, January 1). *Wet houdbare overheidsfinanciën*. <https://wetten.overheid.nl/BWBR0034360/2019-01-01>
- Ríos, A.-M., Guillamón, M.-D., & Benito, B. (2024). The influence of local government transparency on the implementation of the Sustainable Development Goals in municipalities. *Journal of Public Budgeting, Accounting & Financial Management, 36*(4), 417–444. <https://doi.org/10.1108/JPBAFM-12-2023-0229>
- Ruiz, M., Palacios, L., Quiroga, D., & Sanchez, O. (n.d.). *A proposal to measure SDG financing*
- Sachs, J., Schmidt-Traub, G., Kroll, C., Lafortune, G., Fuller, G., & Woelm, F. (2025). Sustainable Development Report 2025. Sustainable Development Solutions Network. <https://s3.amazonaws.com/sustainabledevelopment.report/2025/sustainable-development-report-2025.pdf>, DOI 10.25546/111909
- Salinas, P., & Vilalta, M. (2018). Financing of metropolitan areas: A special reference to the case of the AMB. *Papers, 61*
- Salinas, P., & Vilalta, M. (2021). *Propuestas de reforma del sistema de financiación local: Revisión de literatura*. Fundación Democracia y Gobierno Local.
- Sénat. (n.d.). *Les lois de finances*. <https://www.senat.fr/connaitre-le-senat/role-et-fonctionnement/les-lois-de-finances.html>
- SenGO. (2020). *Geschäftsordnung des Senats der Freien und Hansestadt Hamburg* [Rules of Procedure]. <https://www.landesrecht-hamburg.de/bsha/document/jlr-SenGOHA2020rahmen>
- Siragusa, A., Vizcaino, P., Proietti, P., & Lavalle, C. (2020). European handbook for SDG voluntary local reviews. Publications Office of the European Union. <https://op.europa.eu/en/publication-detail/-/publication/7199c232-49bd-11ea-8aa5-01aa75ed71a1/language-en>
- Siragusa, A., Stamos, I., Bertozzi, C., & Proietti, P. (2022). European Handbook for SDG Voluntary Local Reviews – 2022 edition. Publications Office of the European Union. <https://op.europa.eu/en/publication-detail/-/publication/2fddfb0e-f5c2-11ec-b976-01aa75ed71a1/language-en>
- StabG. (1967). *Gesetz zur Förderung der Stabilität und des Wachstums der Wirtschaft* [Stability and Growth Act]. <https://www.gesetze-im-internet.de/stabg/BJNR005820967.html>
- Sustainable development in the European Union—Monitoring report on progress towards the SDGs in an EU context (2025 edition). (n.d.).
- United Cities and Local Governments (UCLG). (2022). *Voluntary subnational review: The Netherlands 2022*. GOLD. https://www.gold.uclg.org/sites/default/files/field-document/the_netherlands_2022_vsr_eng.pdf
- United Nations. (2015). Transforming our world: The 2030 Agenda for Sustainable Development (A/RES/70/1). United Nations General Assembly. <https://docs.un.org/en/A/RES/70/1>
- United Nations, Department of Economic and Social Affairs, Division for Sustainable Development Goals. (2024). Inter-agency policy briefs on accelerating progress on the 2030 Agenda from local to global levels: The critical importance of SDG localization. <https://sdgs.un.org/sites/default/files/2024-08/Inter-agency%20Policy%20Briefs%20on%20Accelerating%20Progress%202030%20-%20080124.pdf>
- Vie Publique. (2021, December 29). *Loi organique du 28 décembre 2021 relative à la modernisation de la gestion des finances publiques*. <https://www.vie-publique.fr/loi/281020-loi-28-decembre-2021-loi-modernisation-gestion-des-finances-publiques>
- Vie Publique. (2024, August 8). *Qu'est-ce que la LOLF ?* <https://www.vie-publique.fr/infographie/281218-infographie-quest-ce-que-la-lolf>

- Vie Publique. (2024, August 16). *Qu'est-ce qu'une loi de programmation des finances publiques (LPPF) ?* <https://www.vie-publique.fr/fiches/21867-quest-ce-quune-loi-de-programmation-des-finances-publiques-lppf>
- Vie Publique. (2024, February 15). *Les citoyens et les élus peuvent-ils contrôler les finances locales ?* <https://www.vie-publique.fr/fiches/21951-les-citoyens-et-les-elus-peuvent-ils-controler-les-finances-locales>
- Vie Publique. (2024, February 15). *Que sont les chambres régionales et territoriales des comptes (CRTC) ?* <https://www.vie-publique.fr/fiches/21955-que-sont-les-chambres-regionales-et-territoriales-des-comptes-crtc>
- Vie Publique. (2024, February 15). *Quels sont les contrôles des services de l'État sur les budgets locaux ?* <https://www.vie-publique.fr/fiches/21952-quels-sont-les-controles-des-services-de-letat-sur-les-budgets-locaux>
- Vie Publique. (2025, January 21). *Collectivités territoriales : Quels sont les effets des réformes récentes sur la fiscalité locale ?* <https://www.vie-publique.fr/en-bref/296919-collectivites-territoriales-les-reformes-recentes-fiscalite-locale>
- Wegscheider-Pichler, A. (n.d.). *Agenda 2030—SDG-Indikatorenbericht*. [publisher/URL?]
- Weingast, B. R. (2009). Second generation fiscal federalism: The implications of fiscal incentives.
- Wildasin, D. E. (1997). Externalities and bailouts: Hard and soft budget constraints in intergovernmental fiscal relations. *World Bank Policy Research Working Paper* (No. 1843).
- Woerth, E. (2024). *Décentralisation : Le temps de la confiance. Rapport au Président de la République*.
- Zhang, L.-C. (n.d.). *A taxonomy for indicators related to the Sustainable Development Goals*.