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MIRIANE DE FREITAS SEGALLA

LEAVING NO CITY BEHIND: TCESP AS A DRIVING FORCE TO SDG LOCALIZATION IN THE CITIES OF THE STATE OF SÃO PAULO

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Supervisor: Prof. Dr. Evan Michael Berman

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To my son, Guilherme, and my daughter, Helena, my strength and my most sensitive point, my inspiration and my pride. Because of you and for you, I have an inexhaustible desire to be a better person and make the world a better place. As the Bible says, you are my inheritance: what an honor and what a blessing it is to be the heir of you both. Words could not express my love.

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ABSTRACT

This dissertation addresses critical gaps in localizing the Sustainable Development Goal (SDG) in cities and the role Audit Institutions play in fostering the 2030 Agenda. Most studies focus on national-level implementation and federal audit bodies approaches, neglecting local governance challenges and regional external oversight institutions. This study examines São Paulo's municipalities performance in achieving SDGs, through Brazil's Sustainable Cities Development Index (IDSC), and investigates the tools and strategies that Audit Institutions, in particular the Court of Auditors of the State of São Paulo (TCESP), can use to promote the localization of the SDGs in municipalities. The main objective of the research is to identify gaps that hinder local sustainable development efforts, in order to propose practical mechanisms through which Audit Institutions can strengthen the capacity of municipalities, improve accountability and promote progress aligned with the 2030 Agenda. Despite SP State hosting 78 of the country's top-ranked cities, the highest score (66.76/100) underscores persistent implementation challenges. Using IDSC metrics and governmental data, the author examined the financial and infrastructural capacities of the municipalities of São Paulo, along with their proximity to or integration into or technological areas. Additionally, compliance with recommendations issued by the TCESP was assessed. Ultimately, municipal websites were analyzed to evaluate the level of familiarity with, and dissemination of, the theme of sustainable development. The research identified systemic barriers to SDG adoption, revealing that SP' municipalities face most of the common obstacles found in other urban areas around the world: lack of awareness, resource-limited issues, fragmented governance, technical deficits, and low public engagement. To address the underachievement of SP cities in adopting the 2030 Agenda and the above obstacles, this dissertation proposes that, based on analysis of TCESP's tools and actions, and global audit benchmarks, the Tribunal de Contas do Estado de São Paulo (TCESP) promotes changes using SDG-focused audits, capacity-building programs, and publicizing best practices. These tools deal with both technical and governance gaps while optimizing resource use, improving awareness and compliance, and generating benchmarking. While limited by IDSC's 2024 dataset, the findings advance SDG governance literature and provide TCESP with scalable strategies. Future studies should explore longitudinal trends and qualitative case studies. With the 2030 deadline

nearing, this research positions TCESP as a catalyst for transformative SDG action, trying to ensure no city is left behind.

Keywords: Court of Audit; TCESP; SDG localization; 2030 Agenda; municipalities.

RESUMO

Esta dissertação aborda lacunas críticas na localização dos Objetivos de Desenvolvimento Sustentável (ODS) nas cidades e o papel que as Instituições de Auditoria desempenham no fomento da Agenda 2030. A maioria dos estudos concentra-se na implementação em nível nacional e nas abordagens dos órgãos de auditoria federais, negligenciando os desafios da governança local e as instituições regionais de controle externo. Este estudo verifica o desempenho dos municípios paulistas no alcance dos ODS, por meio do Índice de Desenvolvimento das Cidades Sustentáveis (IDSC) do Brasil, e investiga as ferramentas e estratégias que as Entidades de Auditoria, em particular o Tribunal de Contas do Estado de São Paulo (TCESP), podem utilizar para promover a localização dos ODS nos municípios. O principal objetivo da pesquisa é identificar lacunas que dificultam os esforços locais de desenvolvimento sustentável, a fim de propor mecanismos práticos por meio dos quais as Entidades de Auditoria possam fortalecer a capacidade dos municípios, aprimorar a prestação de contas e promover o progresso da Agenda 2030. Apesar do Estado de São Paulo abrigar 78 das cidades mais bem classificadas do país, a pontuação mais alta (66,76/100) ressalta os desafios persistentes de implementação. Utilizando métricas do IDSC e dados governamentais, a autora analisou as capacidades financeiras e de infraestrutura dos municípios paulistas, bem como sua proximidade ou integração com áreas acadêmicas ou tecnológicas. Além disso, avaliou-se o cumprimento de recomendações anteriormente exaradas pelo TCESP. Por fim, foram analisados os sites municipais para avaliar o nível de familiaridade e disseminação do tema do desenvolvimento sustentável. A pesquisa identificou barreiras sistêmicas à adoção dos ODS, revelando que os municípios de São Paulo enfrentam a maioria dos obstáculos comuns encontrados em outras áreas urbanas ao redor do mundo: falta de conscientização, recursos limitados, governança fragmentada, déficits de capacidades técnicas e baixo engajamento público. Para abordar o baixo desempenho das cidades paulistas na adoção da Agenda 2030 e os obstáculos mencionados, esta dissertação propõe que, com base na análise das ferramentas e ações do TCESP e em benchmarks globais de auditoria, o Tribunal de Contas do Estado de São Paulo promova mudanças por meio de auditorias focadas nos ODS, programas de capacitação e divulgação de melhores práticas. Essas ferramentas abordam lacunas técnicas e de governança, otimizando o uso de recursos, melhorando a conscientização e a conformidade, e gerando benchmarking. Embora limitadas pelo conjunto de dados de 2024 do IDSC, as descobertas avançam a literatura sobre governança dos ODS e fornecem ao TCESP estratégias escaláveis. Estudos futuros devem explorar tendências longitudinais e estudos de caso qualitativos. Com o prazo de 2030 se aproximando, esta pesquisa posiciona o TCESP como um catalisador para ações transformadoras dos ODS, para tentar garantir que nenhuma cidade fique para trás.

Palavras-chave: Tribunais de Contas; TCESP; localização dos ODS; Agenda 2030; municípios.

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LIST OF ACRONYMS AND ABREVIATIONS

ATRICON Associação dos Membros dos Tribunais de Contas do Brasil (Brazilian

Association of Courts of Audit)

ECA European Court of Auditors

EPCP Escola Paulista de Contas Públicas (São Paulo School of Public

Account)

EU European Union

IBGE Instituto Brasileiro de Geografia e Estatística (Brazilian Institute of

Geography and Statistics)

ICS Instituto Cidades Sustentáveis (Sustainable Cities Institute)

IDSC Índice de Desenvolvimento Sustentável das Cidades (Sustainable

Cities Development Index - Brazil)

IEG-M *Índice de Efetividade da Gestão Municipal* (Municipal Management

Effectiveness Index)

INTOSAI International Organization of Supreme Audit Institutions

GDP Gross Domestic Product

MDGs Millennium Development Goals

OECD Organization for Economic Cooperation and Development

SAI Supreme Audit Institutions

SDGs Sustainable Development Goals

SDR Sustainable Development Report

SDSN Sustainable Development Solutions Network

TCESC Tribunal de Contas do Estado de Santa Catarina (Court of Auditors of

Santa Catarina)

TCESP Tribunal de Contas do Estado de São Paulo (São Paulo State Court of

Audit)

TCU Tribunal de Contas da União (Brazilian Federal Court of Audit)

UN United Nations

UN-DESA Department of Economic and Social Affairs

UNDP United Nations Development Program

UN-HABITAT United Nations Human Settlements Programme

UN-STATS United Nations Statistics Division

VLR Voluntary Local Reviews

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Leaving no city behind: TCESP as a driving force to SDG localization in the cities of the State of São Paulo

1 INTRODUCTION

In 2024, only 17% of the UN's Sustainable Development Goals (SDGs) were on track for completion by 2030 (United Nations, 2024a). It is the same percentage for regression. For Brazil – a country where 78 of the top 91 SDG-performing cities are in São Paulo State – local governance plays a decisive role in closing this gap. Yet, even the highest-ranked municipality scored just 66.76 out of 100 on Brazil's Sustainable Cities Development Index (IDSC), revealing critical implementation challenges.

The Sustainable Development Goals (SDGs) of the 2030 Agenda represent a global commitment to addressing economic, social, and environmental challenges, providing "a shared blueprint for peace and prosperity for people and the planet, now and into the future" (United Nations¹). In 2015, the 193 Members of the United Nations (UN) stablished 17 goals, subdivided into 169 targets, that are measured by 234 indicators (UN-STATS²) to address urgent global challenges until 2030. Building on the Millenium Development Goals (MDGs), the new agreement broader the desirable field of action for nations. The Secretary-General of the UN at the time, Ki-Moon Ban, stated on the first report about the SDGs:

The new agenda is a promise by leaders to all people everywhere. It is a universal, integrated and transformative vision for a better world. It is an agenda for people, to end poverty in all its forms. An agenda for the planet, our common home. An agenda for shared prosperity, peace and partnership. It conveys the urgency of climate action. It is rooted in gender equality and respect for the rights of all. Above all, it pledges to leave no one behind. (The Sustainable Development Goals Report 2016³)

While the SDGs provide a global framework, their success hinges on local adaptation. Although "implementation" and "localization" can be seeing as synonymous there are some important differences between the terms regarding focus,

¹ Available at: https://sdgs.un.org/goals. Accessed on: 30 April 2025.

² Available at: https://unstats.un.org/sdgs/indicators/indicators-list/. Accessed on: 5 May 2025.

Available at: https://unstats.un.org/sdgs/report/2016/The%20Sustainable%20Development%20Goals%20Report%202016.pdf. Accessed on: 5 May 2025.

execution, scope and others⁴. Both of them aim to put the sustainable development goals and targets into practice, but SDG localization is more specific or detailed and involves translating global sustainable goals into local policies, governance, and actions based on the specific needs, capacities, and challenges of cities, regions or territories.

Since the SDGs are interconnected, and some public projects and actions can affect different targets and goals, municipal-level adoption remains complex. Tailored strategies and strong governance frameworks are essential to ensure effectiveness. It involves tailoring the global SDG targets to the local realities and priorities, ensuring that global objectives are translated into practical, community-based actions. Considering that many SDG challenges (e.g., poverty reduction, clean water, education, infrastructure) are addressed at the local level, effective localization is critical for successful implementation (Guarin; Mori; Zuffada, 2022).

Currently, cities worldwide are at varying stages of adopting SDGs, with some demonstrating significant progress while others lag behind. "Performance in pursuit of SDGs is measured by means of indicators, which summarize a range of data and provide inputs for planning and oversight in public management, allowing the achievement of SDGs to be monitored" (Costa; Fernández, 2023, p. 2). In Brazil, municipalities such as those in São Paulo State exhibit disparities in SDG achievement, as measured by indices like the *Índice de Desenvolvimento Sustentável das Cidades* (IDSC – Sustainable Cities Development Index – Brazil, in English).

Despite efforts, many cities face systemic barriers, including little awareness of the topic, lack of technical knowledge, limited financial resources, fragmented governance, and insufficient public engagement, hindering their ability to meet global targets. With only five years remaining until the 2030 deadline, urgent action is needed to accelerate progress.

Existing research on SDG adoption often focuses on national or macro-level analyses, overlooking the unique challenges faced by local governments. Additionally, studies frequently neglect the role of regional oversight institutions, such as Audit

⁴ The differences will be more detailed in the Chapter 2. In order not to go unnoticed, the concept of SDG localization can be briefly summarized as "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" (UN, 2024, p. 3).

Institutions, in driving sustainable practices. These gaps limit the understanding of how auditing bodies can influence municipal governance to align with the 2030 Agenda.

"In the Brazilian context, the 33 State Courts of Accounts, Municipalities and Federal District (CAs) compose the control network on the public administration" (Lino; Aquino, 2018, p. 2). These institutions are part of the Legislative Branch and, despite being called "Courts"⁵, they have no legal function. However, their role is not diminished in any way, as by monitoring and guiding public managers, they hold the governments accountable and can influence decision-making towards better public policies. Sharing functional similarities with other external oversight bodies worldwide, such as the U.S. Government Accountability Office (GAO), these institutions assess compliance with legal frameworks, audit public expenditures, and promote transparency in public administration. These roles make them critical actors in advancing governance principles central to the 2030 Agenda.

The State of São Paulo, one of Brazil's most socioeconomically developed and well-resourced regions, accounts for 78 of the 91 highest-ranked municipalities in terms of SDG localization. However, even the top-performing city in the ranking achieved only 66.76 out of 100 points in the index evaluation. This suggests significant room for improvement, underscoring the need for deeper analysis.

Then, focusing on the SP municipalities and the audit institution responsible for their inspection, this study addresses a critical gap in the literature by investigating the potential role *Tribunal de Contas do Estado de São Paulo* (TCESP – São Paulo State Court of Audit, in English) can have in driving SP cities to improve the SDGs' adoption. Beyond theoretical contributions, the research holds practical significance for governance and public administration. Its findings provide actionable insights for municipal managers seeking to align local policies with the 2030 Agenda, while also offering Auditing Institutions – particularly TCESP – strategies to enhance their role in promoting sustainable urban development. By bridging academic analysis and real-world application, this study seeks to optimize the impact of external oversight on SDG adoption.

First, considering the sample selected, the study verified some of the characteristics of cities in São Paulo, such as population size and GDP *per capita*,

⁵ The term "Court", used in several Auditing Institutions with latin roots, comes from the fact that their decisions are taken jointly by a group of Councillors or Ministers, not from a juridical power. "The term court presupposes a collegiate body" (Chaves, 2009, p. 20 *apud* Martins *et al.*, 2018, p. 34).

proximity to academic and technological poles, compliance with irregularities presented in regular TCESP audits and the sensibilization and dissemination of the idea of sustainable development. Then, the study sought to identify successful practices of Auditing Institutions around the world and within TCESP, with the intention of fostering the global agenda. The intersection of these themes sought to elucidate the dynamics of SDG localization and the potential role of oversight bodies in bridging gaps between policy aspirations and municipal execution.

To evaluate whether the primary barriers to SDG localization observed globally persist in São Paulo's municipalities, this study employed a multi-dimensional analytical framework. Secondary data – including demographic density from the IDSC index – were analyzed to evaluate baseline conditions. Fiscal capacity was examined through governmental information about GDP, revealing financial resources available for policy implementation. The analysis of SP map allowed to verify the proximity cities have to main academic and technological hubs, to determine access to expertise and innovation, addressing structural limitations in technical and knowledge-based capacities. Further scrutiny focused on municipal governments' responsiveness to recurring inefficiencies, by accessing public data (IEG-M - Municipal Management Effectiveness Index, in English) relating problems previously diagnosed and reported by TCESP, over the past years. Lastly, to assess awareness of sustainable development principles, the study conducted a qualitative review of official municipal websites, evaluating the extent to which SDG-related initiatives were publicly reported. This approach provided insights into both institutional prioritization of the 2030 Agenda and broader engagement levels among public officials and citizens.

To investigate how TCESP can effectively address current challenges and support cities in fostering sustainable development, this study examined the literature for exemplary initiatives undertaken by Audit Institutions globally. These cases demonstrated how audit bodies have facilitated progress toward the full adoption of SDGs through diverse approaches. Notably, TCESP's own interventions were highlighted, as its past initiatives have already contributed to measurable improvements in local governance and community outcomes.

By synthesizing two key areas of inquiry - (1) the primary challenges faced by SP's cities in advancing the local adoption of the SDGs, and (2) the tools and strategies employed globally by Audit Institutions to promote the 2030 Agenda - this study

addresses the central research question: how can Audit Institutions, particularly the Court of Audit of the State of São Paulo (TCESP), enhance the localization of the Sustainable Development Goals (SDGs) in municipalities? The objective is to identify critical gaps hindering local sustainable development efforts while proposing actionable mechanisms through which Audit Institutions can strengthen municipal capacities, improve accountability, and accelerate progress toward the 2030 Agenda – ensuring inclusivity and leaving no city behind.

This research provides insights for academics, policymakers and Audit Institutions by highlighting challenges other regions can face in implementing the SDGs and discussing mechanisms and strategies other Audit Institutions could use to drive auditees towards the full adoption of the 2030 Agenda. Moreover, this study is relevant as it seeks to bridge the gap between theoretical frameworks and practical governance, offering insights into how Auditing Institutions can foster sustainable development at the local level.

Embedded in theoretical teachings on SDG implementation and localization, and by analyzing the IDSC data and TCESP's tools, the research aims to propose actionable strategies to strengthen SDG in cities, ultimately contributing to the global sustainability agenda.

This dissertation is structured as follows: after this introduction, Chapter 2 provides a broad overview of SDGs, its measuring and evaluation through indexes worldwide, but as the analysis progresses, the focus gradually shifts to a more detailed examination of Brazilian cities and, especially, São Paulo State cities. At the same time, Chapter 2 presents a wide view of auditing practices related to sustainable development, exploring the existing literature and frameworks related to the public sector auditing the 2030 Agenda. Starting with Superiors Audit Institutions, the study details the specific Brazilian audit system, narrowing it down to regional Courts of Audit, particularly TCESP, exploring several tools the Court has to approach its auditees. These transitions pave the road and serve as basis for the analysis made, allowing a deeper dive into the real-world situation to explore SDGs in SP cities.

Following, Chapter 3 outlines the limitations faced and the limits chosen for this dissertation, and presents the methodological steps taken, as well as the characteristics of the index chosen to support the analyses: Sustainable Cities Development Index – IDSC. These steps discussed in this chapter make the research

process transparent and replicable, enabling replication or adaptation by other Courts of Audit.

Thus, Chapter 4 examines data to identify urban characteristics of SP best ranked municipalities, according to IDSC, the specific index that examines all Brazilian cities regarding sustainable development actions. After verifying generical data like the population size and GBD, the study focuses on specifics like how these cities address the SDG theme on its official webpage and how they perform on the TCESP management effectiveness index, as well as how near they are to regions with academic and technological structure. Regarding the actions from Audit Institutions, the study verifies different approaches auditing bodies took around the world, aiming to foster the adoption of SDGs. In addition, the chapter highlights actions and tools TCESP have already used, in the past, to foster compliance and governance in other important themes, like Covid-19.

Through this analysis, in Chapter 5, the study derives theoretical insights while proposing actionable approaches for improving the adoption of SDGs in cities. These strategies, designed to enhance SDG localization, emphasize scalability and adaptability, ensuring their potential application extends beyond the immediate regional context. The findings desire to bridge research and practice, offering transferable solutions to advance sustainable urban development.

Finally, Chapter 6 synthesizes the research findings, presenting key conclusions and actionable recommendations to enhance SDG localization in cities and 2030 Agenda-focused auditing. The discussion acknowledges the study's limitations and constraints while proposing future research directions to provide tools for local managers to advance the UN goals, as well as to improve understanding of public sector auditing's role in sustainable development. These pathways aim to address emerging challenges in SDG localization and oversight, contributing to both academic discourse and practical frameworks.

2 ASSESSMENT FRAMEWORK AND OVERVIEW OF TOPICS

This chapter outlines the theoretical concepts and key academic discussions related to sustainable development and the approach Courts of Audit are giving to the theme worldwide, narrowing it down to the Author's field of action: São Paulo State Court of Audit (TCESP – Tribunal de Contas do Estado de São Paulo, in Portuguese).

It first presents a brief retrospective of the topic of sustainable development in the world in recent decades and its evolution, addressing the indicators that allowed monitoring if the goals are being achieved. Then, the next section reviews the literature on the evolving role of Courts of Audit globally regarding SDG, addressing the ways auditing practices broader to include the analysis, evaluation and promotion of the ever-growing theme of sustainable development. Following this but narrowing the object of study, this chapter provides an overview of the TCESP's actions in order to approach the SDGs, both inside and outside – in its auditees. These sections lay the groundwork for understanding how cities in São Paulo State are dealing with the SDGs and how TCESP can be a driving force for the necessary advancing of the theme.

2.1 How the story begins: timeline and importance of the Sustainable Development Goals (SDGs) and 2030 Agenda

Sustainability is a word that mankind is debating for some years, now. It is all about finding balance among three different dimensions and achieving social justice (social sustainability), environmental preservation (environmental sustainability) and economic prosperity (economical sustainability) at the same time.

In 2015, the Sustainable Development Goals and the 2030 Agenda emerged as an international commitment and an evolution of the Millennium Development Goals (MDGs), bringing a more comprehensive and integrated approach (TCESP, 2023). International agreements from 2000 to the present show a deliberate effort to refine objectives, extend the scope of intervention, and enhance multiple dimensions of human well-being. This shift reflects a growing recognition of the need for widespread strategies to achieve sustainable and equitable development worldwide. Figure 1 illustrates the key international agreements established in the 21st century,

some of the landmark frameworks that demonstrate the global commitment to sustainable development:

The SDGs are launched, with The Millennium 17 goals and 169 targets Development Goals (MDGs) guiding global developmeent are established, focusing until 2030. on eradicating extreme poverty and improving education and halth. 2025 2000 2012 2015 Today The Rio+20 Conference recognizes the need for a new set of broader and more sustainable goals

Figure 1 – The sustainable development evolution in the 21st century

Source: Own elaboration using Al.

The 2030 Agenda, adopted by all countries members of the United Nations (UN), is based on 17 sustainable development goals with 169 underlying targets. Of which progress is measured through a set of global indicators for monitoring performance, updated periodically⁶.

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⁶ See the full list of indicators of the SDG Index on https://unstats.un.org/sdgs/indicators/indicators-list/. Accessed on: 24 May 2025.

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Figure 2 – The UN traditional logo for Sustainable Development Goals

Source: INTOSAI

The global agreement is not mandatory although "all 193 UN member states signed up to adhere to the SDGs and report on domestic progress made towards their realization" (Guiry, 2024, p. 4). Despite the SDGs do not constitute binding obligations, some factors are highlighted as motivators for the adoption of the Agenda: "the role of law, particularly inter- and transnational law, the legitimacy of the framework, the notion of reciprocity, reputational concerns, national self-interest, and the moral duty to address the shared global challenges of sustainable development" (Guiry, 2024, p. 1).

Therefore, the adoption of the SDGs is not characterized as a legal obligation or subject to financial penalties, in itself. It is a work of raising awareness, convincing and engaging leaders and civil society, through time. The global pact does not undermine the autonomy of each nation, region or city to act, but it raises consciousness that the consequences of actions can affect everyone.

From the fifteen years that the countries had to implement 2030 Agenda, two thirds had already passed. Even though some progress has been made, such as reducing extreme poverty⁷ or increasing access to schools and education in various parts of the globe, there are still some obstacles to overcome and so much to achieve

⁷ According to the UN (2015), before the beginning of SDGs, extreme poverty had been reduced from 36% to 10%. However, the downward movement was affected by the Covid-19 pandemic (UNSD, 2024), causing the percentage to reach 8,5%, in 2024, according to the World Bank Group (2024).

once challenges such as hunger and inequality remain. In the words of Antônio Guterres, Secretary-General of the UN, on The Sustainable Development Goals Report 2023⁸, "Unless we act now, the 2030 Agenda will become an epitaph for a world that might have been". According to the last report published by the UN's Department of Economic and Social Affairs, The Sustainable Development Goals Report 2024 shows that some targets and goals had stalled in recent years due to global crises, such as pandemics, geopolitical conflicts and growing climate chaos.

The 2024 progress assessment reveals the world is severely off-track to achieve the 2030 Agenda. [...] out of 135 targets with trend data and additional insights from custodian agencies, only 17% are progressing as expected to be achieved by 2030. Nearly half (48%) exhibit moderate to severe deviations from the desired trajectory, with 30% showing marginal progress and 18% indicating moderate progress. Alarmingly, 18% have stagnated, and 17% have regressed below the 2015 baseline levels (United Nations, 2024a).

Figure 3 – Overall progress assessment across targets with trend data, 2024 or the latest data



Source: Sustainable Development Goals Report 2024

As Guterres emphasized on the online launch of the 2024 annual report⁹, "without massive investment and scaled up action, the achievement of the SDGs – the blueprint for a more resilient and prosperous world and the roadmap out of current global crises – will remain elusive".

Worldwide the benefits of the implementation of the SDGs are obvious, starting with poverty eradication, lifting billions out of extreme poverty, going on preventing extreme climate changes and the occurrence of natural disasters, achieving the promotion of world peace, reducing violence and strengthening democratic institutions.

As a member of the UN and a signatory of the 2030 Agenda, Brazil committed to implement the SDGs within the stipulated timeframe. Beyond fulfilling an

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⁸ Available at: https://unstats.un.org/sdgs/report/2023/The-Sustainable-Development-Goals-Report-2023.pdf. Accessed on: 05 May 2025.

⁹ Available at: https://unstats.un.org/sdgs/report/2024/. Accessed on 30 March 2025.

international agreement, this process presents substantial domestic benefits. Advancing the SDGs in Brazil offers a strategic opportunity to tackle persistent sociohistorical inequalities and promote more balanced national development. Moreover, it can enhance food security, attract investment in a green economy, and ensure sustainable management of the country's extensive natural resources.

Furthermore, the implementation of the SDGs fosters greater institutional transparency and public accountability, mitigating corruption and inefficiencies within government institutions. In the Brazilian context, adopting policies aligned with the SDGs could substantially enhance the population's quality of life.

2.1.1 Impacting big, acting local: the relevance of localization of SDGs in cities

A crucial aspect of achieving the SDGs lies in their adoption at the local level, where the direct impact on people's lives is most evident. While the SDGs provide a broad global framework for sustainable development, their success depends on how effectively they are translated into policies, programs, and initiatives at the municipal and regional levels.

More than implementing SDGs locally, it is necessary to localize the goals and targets, what means "the process of cascading their implementation and monitoring from the global to the local level of government" (UN-HABITAT, 2015 *apud* Guarini; Mori; Zuffada, 2022, p. 590).

The implementation of the SDGs refers to the operationalization of global targets into concrete policies, programs, and actions at national and subnational levels. This process often involves aligning existing development plans with the SDGs, setting measurable indicators, and mobilizing resources to achieve the goals. However, implementation tends to focus on technical and administrative measures, such as gap analyses and target-setting, without necessarily adapting the goals to local contexts or engaging broader stakeholders.

In contrast, localization goes beyond mere implementation by emphasizing the contextual adaptation of the SDGs to local realities, priorities, and governance structures. It involves a participatory approach that engages local governments, civil society, and communities in translating global goals into locally relevant strategies. As Jönsson and Bexell (2021, p. 184) argue, localization is a "process through which

political decisions at the global level are adopted by political institutions at lower levels and integrated into the policy ambitions of those institutions." This distinction is further underscored by Ciambra *et al.* (2023, p. 1), who note that localization requires "defining, implementing, and monitoring strategies at the local level" while addressing unique socio-political dynamics. Thus, while implementation is a top-down, technical process, localization is a bottom-up, politically embedded approach that ensures the SDGs resonate with local needs and actors.

Table 1 highlights the main differences between the two concepts.

Table 1 – The differences between "implementing" and "localizing" SDGs

Aspect	Implementing SDGs	Localizing SDGs
Definition	Executing national/global SDG-aligned policies.	Adapting SDGs to local contexts and priorities.
Scope	National or international.	Local, city, or community level.
Approach	Top-down: led by national governments.	Bottom-up: driven by local stakeholders.
Objective	Meet global targets of the 2030 Agenda.	Align global goals with local needs.
Policy Orientation	Sectoral and strategic at national level.	Integrated into local plans and budgets.
Stakeholders	National agencies, ministries.	Local authorities, citizens, civil society.
Data & Indicators	Uses national-level data.	Uses disaggregated and local data.
Challenges	Coordination and coherence across sectors.	Resource and capacity limitations.
Monitoring & Evaluation	National statistics and global reporting.	Voluntary Local Reviews, community metrics.
Outcome Focus	National goal achievement.	Local impact and community development.

Source: Own elaboration using Al.

Considering the UN has been using the term "localization" since the beginning of the 2030 Agenda validity, the terminology will be used in this dissertation as "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" (UN-DESA; UN-HABITAT; UNDP, 2024, p. 2) and the subsequent monitoring of the adoption of actions.

With the concept in mind, and "because SDGs are not legally binding, it is important to discuss how to localize these goals, i.e. how LGs (local governments) can

lead the implementation of SDGs targets at the local level" (Guarini; Mori; Zuffada, 2022, p. 585).

Cities, as centers of economic activity, social diversity, and environmental challenges, play a pivotal role in this process. With more than half of the world's population residing in urban areas – a number expected to rise in the coming decades – sustainable urban development is essential to meeting global targets. If it is considered that "cities represent half of the world's population and two-thirds of the global economy, it can confidently be said that the SDGs have been adopted in an urban world. It is for this reason that action at the city-level is crucial, and the likelihood of the SDGs being successful is considerably greater if local and regional governments are sufficiently empowered" (Woodbridge, 2015, p. 1).

The Brazilian urban population is even bigger: 87% do Brazilians live in cities, according to the last census (Agência IGBE, 2024). Considering these numbers, it is important to study the vital role of cities and local governments in driving sustainable change, addressing how localized strategies can accelerate the fulfillment of the 2030 Agenda.

Municipalities and local governments have been at the radar of various academics and strategists for sustainable development for a long time. Even before the establishment of the 2030 Agenda, when the world was still debating the MSDs, the opinions were that:

When all is said and done, cities stand at the very center of each and every one of the biggest challenges we face: climate, pollution and energy; jobs and economic opportunity; poverty and inequality; sustainability and resilience; curbing violence and ensuring personal safety and security; accelerating the spread of personal freedom, tolerance and democracy; and of course spending trillions upon trillions of dollars on infrastructure, housing and city services in the most effective way (Florida, 2014, p.2).

Woodbridge (2015, p. 3) summarized "if cities change, so does the world" and explained that:

Given that urbanization is now a global-scale process, future of the planet depends on how cities grow, function and respond to stress. By getting urban development right, cities can accelerate progress towards achieving the SDGs by creating jobs and offering better livelihoods; improving social inclusion; promoting the decoupling of living standards and economic development from environmental resource use; protecting local and regional ecosystems; alleviating both urban and rural poverty; and drastically reducing pollution and greenhouse gas emissions. Because the global impacts of climate change are

most visible locally, cities will serve as the indicator of progress within the SDGs.

In 2019, the First Vice-President of the European Committee of the Regions Commission stated that the "analysis shows that 65% of the 169 SDG targets cannot be reached without the consultation or involvement of regions and cities" (Abramavicius, 2019, p. 19).

The localization of SDGs may require collective efforts, but it is the best way to ensure that sustainability laborers directly address the needs of urban populations, creating a more equitable and resilient future. The success of the 2030 Agenda depends on the ability of cities to turn global goals into local realities.

Theory of Change:

If cities:

- Have clearly defined, evidence-based development targets for 2030, and understand their baseline status of achieving these targets through urban data tools:
- Know the actions and investments needded to achieve these targets;
- Have the support needed to build key capacities (data management, policy, planning, governance, financing);
- Are able to design projects that have significant SDG impact;
- Are able to blende sources of public and private finance to ensure impact at scale;
- Have a means to measure the contribution of these actions and investments towards their targets; and can recognise progress in achieving SDGs; and
- Are able to share their knowledge and experiences with similar cities,

They will be equipped to address their challenges, imporve the quality of life of their inhabitants and help drive the achievement of global sustainable development. (UN-HABITAT)

What was once considered a desirable initiative has, after a decade of the 2030 Agenda's validity, become a fundamental step toward achieving global sustainability: the localization of the SDGs at the city level. As home to the majority of the world's population, cities are at the forefront of economic, social, and environmental challenges. While they face numerous obstacles, they also hold unique opportunities for advancing sustainable development. In this context, local governments emerge as key actors in fulfilling the commitments of the 2030 Agenda.

Several cities around the globe are tailoring global targets to face local realities and priorities. Facing poor air quality, Santiago (Chile) took measures like converting

30% of its bus fleet to electric among others, reducing the days with poor air quality by 70% over a decade (SDGs 3, 11 and 12); Cape Town (South Africa) facilitated citizens' access to information and improve livability by providing wi-fi on public transport and using real-time data to tackle surveillance and reduce time in emergency response (SDGs 9 and 16) (Edmond, 2024). Among the best ranked cities in the world, sustainable initiatives are even easier to find: Gothenburg (Sweden), for example, helps to cut carbon emissions investing in cycling paths and areas for electric vehicle charging (SDGs 7 and 11); Oslo (Norway) goes beyond investing in green options for transportation – it also indicates in the city touristic website restaurants that received Michelin Green Star for sustainable practices and hotels that uses renewable energy¹⁰ (SDGs 2, 7 and 12).

Municipalities can look to each other for guidance on their achievements and obtain implementation and monitoring roadmaps through benchmarking. In addition, since the 2030 Agenda is an international commitment, various institutions around the globe provide and release guides, manuals, and other documents to facilitate the implementation, localization, measurement and analysis of the SDGs. The following examples can be mentioned:

- a) "Roadmap for localizing the SDGs: implementation and monitoring at subnational level" (by Global Taskforce of Local and Regional Governments, UNDP and UN-Habitat)¹¹;
- b) "Guide for the localization and integration of the Sustainable Development Goals" (*Guia de territorialização e integração dos Objetivos de Desenvolvimento Sustentável*, in Portuguese), one of the 4 guides from the series "SDG Localization: Your Municipality Helping to Transform the World" (by UN-SDG Brazil, UNDP Brazil and Petrobras)¹³;

¹² Information about the series is available at: https://www.undp.org/pt/brazil/news/pnud-e-petrobras-lancam-coletanea-de-territorializacao-dos-objetivos-de-desenvolvimento-sustentavel.

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¹⁰ Available at: https://www.bbc.com/travel/article/20240402-five-standout-cities-making-the-world-a-better-place. Accessed on: 5 May 2025.

Available at: https://sustainabledevelopment.un.org/content/documents/commitments/818 11195 commitment R OADMAP%20LOCALIZING%20SDGS.pdf.

Available at https://www.undp.org/sites/g/files/zskgke326/files/migration/br/d2b759d4cd785cb56fe02b71ef766fb1
0d0c1bc8fa58fc61444ac68ab6b7db84.pdf.

c) "The Sustainable Development Goals: what local governments need to know" (by United Cities and Local Governments)¹⁴.

Furthermore, local and regional governments can profit from international organizations formed with the purpose of fulfilling one of the 2030 Agenda motos – "leave no one behind", like Sustainable Development Goals Cities 15. As their webpage explains, SDG Cities is "a global initiative that unleashes the potential of cities to accelerate sustainable development and improve wellbeing for all. It aims to respond to and generate demand amongst cities to pursue the achievement of SDGs during the Decade of Action (2020-30)". This initiative headed by UN-Habitat gives guidance and funding through international cooperation to support sustainable urban development.

However, implementing several sustainable actions without monitoring their development is risking wasting time, efforts and financial resources. This is why evaluating, adjusting, recalibrating and improving actions is so important to achieve effectiveness. Wherefore this is the topic of the next section.

2.1.2 Keeping track: measurement, evaluation and dissemination of SDGs localization

Measurement and evaluation are integral components of the public policy cycle, contributing to its effectiveness and maintenance. Without a clear understanding of current progress, achievements, and areas needing improvement, it becomes difficult for policymakers and stakeholders to assess outcomes or make informed decisions about future actions. Recognizing results and identifying necessary adjustments depends on a structured approach to monitoring and evaluation. If it is crucial for a wide comprehension of a regular scenario, it becomes vital when a global achievement is in order.

The rapid global urbanization highlights the necessity of monitoring the SDGs localized in cities, especially considering the projection of 70% of the world's population residing in urban areas by 2050 (UN-HABITAT). Continuous monitoring is both a virtuous and necessary step following the localization of sustainable development

¹⁴ Available at: https://www.uclg.org/sites/default/files/the-sdgs-what-localgov-need-to-know-0.pdf.

¹⁵ Available at: https://www.sdg-cities.org/.

targets. It enables the assessment of progress, the identification of areas requiring attention, and the implementation of timely adjustments to ensure effective and sustained advancement toward the goals.

Nonetheless, cities frequently face significant challenges in developing and maintaining effective SDG monitoring systems. Many local governments lack the technical expertise, financial resources, and institutional capacity to design or adapt appropriate indicators. Additionally, the processes of data collection, analysis, and the conversion of financial and operational data into meaningful sustainability metrics present further difficulties. Maintaining a monitoring framework that ensures consistency for longitudinal comparisons compounds these challenges, particularly for smaller cities with constrained resources.

While there is widescale demand by cities to understand how they are performing on the achievement of SDGs, many cities worldwide also need support in translating performance dada into strategic plans and to the development, financing and implementation of targeted actions that can accelerate the achievement of SDGs and improve wellbeing for all (UN-HABITAT¹⁶).

Effective responses to global sustainable development challenges depend on access to robust, comparable data. However, municipalities that adopt customized indexes and monitoring systems risk creating fragmentation in sustainability assessment frameworks. This lack of standardization not only undermines the effectiveness of monitoring initiatives but also limits opportunities for cross-city learning and comparative benchmarking.

The use of established indicators – particularly those developed by the UN, either independently or through partnerships – ensures methodological reliability and promotes broad adoption. Standardized indices serve not only as catalysts for action but also as mechanisms for transforming raw data into practical policy insights. With consistent metrics, public administrations can refine existing policies or design new interventions, whether by adapting strategies from other municipalities or developing locally tailored solutions. Moreover, uniform indicators facilitate cross-jurisdictional comparisons, enabling benchmarking and collaborative learning among cities, regions, and nations. These external tools enable more consistent reporting and help bridge

¹⁶ Available at: https://unhabitat.org/programme/sustainable-development-goals-cities. Accessed on: 28 March 2025.

the gap between global goals and local action, thereby enhancing policy coherence and accountability (Ciambra *et al.*, 2023).

Evaluation serves as a fundamental mechanism for enhancing policy effectiveness and reinforcing institutional accountability. However, merely conducting evaluations is insufficient to ensure transparency and align local actions with international commitments. The principles of transparency and publicity require the active dissemination of evaluation results.

Following the measurement and assessment of SDG localization within a specific region or municipality – including subsequent policy adjustments to better achieve established targets – governments must prioritize the public disclosure of their strategies, actions, and outcomes. This practice not only strengthens institutional accountability but also facilitates knowledge exchange among municipalities and fosters civic participation.

The dissemination of successful outcomes yields additional benefits, including the potential to inspire emulation among other jurisdictions. Publicizing achievements can attract positive attention and investment to the region while fostering social cohesion through enhanced community engagement with public, private, and third-sector stakeholders. Such transparency creates a virtuous cycle of benchmarking and continuous improvement across municipalities.

Furthermore, communicating results in accessible language bridges the gap between technical governance and public understanding. By translating administrative decisions into tangible community impacts visible in schools, healthcare facilities, and public spaces, municipalities can cultivate collective ownership of SDG targets. This approach transforms abstract policy goals into relatable experiences, thereby increasing civic awareness and commitment to sustainable development objectives.

Local and regional governors can share what has been done on their websites, on local newspapers, on online platforms as Instagram, on national or international spaces, physical or virtually. The important thing is to spread the news. Institutionalizing the publication of SDG progress is not merely a bureaucratic step – It is a strategic one toward reinforcing public trust, stimulating policy innovation, and contributing to the global exchange of best practices.

The procedure is even more important for public managers that want their good actions to be perpetrate in time, once after a change of leadership due to new elections

it will be more difficult for the new government not to continue some policy that the whole community knows about and cares for.

One international opportunity for promote local actions on SDGs is elaborating a Voluntary Local Reviews (VLR). According with UN-Habitat, "since 2016, countries have been reporting on their SDG progress through Voluntary National Reviews (VNR) and more recently cities have started to prepare Voluntary Local Reviews (VLR)"¹⁷.

Despite the UN's global importance and the undeniable reach that this kind of report could achieve, the data shows that only 248 local reports were produced in ten years, since the beginning of 2030 Agenda project, considering all cities, states and regions around the world. Among the 248 reviews published at UN's website¹⁸, only 16 are Brazilians. As Ciambra et al. (2023, p. 2) emphasize, Voluntary Local Reviews (VLRs) are instrumental to "systematise localisation monitoring via local data, measurement, indicators and benchmarks" reinforcing the role of local governments in global sustainability governance.

Ultimately, integrating rigorous measurement, transparent reporting, and collaborative governance is essential to aligning local actions with global sustainability goals and ensuring inclusive, long-term progress. Central to this approach is the utilization of standardized, reliable indicators that yield comparable data across jurisdictions, enabling meaningful progress assessment and informed policy adjustments

2.2 How is the progress so far: the indexes to measure and monitor SDGs' implementation and localization

The importance of measuring and reporting the implementation of SDGs is crucial not only for the governments involved in their own tasks, but for the world. As the 2030 Agenda is a global commitment, there are several organizations, administrations and companies around the world developing and using indexes to have a better picture of the sustainable development situation all over.

Created in 2012, the Sustainable Development Solutions Network (SDSN) is a large knowledge network for SDGs, working under the UN Secretary-General, which

¹⁷ Available at: https://unhabitat.org/programme/sustainable-development-goals-cities. Accessed on: 30 March 2025.

¹⁸ Available at: https://sdgs.un.org/topics/voluntary-local-reviews. Accessed on: 03 April 2025.

developed an index that measures the annual performance of all UN member states regarding the 17 global goals: the SDG Index¹⁹. Based on that, SDSN publishes annually the Sustainable Development Report (SDR) which "is consulted online more than 300,000 times annually by governments, researchers, investors, policymakers and consulting firms" to "identify priorities for action, understand key implementation challenges, track progress, ensure accountability, and identify gaps that must be closed in order to achieve the SDGs by 2030 and beyond"²⁰.

Each country performance in achieving the sustainable targets are evaluate through more than 100 different indicators related to the goals²¹ as, for example, "poverty headcount ratio at \$2.15/day" (SDG 1), "neonatal mortality rate (per 1,000 live births)" (SDG 3), "PISA score (worst 0-600 best)" (SDG 4) and "access to improved water source, piped (% of urban population)" (SDG 11). The set of these indicators²² obtained from government sources or international organizations, such as UNICEF, OECD, World Data Lab, form the overall view of how each country is managing each SDG. Providing a score from 0 to 100, the SDG Index demonstrates how close a country is to fully achieving sustainable goals, making a rank of all UN's Members with data available. The results are published annually in the SDG Transformation Center website²³.

¹⁹ Available at: https://sdgtransformationcenter.org/sdgindex. Accessed on: 03 April 2025.

²⁰ Idem.

²¹ See the complete list on https://unstats.un.org/sdgs/indicators/indicators-list/. Accessed on: 24 May 2025...

²² The SDGs are formed by 17 goals that are divided into 169 targets, which are subdivided in 234 indicators (UN-STATS) but not all of these indicators are considered in the SDG Index methodology.

²³ Available at: https://sdgtransformationcenter.org/reports/sustainable-development-report-2024. Accessed on: 5 May 2025.

Rank Country Score Performance by SDG 1 + Finland 86.35 85.70 2 Sweden 3 Denmark 85.00 83.45 4 Germany 5 France 82.76 82.55 6 Austria 7 Norway 82.23 8 Croatia 82.19 82.16 United Kingdom 9 10 81.69 Poland 52 Brazil 73.78

Figure 4 – SDG Index 2024: the first 10 countries and Brazil

Source: SDG Index 2024 (see the complet list on Annex A)

Alongside the SDG Index, SDSN. adapts and uses the same methodology to cities and metropolitan areas, generating data and ranking municipalities around the world. After analyzing local data and scoring cities, SDSN publishes reports with regional and subregional data²⁴ such as Europe Sustainable Development Report, The Arab Region SDG Index and Dashboards, Benin Sustainable Development Report,

Available at: https://sdgtransformationcenter.org/online-library?edition=regional&edition=subnational&type=report. Accessed on: 03 April 2025.

African SDG Index & Dashboards²⁵, United States, Paraguay and Uruguay Sustainable Development Reports. Among these is the Brazilian index Sustainable Cities Development Index (IDSC), source of data from the cities of São Paulo studied in this dissertation, that will be detailed in the Subsection 2.2.2.

There are also other indexes and reports related to countries, continents or wide regions that address specific themes or SDG, such as:

- a) "EU SDG Monitoring Report"²⁶: published by Eurostat (European Commission), the index shows the status in each sustainable development goal;
- b) "The 2022 Asean SDG Snapshot Report"²⁷: published by Aseanstat (Asean Statistics Division);
- c) "Environmental Performance Index (EPI)"²⁸: published by Yale University, the index ranks 180 countries considering climate change performance, environmental health, and ecosystem vitality;
- d) "Human Development Index (HDI)"²⁹: published by the United Nations Development Program (UNDP), the index focuses on SDG related to human development like health, education and work / income; and
- e) "Global Multidimensional Poverty Index (MPI)"30: published by Oxford Poverty & Human Development Initiative (OPHI) and UNDP, this index measures poverty beyond income, including health and living standards, helping track SDGs 1 and 10.

Furthermore, there are some indexes provided by private companies that analyze and disseminate data related to urban actions that concern sustainable development. Some examples are:

a) Green City Index³¹: published by Siemens, analyze selected cities regarding specifically environmental issues;

²⁵ Available at: https://sdgafrica.org/. Accessed on: 03 April 2025.

²⁶ Available at: https://ec.europa.eu/eurostat/web/sdi/database. Accessed on: 03 April 2025.

Available at: https://www.aseanstats.org/wp-content/uploads/2022/11/The-2022-ASEAN-SDG-Snapshot-Report-b.pdf. Accessed on: 03 April 2025.

²⁸ Available at: https://epi.yale.edu/. Accessed on: 03 April 2025.

²⁹ Available at: https://hdr.undp.org/data-center/human-development-index#/indicies/HDI. Accessed on: 03 April 2025.

³⁰ Available at: https://ophi.org.uk/global-mpi/2024. Accessed on: 03 April 2025.

³¹ Available at: https://assets.new.siemens.com/siemens/assets/api/uuid:cf26889b-3254-4dcb-bc50-fef7e99cb3c7/gci-report-summary.pdf. Accessed on: 03 April 2025.

b) Arcadis Sustainable Cities Index³²: published by Arcadis, the index evaluates the sustainable efforts in 100 cities around the world and ranks their performance in 4 dimensions – planet, people, profit and progress.

As detailed in this section, there are numerous indexes and monitoring frameworks globally to measure the adoption of SDGs in countries, regions and cities. These tools provide critical data and insights to help governments, policymakers and civil society track progress, identify challenges, and enhance efforts to achieve the 2030 Agenda.

As well alerted in Arcadis' website, "with just 2.000 days left to achieve the United Nations Sustainable Development Goals by 2030", the insights from city-oriented indexes are "more vital them ever. The results are clear. We must act now to forge a resilient, fair, and sustainable world".

2.2.1 Nationally speaking: the position of Brazil among UN member states, G20 and South America

Brazil is one of the largest and most populous countries in the world and has significant impact on the implementation of the UN' SDGs, especially the goals related to the planet (environment) and people. Despite of the clear importance of prosperity, peace and partnership to the global goes, it is Brazilian forest and agriculture that takes the world attention because of the potential impact on nature and the possibility of causing or worsting extreme climate changes that countries are facing, right now. Regarding to the SDGs related to people and its quality of life, Brazil plays a key role as the biggest and one of the most influent countries in South America, sharing boarders with several territories, receiving immigrants, sealing agreements, setting examples, etc.

According to the SDG Index, Brazil has the 52nd position in the ranking, all the UN member states considered, accumulating 73.78 of a total of 100 points possible (see complete 2024 ranking on the Annex A). The analysis took into account official

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³² Available at: https://www.arcadis.com/en/insights/perspectives/global/sustainable-cities-index-2024. Accessed on: 03 April 2025.

data on the various indicators selected within each SDG (the same set used to analyze all countries) and determined which targets showed progress, stagnation or regression. This determined which objectives were achieved and which still had challenges to overcome.

SUSTAINABLE DEVELOPMENT

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1 MO REPORT

1 MO POVERTY STRENGE AND SANDARD TO REPORT

3 GOOD HEALTH SUBJECTION

7 AFFREDAME AND COUNTRY PROFILES DATA EXPLORED TO DOWNLOADS & Materials

5 GENDER FRUINTITY STRENGE TO DOWNLOADS & MATERIAL TO DOWNLOADS & MATERIA

Figure 5 – Brazilian SDG Dashboard in 202433

Source: https://dashboards.sdgindex.org/profiles/brazil

As a member of the G20, a group comprising the world's major economies, Brazil comes in the 11th position of the ranking, almost 10 points behind the first ranked, Germany. Table 2 shows the ranking with all countries.

³³ See complete SDG Index 2024 – Country Profile in Annex B.

Table 2 – G20 Countries on the SDG Index World Rank

Rank	Country	Points
1	Germany	83,45
2	France	82,76
3	United Kingdom	82,16
4	Japan	79,87
5	Italy	79,29
6	Canada	78,83
7	Republic of Korea	77,33
8	Australia	76,88
9	United States	74,43
10	Argentina	74,40
11	Brazil	73,78
12	Russia	73,10
13	China	70,85
14	Turkiye	70,47
15	Indonesia	69,43
16	Mexico	69,28
17	Saudi Arabia	64,91
18	India	63,99
19	South Africa	63,44

Source: Own elaboration based on SDG Index.

When narrowing the scope to South America, the findings reveal that Brazil occupies fourth position in the regional ranking, trailing behind Chile, Uruguay, and Argentina, as showed at Table 3. This positioning persists despite Brazil's considerable geographic scale and available resources:

Table 3 – South America Countries on the SDG Index World Rank

Rank	Country	Points
1	Chile	77,82
2	Uruguay	77,09
3	Argentina	74,40
4	Brazil	73,78
5	Peru	71,88
6	Colombia	70,30
7	Ecuador	70,14
8	Suriname	70,01
9	Bolivia	68,08
10	Paraguay	68,02
11	Guyania	66,73
12	Venezuela	62,46

Source: Own elaboration based on SDG Index.

The available data reveals how Brazil is implementing the SDGs compared to other countries, indicating clear areas requiring policy improvement. At the regional and local levels, performance metrics demonstrate a pronounced concentration of best ranked Brazilian cities within São Paulo State. As the focus of this study, SP State represents one of the nation's most developed and economically resourced regions. Through examination of city indicators within the State, an index that specifically assesses the municipal context will demonstrate the current SDG progress at the subnational level.

2.2.2 A tailor-made Index: the Sustainable Cities Development Index – *IDSC* – the Brazilian index to evaluate cities

As previously discussed, fulfilling the commitments outlined in the 2030 Agenda requires coordinated action across all levels of government, particularly at the regional, state, and municipal levels. The localization of SDGs within cities is not only a strategic necessity but a foundational element of national success. Cities, as the smallest administrative units with direct influence over daily life, represent critical building blocks in the broader SDG framework. The capacity of cities to interpret global goals through local priorities ensures that no one and no territory is left behind.

Therefore, it is important to measure and evaluate the sustainable actions of the local and regional governments, in order to adapt when necessary and to replicate the good practices when possible. "Performance in pursuit of SDGs is measured by means of indicators, which summarize a range of data and provide inputs for planning and oversight in public management, allowing the achievement of SDGs to be monitored" (Costa; Fernández, 2023, p. 2).

According to the Section 2.2 of this dissertation, there are a considerable number of different indexes around the world, developed by governments, companies, non-profit organizations and other associations, that analyze sustainable procedures and projects worldwide. Some of them compare countries, some study specifics sustainable goals, some verify how regions are doing. Just a few have cities as their object of study.

In March 2021, an alliance between the *Instituto Cidades Sustentáveis* (ICS – Sustainable Cities Institute, in English) and the SDSN create the *Índice de Desenvolvimento Sustentável das Cidades* – *BR* (Sustainable Cities Development Index – Brazil, in English), the IDSC³⁴, to measure the UN goals and targets in Brazilian cities, through various indicators³⁵. The index analyzed a sample of 770 municipalities in that first year.

From 2022 onward, the index expanded its scope and began measuring each one of the 5,570 cities in the country, and Brazil became the first of G20 countries to track the SDGs of all its cities (SDSN, 2022). The municipalities' progress, stagnation or regression on several SDGs targets are measured by official data and statistics and each city receives a score from 0 to 100 points. Higher scores mean better performance and more achievements regarding SDGs.

"The IDSC-BR provides a comprehensive and integrated overview of Brazilian cities in relation to each of the SDGs. It is a tool designed to encourage the fulfillment of the 2030 Agenda and an opportunity for cities to align with the most advanced global sustainable development agenda" (IDSC³⁶). The analysis of the data shows the strengths and weaknesses of the public management, according to the achievements (or not) of SDGs targets.

³⁴ Available at: https://idsc.cidadessustentaveis.org.br/. Accessed on: 01 April 2025.

³⁵ See complete list of IDSC Indicators at Annex D.

³⁶ Available at: https://idsc.cidadessustentaveis.org.br/. Accessed on: 09 May 2025.

The index uses 100 indicators³⁷ to evaluate each one of the SDGs, and 98 of them are from official public data sources, such as like IBGE (Brazilian Institute of Geography and Statistics), DATASUS, and INEP. The thematic indicators use formal meta-data and values to measure how many organic agriculture establishments are in the city (SDG 2), the quantity of pregnant teenagers (SDG 3) or population served by sanitation (SDG 6) in a municipality, for example.

Every year, a report is made including all 5,570 cities in Brazil, regarding every SDG, scoring them from 0 to 100. For didactical purpose, scores are represented in different colors (caption): very low / red – punctuation below 39,99 points; low / orange – between 40 and 49,99 points; medium / yellow – between 50 and 59,99 points; high / light green – between 60 and 79,99 points; very high / dark green - above 80 points up to 100 points. This study focuses on the results of 2024, when only 91 (of an universe of 5,570 cities) reached light green:

Brazilian Cities - Achieving SDGs' Score - IDSC 2024

Between 60 and 79,99 points
Between 50 and 59,99 points
Between 40 and 49,99 points
Below 39,99 points

Graphic 1 – SDG level of achievement in Brazilian cities accordingly to IDSC 2024

Source: Own elaboration based on IDSC rank - 2024.

The results from IDSC 2024 will serve as data source for analyzing patterns of SDG localization across São Paulo municipalities, whether demonstrating either advanced or limited integration of sustainable development goals. A comprehensive

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³⁷ See complete list of IDSC Indicators at Annex D.

examination of the IDSC's methodology, indicators, and scoring framework will be presented in Chapter 3 to ensure methodological transparency and reproducibility.

2.2.3 Locally speaking: the situation of São Paulo State and the cities within

Brazil, as a country, is holding the 52nd position on the SDG Index ranking that evaluate the UN 193 country members (United Nations, 2024). The place stablishes Brazil among the first third of the analyzed nations, giving the feeling that the Brazilian national government has made solid accomplishes. Although, looking closer, towards its local and regional governments, the picture holds some big discrepancies. While some regions and states present advances and positive outcomes concerning the SDGs, others demonstrate being struggling to achieve half of the actions needed.

Awalya et al (2024) say that unique economic and institutional conditions of a territory can impact the achievement of SDGs and it is necessary to tailor some approaches to reach broader and better results. In the Brazilian context, factors including geographical characteristics, industrial development, educational infrastructure, natural resource endowments, and income distribution contribute to substantial regional disparities in sustainable development outcomes. Consequently, the Brazilian Sustainable Cities Development Index (IDSC) presents a more appropriate evaluation framework than the global SDG Index for municipal-level assessment, as it incorporates nationally specific indicators and utilizes official government data sources that better reflect local conditions.

Figure 6 clearly demonstrates the differences mentioned. The map shows the cities' overall score (based on a scale from 0 to 100 points) for SDG's targets achieved until 2024. Municipalities in the North and Up central parts of the map presents "very low" (red) or "low" (orange) caption, while the South of the country presents some "medium" (yellow) or even "high" (light green) evaluation. None of Brazilian city achieved "very high" score – above 80 points (dark green).

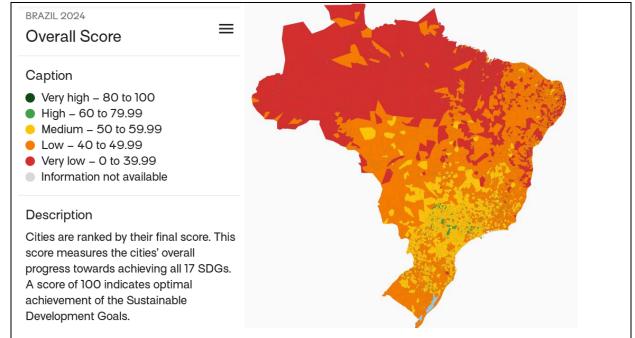


Figure 6 – Brazilian map colored accordingly to IDSC 2024 results

Source: ICS - IDSC - Interactive Map.

The spatial analysis reveals distinct regional patterns in SDG implementation, with municipalities in the Southeast region – particularly São Paulo State – demonstrating notably higher performance scores. This geographic concentration of high-scoring cities suggests that local governments in these areas possess greater institutional capacity to meet sustainable development targets within established timelines. The observed regional disparities highlight the influence of subnational factors on SDG achievement trajectories.

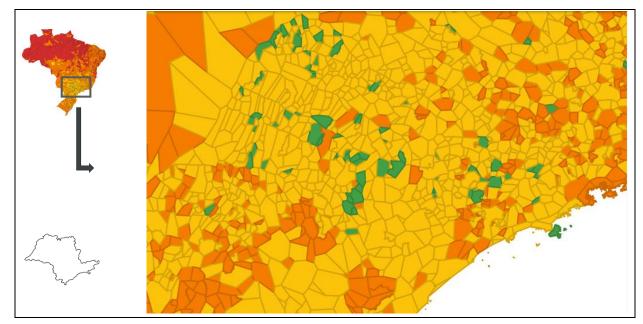
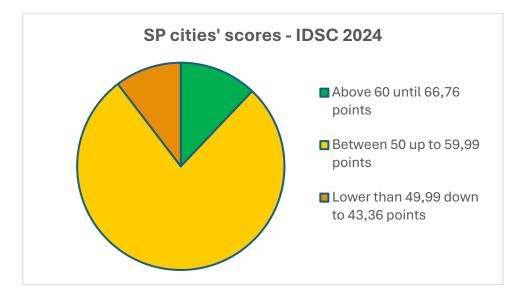


Figure 7 – A closer look (SP State) on Brazilian map colored from IDSC 2024 results

Source: ICS - IDSC - Interactive Map.

According to the 2024 edition of the IDSC, the achievement of SDGs targets in SP municipalities is far from ideal – even in the State that demonstrate the highest overall performance.

Only 12.09% of SP's cities have reached the "high" score (light green caption), but still with the lower quantity of points for this range (determined between 60 and 79.99 points). In the other corner of the graph, 10.39% of the SP municipalities still face major difficulties in reaching halfway, scoring between 43.36 and 49.99 of the 100 total possible points. The analysis reveals that 77.52% of municipalities fall within the intermediate performance category ("medium – yellow caption), scoring between 50 and 60 points on SDG achievement metrics. This predominant classification indicates that while most urban jurisdictions have made measurable progress toward sustainable development targets, significant opportunities for improvement remain across multiple goal areas.



Graphic 2 – SDG level of achievement in SP cities accordingly to IDSC 2024

Source: Own elaboration.

The complete list of IDSC 2024 ranking regarding SP's Cities is on Annex C of this work.

The period to fully achieve the UN 17 sustainable development goals, detailed in 169 targets, was fifteen years: from 2016 until 2030. With two thirds of this time lapsed, the data shows that most cities are in the middle of the way to build sustainable development communities, granting economic growth, environmental protection and social advancement.

2.2.4 Barriers in achieving the SDGs in cities and strategies to overcome them

Aiming to understand the reasons why cities aren't delivering more policies related to SDGs targets and scoring so low, this study searches for worldwide literature that go deeper on the barriers and obstacles faced by governments, whether national, regional or local. At the same time, the author looked for strategies to overcome the reported challenges. Although not all writers go on the exact same path, some barriers are highlighted in several writings. Common challenges include lack of awareness or consciousness of the issue (both among public administrators and the population), low technical capacity to deal with public policies for sustainable development (concerning leaders and servants), few financial resources, among others.

In many municipalities, lack of awareness is the first obstacle to overcome. Focusing on engaging people, both inside and outside city halls, can generate positive changes. Public interest is essential for achieving the SDGs, as people need to understand the goals and, on most occasions, actively participate in local sustainability initiatives. Many times, the lack of widespread knowledge about the SDGs among the public managers, servants and general population limits the ability to generate momentum for sustainable initiatives and involvement.

Comprehension of the 2030 Agenda and its SDGs is essential for public administrators and leaders engaged in formulating public policies and coordinating sustainable development strategies. Public servants proficiency in this subject allows institutional mandates to be aligned with municipal structures, keeping the necessary interconnection between different sectors of municipal administration, in addition to reinforcing the importance of their own role in this multifaceted process. Broader societal awareness of the global agenda and its individual-level implications leads to increased support for sustainable development initiatives. Furthermore, access to clear and engaging information about government actions in this area enables higher levels of civic engagement.

Considering this scenario, diverse approaches and tools are needed to involve different kinds of people's participation in the localization of the SDGs.

Identifying the strengths and weaknesses of a municipality is an initial step in structuring efforts toward the SDGs and the development of a smart and sustainable city, which involves factors such as social cohesion, human capital, and economic performance (Edmond, 2024). Once these elements are thoroughly analyzed they can be meaningfully synthesized, thereby enabling the formulation of evidence-based public policies that align with the SDGs. This systematic approach ensures that policy design is not only theoretically grounded but also contextually relevant to the city's unique challenges and aspirations.

When it comes to public servants, it is important to clarify the targets and orchestrate a coordinated plan of action, given the inherently interconnected nature of the SDGs, integrating action plans capable of generating synergistic outcomes across multiple goals simultaneously. This systemic approach meets the nature of SDGs, as progress in one domain often depends on or influences outcomes in related sectors, requiring deliberate cross-sectoral alignment of policies and interventions. Alling the

functions and expectations of everyone can be challenging. Although, in the words of Winden (2017, p. 60) "sustainability can be seen as a 'boundary object', a term that facilitates communication across different disciplines and helps bridge these disciplines through a shared vocabulary".

One strategy for municipal administrations to foster societal awareness is by disseminating information through multiple channels, including official city websites, social media platforms, educational campaigns in schools, and public displays in communal spaces. Furthermore, systematic publication of sustainable public policy implementation and evaluation results ensures transparency and accountability in local governance. Publicizing these initiatives not only underscores the goals and targets accomplished but also serves a dual purpose: it enhances civic engagement by informing residents of municipal efforts and establishes a robust accountability mechanism. "Achieving stakeholder engagement and empowerment is identified [...] to be an important and enduring practical challenge" (Abhayawansa; Adams; Neesham, 2021, p. 26). By making such data accessible, local governments also empower citizens to monitor progress while reinforcing trust in public institutions.

Furthermore, this lack of engagement can be the cause of another barrier to face: difficulties in creating partnerships with private actors (Ansell; Sørensen; Torfing, 2022). Sometimes, the projects and policies will demand the participation of other stakeholders in society, such as non-profit organizations, private companies and national government, among others. "By working in concert with various actors, local leaders can implement effective public policies, promote the financing and delivery of sustainable infrastructure, goods, and services, and support inclusiveness and enhance sound multi-level Governance" (Woodbridge, 2015, p. 3).

Research indicates suggests that local population frequently exhibit a weak sense of community and underdeveloped participatory engagement (Ansell; Sørensen; Torfing, 2022), a situation that exacerbates existing implementation challenges. This sociocultural context creates additional barriers to effective civic participation in sustainable development initiatives. When citizens remain disengaged from decision-making processes, municipalities face heightened difficulties in fostering inclusive governance, implementing participatory policies, and securing public buy-in for long-term initiatives. Consequently, this dynamic perpetuates a cycle of weak civic

culture, further marginalizing communities that might otherwise contribute to – and benefit from – localized SDG adoption.

Abhayawansa, Adams and Neesham (2021) identify structural impediments to effective SDG implementation, emphasizing how institutional compartmentalization within government systems and competing policy priorities across administrative levels exacerbate the inherent complexity of Sustainable Development Goals. Their analysis reveals that the siloed nature of bureaucratic organizations, combined with divergent strategic agendas at different tiers of governance, creates significant barriers to the integrated approaches required for meaningful progress on interconnected sustainability challenges.

The implementation of sustainable development initiatives still faces compounded governmental obstacles when local actors exhibit insufficient leadership capacity, constrained resources, and inadequate professional competencies (Ansell, Sørensen, & Torfing, 2022). These systemic deficiencies create multiplicative challenges that hinder effective policy execution and institutional coordination at the municipal level, particularly when addressing complex, cross-sectoral sustainability objectives. Cordery, Arora and Manochin (2022, p. 17) also brings "the slowness of bureaucratic processes, perhaps due to capacity issues in a socially complex, pluralistic and large country" to the table.

Due to the interconnected nature of the SDGs, it is necessary to coordinate several stakeholders, funding and bureaucratic issues. Analyzing European panorama but with arguments that can be applied worldwide, Filho *et al.* (2016 *apud* Abhayawansa; Adams; Neesham, 2021, p. 6) listed the "limited knowledge about sustainable development, lack of policy integration at different government levels, lack of cooperation among sectors, and insufficient stakeholder engagement as the main reasons why certain SDG implementation projects have failed".

To engage managers, public servants, and society in general, "monitoring and measurement is a key UN SDG strategy" (Cordery; Arora; Manochin, 2022, p. 10). "Nevertheless, collecting and compiling appropriate data are challenging" (Abhayawansa *et al.*, 2021 *apud* Cordery; Arora; Manochin, 2022, p. 10).

These include structural and systemic measures like urban planning, mobility and transportation, as well as economic ones like attracting and retaining the best talent and promoting economic development.

Environmental protection and technology are increasingly important considerations, too. And then there are areas related to culture and society that can be harder to measure, such as social cohesion and human capital.

They all come together to make the world's best cities, which are not only enjoyable places to live in but also good for business (Edmond, 2024, p. 2).

The lack of financial resources is a critical barrier to SDG implementation in urban areas that deserves a deeper analysis. Despite cities being economic hubs, many of them don't have the necessary funds to support the challenges posed by the SDGs such as implementing sustainable infrastructure, improving public transportation, generating green energy, and addressing climate change, among others. The implementation of such managerial interventions and public policies frequently demands significant financial investments, which pose particular challenges for urban administrations in developing nations where fiscal constraints are prevalent.

One other reason mentioned by specialized literature is the difficulty of changing the culture of doing things. The reluctance to change arising from customary behavior touches both public servants and citizens (Ansell; Sørensen; Torfing, 2022) and repels capacity learning, innovation and often adaptation needed to attend the SDGs targets in a often changing world. Different times and complex social needs should be faced with new and improved ideas, adapted to local realities.

The complex and interdependent nature of the SDGs makes it difficult to attribute underperformance in localization efforts to a single factor. As the OECD (2020, p. 230) emphasizes, "at least 105 of the 169 SDG targets will not be achieved without proper engagement and coordination with local and regional governments", highlighting the multifaceted institutional, financial, and territorial dynamics involved.

For analytical clarity, the primary obstacles hindering effective SDG localization in urban contexts can be organized into three principal categories, as most frequently identified in the literature: governmental, financial and social barriers. Governmental obstacles include lack of knowledge of SDGs, poor infrastructure (human and technological capital), fragmentation at the local level government, poor coordination among governmental agencies, lack of technical expertise, weak leadership. Considering the financial barriers, the most mentioned are the lack of resources (for various activities such as the implementation of policies and the training of those involved), in addition to the absence of local partnerships. Social challenges arise in the lack of public awareness and engagement, weak participatory culture, little

knowledge of local policies due to weak or non-existent dissemination of public actions. However, just as the SDGs are interrelated, the barriers also demonstrate interconnection. For example, the lack of adequate IT infrastructure and non-dissemination of policies (governmental) can result in the population having little knowledge about what is being done (social), failing to encourage partnerships with local entrepreneurs (financial).

These interconnected barriers highlight why municipalities, as key arenas for sustainable development, require focused attention in global efforts, especially given their demographic and economic significance. "Cities are home to a growing majority of the world's population and so ensuring they thrive as sustainable, inclusive and livable hubs is an ongoing challenge", states Edmond (2024, p. 7). This situation, of cities emerging as central protagonists in the advancement of sustainable development, is proven by the fact that one of the SDGs is specifically about urban areas.

Sustainable Development Goal 11, also known as the UrbanSDG, aims to "Make cities and human settlements inclusive, safe, resilient and sustainable". It is a truly transformational element of the 2030 Agenda, being the only goal that is location-specific at a manageable scale. Cities can provide the much needed interlinkages and integrated approaches across sectors and goals, given that a city represents a microcosm of all the other SDGs. The inclusion of SDG 11 represents a pivotal first step towards the integration of sustainable urban development into the global framework for action, and will upscale the effect that local and subnational governments can have in making contributions to the achievement of the SDGs. (Woodbridge, 2015, p. 2)

"When it comes to the SDGs, it is clear that not all countries or cities will work at the same speed or have had the same starting point" (Woodbridge, 2015, p. 1). On the other hand, "ambitious and innovative cities that have been pioneers in sustainable urban development will push and lead this Agenda and provide an example for cities in need of support" (*ibid.*, 2021, p. 1).

Despite the author's research, it's possible to acknowledge the lack of specific studies on cities in São Paulo. However, based on the author's field experience, it is possible to affirm that these situations are in line with those of other jurisdictions. Thus, the selected literature and empirical findings from São Paulo State reveals that inadequate SDG localization in urban contexts stems not from isolated factors, but rather from interconnected multidimensional challenges. This study adopts a holistic analytical approach, examining how specific constellations of these challenges

collectively influence municipal performance rankings. These complex circumstances may function as both causes and consequences within systemic barriers to sustainable development implementation

Therefore, Chapter 4 will present the analysis of SP cities having the IDSC ranking as a starting point. Aiming to have a more detailed view at the SP municipalities, characteristics will be highlighted as the size of the city, the volume of its revenue, the region where it is located, the attendance to TCESP guiding lines (specially measured in IEG-M index) and the dissemination of information about SDGs, both inside and outside public departments, in city's website.

2.3 The role of Audit Institutions around the world regarding the sustainable agenda

Although the implementation of public policy remains fundamentally an administrative decision under the purview of public managers, Audit Institutions around the world can and have been involved with the 2030 Agenda. That is due to the unique position audit bodies have to act as drivers of good governance and compliance, promoters of accountability, ensuring effective resource allocation especially at the local level, where municipal governments are directly responsible for delivering essential services aligned with the SDGs.

Several studies (e.g., OECD, 2016; Nunes; Nascimento, 2023) emphasize the potential of these institutions to influence not only fiscal discipline but also the design, implementation, and monitoring of policies that promote environmental protection, social equity, and economic development. As the OECD (2016, p. 15) observes, SAIs "have untapped potential to help governments meet these [sustainability] challenges and can provide critical evidence to inform what works and what does not in public governance."

2.3.1 The INTOSAI determination to track and act

The International Organization of Supreme Audit Institutions (INTOSAI) made its first formal determination to act on the SDGs in 2016, through a formal declaration. The document recognized the pivotal role Supreme Audit Institutions (SAIs) could play

in reviewing and supporting the implementation of the 2030 Agenda for sustainable development. In addition to committing to the SDG 16 (to promote peace, justice, and strong institutions), with a focus on accountability, transparency, and inclusive governance, INTOSAI encouraged SAIs to conduct audits assessing how well national governments were prepared to implement the SDGs. These "readiness reviews" became one of the first structured actions SAIs took globally.

Therefore, since the beginning of the period 2016-2030, SAIs audited and demanded actions towards sustainable development, highlighting the importance of promoting and disseminating information about the goals and targets to ensure broader societal engagement. For example, in 2017, in a coordinated audit, SAIs of eleven countries from Latin America (Brazil included) have evaluated the preparedness of the governments to implement SDG as whole (Le Blanc; Montero, 2020, p. 4). This initiative evaluated governance structures at several levels, focusing on components like strategy, coordination, supervision, and transparency.

The implementation of SDGs and the 2030 Agenda are so relevant and the benefits of proper external control can be so impactful that the subject becomes one of the main topics of analysis. Therefore, INTOSAI highlighted it in its 2023-2028 strategic plan by determining that one of its key priorities is to contribute to the achievement of the sustainable agenda (INTOSAI³⁸).

Integrating sustainability assessments into their audit practices, whether regular, performance or thematic, SAIs can go beyond financial analysis, but the audit bodies can diagnose the achievement of 2030 Agenda and promote a culture of results in this area. According to the European Court of Auditors (ECA) website³⁹, Audit Institutions "have a valuable contribution to make through their audits (...) they can monitor implementation, track progress, and identify improvements across all SDGs".

By auditing government preparedness and execution of the SDGs, SAIs enhance transparency, accountability, and effectiveness in public administration. "The value of coordinated audits is especially relevant in the context of the SDGs, which demand from SAIs (as from governments) innovative ways of working, novel

³⁹ Available at: https://www.eca.europa.eu/en/sustainable-development-goals. Accessed on: 10 April 2025.

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Available at: chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.intosai.org/fileadmin/downloads/news/202 2/08/310822_EN_2023-2028_INTOSAI_Strategic_Plan.pdf. Accessed on: 10 April 2025.

methodologies and different skills and capacities to audit complex issues and integrated policies, and to engage with multiple stakeholders" (TCU, 2018⁴⁰).

2.3.2 Brazilian audit system

Audit Institutions, in Brazil, are named "Courts of Audit" and are divided into one Brazilian Federal Court of Audit (TCU - *Tribunal de Contas da União*, in Portuguese), 26 State Courts of Audit, one Federal District Court of Audit and five Audits Institutions related to municipal (often metropolitan) accounts. Each of them is responsible for auditing a specific group of auditees and the accounts may be national, state or municipal. According to Lino and Aquino (2017), these courts also exhibit some differences in operational independence, technical capacity, and audit processes. As for the similarities, they are all branches of the Legislative, despite maintaining their autonomy and independence for that power in their analyses and decisions.

Despite their judicial nomenclature, Brazil's Audit Institutions do not exercise judicial functions. The term "Courts" reflects their decision-making structure, which operates on a collegiate basis, similar to several European counterparts. This naming convention is particularly prevalent in Latin-derived systems, as seen in France (Cour des Comptes), Italy (Corte dei Conti), Portugal (Tribunal de Contas), and Spain (Tribunal de Cuentas), as well as in Belgium and Luxembourg (both using Cour des Comptes). The designation underscores their role as independent oversight bodies rather than judicial entities, aligning with their mandate to review public accounts and ensure fiscal accountability through collective deliberation.

The adoption of this terminology in Brazil traces back to the Napoleonic model, which emphasizes a dual-layered structure comprising a technical audit body and a deliberative council (Arantes; Abrucio; Teixeira, 2005 apud Lino; Aquino, 2017, p. 2). While these institutions lack judicial authority, their decisions carry administrative weight, influencing public financial management and compliance. The persistence of the "Court" label across multiple jurisdictions highlights a shared historical and functional lineage, even as their operational frameworks diverge from conventional

⁴⁰ Available at: https://sdgs.un.org/partnerships/supreme-audit-institutions-drivers-foster-2030-agenda-implementation. Accessed on: 18 April 2025.

judicial systems. This distinction is crucial for understanding their role within Brazil's public accountability mechanisms.

Among all the Audit Institutions in Brazil, there is São Paulo State Court of Audits (TCESP), whose performance is the central focus of this dissertation. For that matter, this study adopts the understanding that regional Courts of Audit and similar institutions of external control have the same purpose as SAIs and similar goals and the learning can apply to them, keeping the necessary proportions and recognizing the need for adaptations in some cases.

Brazilian Courts of Audits lack the legal authority to force the adoption of specific SDGs by public administrators, as these goals are voluntary commitments rather than binding obligations for UN member states. Their implementation depends primarily on governmental engagement and recognition of their significance (United Nations, 2015). Consequently, fostering adherence to the SDGs requires a proactive approach centered on awareness-raising, technical guidance, the promotion of sustainable governance mechanisms, and advocating for best practices. By strengthening accountability frameworks and incentivizing transparent public policies, Audit Institutions can play a pivotal role in advancing sustainable development – even without coercive powers – through oversight, recommendations, institutional persuasion, and others.

Thus, rather than imposing directives, Courts of Audits can leverage their advisory and evaluative roles to encourage SDG integration within public administration, reinforcing governance structures that prioritize long-term sustainability.

2.3.3 Influencing through auditing, capacity-building and disseminating

Facing this challenge of fostering sustainable development, Audit Institutions can influence public managers to localize and engage with the SDGs by leveraging their oversight, insight, and foresight functions (IIA, 2012). Through different tools, they can assess the alignment of public policies with SDG targets. While lacking direct enforcement power, their actions and public disclosures create reputational incentives for compliance, fostering a culture of accountability and long-term commitment to the SDGs.

Several approaches have already been used globally to raise awareness and encourage sustainable development action. Restricting the examples to the countries closest to Brazil, the General Comptroller of Bogotá (Colombia) audited SDG 1 (poverty reduction), analyzing local government preparedness and policy alignment, which informed targeted interventions to address urban poverty. Costa Rica's SAI used a different approach developing an index to evaluate water service quality in vulnerable communities, incorporating stakeholder feedback to identify systemic gaps and advocate for equitable service delivery. Another example of good practice comes from Brazil, where the Brazilian Federal Court of Audit (TCU) conducted a coordinated audit on some targets focused on marine and terrestrial ecosystem protection (SDGs 14 and 15), involving Latin American SAIs, Spain, and Portugal.

It can therefore be seen that the approaches may involve the audits themselves, the development of innovative tools for control or training, as well as the creation of incentives, even if only reputational. Or it can be a fusion of several actions, maximizing the influence.

When performing a regular audit, auditors can identify gaps and recommend corrective measures. According to McClain (2024), it is necessary to develop follow-up mechanisms on audit recommendations granting that technical words are not merely issued but implemented, as constructive feedback, tracked and reported. "SAIs are in the position of to possess relevant information that program directors and other auditees may not have" (McClain, 2024, p. 29). This is particularly relevant in the context of cities, where local governments, without technical and specific knowledge, play a central role in implementing global goals through locally adapted public policies.

Another Courts of Audit's strategy would be to integrate SDG-related criteria into audit frameworks, developing SDG-related checks to analyze whether certain targets or goals are incorporated into public policies. These thematic or performance audits can even analyze a specific public policy, within which many SDGs or the targets of several sustainable goals should be included. Since the SDGs are interconnected, analyzing the lunch of a municipal school, for example, can bring connections with SDG 2 (zero hunger and sustainable agriculture), SDG 3 (good health and well-being), SDG 4 (quality education), SDG 12 (responsible consumption and production) and SDG 16 (peace, justice and strong institutions).

Additionally, Courts of Audit can have a key role in the contemporaneity through its advisory function by promoting capacity building and offering guidance to municipal managers and servants. Beyond technical recommendations, Courts of Audit around the world are innovating by elaborating manuals and curses, fostering events for discussion and learning, developing indicators and other measurement tools in order to translate the global language of 2030 Agenda to particular and unique realities. These instruments help local governments align their operations with the goals and principles of sustainable development.

This movement worldwide to broaden the field of Auditors' acting demonstrates how Audit Institutions are evolving to become enablers of good governance, providing foresight and feedback that guides administrations in achieving better outcomes, especially in complex policy areas like the SDGs. "This expansion of the audit perspective holds the prospect of audit contributing more to effecting change in society" (Londsdate; Mayne, 2005, p. 173 apud Winden, 2017, p. 12).

The guiding function of Courts of Audit refers to their role in orienting public administration through advisory, educational, and non-binding activities that aim to improve the quality of governance without infringing on managerial autonomy. This function is also exercised through actions tailor made to encourage practices of excellency, which serve as inspiration and reference for others, in addition to stimulating public administrators and strengthening public recognition for the municipality itself. Diversified actions can act as catalysts for encouraging and disseminating the SDGs, such as dissemination of best practices, publicizing achievements at events or institutional media, and even establishing rankings or awards according to the adoption of the SDGs.

This dynamic aligns with Winden's (2017) conceptualization of the impact that Audit Institutions can have on public policy. By examining outputs – such as audit reports, recommendations, manuals, contend of courses, and requirements for winning awards or being included in best practices – and their subsequent outcomes – Including behavioral changes and institutional adjustments made by auditees in response – It becomes evident that Courts of Audit play a pivotal role in promoting improved governance practices. Through this virtuous circle, Audit Institutions not only identify inefficiencies but also drive meaningful reforms, thereby fostering the adoption of best practices or, at minimum, more effective alternatives to existing policies. "If a

Supreme Audit Institution is able to produce, assimilate and disseminate knowledge independently and is considered an authoritative and legitimate source of this knowledge, then it potentially possesses autonomous influence" (Winden, 2017, p. 10).

In this regard, Courts of Audit have a multifaceted and increasingly strategic role in supporting the localization of the SDGs within cities. "The potential value of the contributions Supreme Audit Institutions can deliver is high; as these Institutions enhance good governance practices, can be vital in tracking progress of the Goals and can highlight and prioritize actions to achieve the goals" (Winden, 2017, p. 60). As stressed by the OECD (2016, p. 7), "it is through this process that SAIs can provide insight to improve the functioning of processes and programmes, and foresight to aid governments in adapting to future trends and risks". Their evolving mandate situates them as key allies in the global effort to turn the 2030 Agenda into local reality.

 Performance audits on public policies Innovative tools aligned with SDGs • Follow-up mechanisms for previous control & training recommendations Development of resources to enhance the ability to internalize and localize SDGs Training courses for public managers Training programs for civil servants Audits • Indexes to evaluate SDG localization Dissimination Practical manuals with guidelines Oversight actions & incentives aimed at analyzing the localization and Strategies to promote performance best practices by · Awards or rankings based on SDG related to the SDGs offering recognition performance and institutional Publicizing achievements through events or institutional media

Figure 8 – Audit Institutions tolls to foster SDGs

Source: Own elaboration.

2.4 TCESP (São Paulo State Court of Audit) as a driving force to implement and localize SDGs in SP State

In Brazil, external control is exercised through 33 Courts of Audits, each with its own jurisdiction, whether national, state or municipal⁴¹. TCESP (São Paulo State Court of Audit) is responsible for the oversight of the state government as well as of 644 of the 645⁴² municipalities in the State. In this sense, it is also the Institution capable of performing the functions of insight and foresight, regarding SDGs localization.

Embedded in the fact that cities play a crucial role in localizing SDGs and that municipalities face a complex variety of urban challenges, Courts of Audit (TCESP included) emerge as essential actors to ensure that public policies and actions align with the principles of sustainability, good governance and accountability. The activities go beyond oversighting the public accounts and the adequacy of the acts to the legislation.

Concerning the SDGs, Court of Audits:

(...) can strengthen the implementation of the 2030 Agenda for Sustainable Development by evaluating public policies along the entire policy process, considering the interrelations between policies, assessing their results, and enhancing the level of transparency and accountability on how governments implement international commitments on sustainable development. (TCU, 2018, p. 01).

There are a "key role for accounting processes and practices in helping entities develop more sustainable operations and providing inputs to sustainable development" (Cordery; Arora; Manochin, 2022, p. 6). Even more, "accounting practices can improve decision-making through systematic identification and interlinking of economic, social, and environmental costs and benefits of strategies, policies, actions, and outcomes" (Cordery; Arora; Manochin, 2022, p. 6).

The State Courts are closer to the cities audited and have a better understanding of municipal realities, barriers, challenges and needs. That is the case of TCESP, the State of São Paulo Court of Audit, that have under its jurisdiction 644 of the 645 cities in the State (capital excluded⁴³).

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⁴¹ See more details on Subection 2.3.2 of this dissertation.

⁴² Capital excluded.

⁴³ The city of São Paulo, capital of the State of São Paulo, has its own court: the Municipal Court of Auditd (TCM).

2.4.1 Tools for improving governance

Every year, at least once a year, Auditors from TCESP go to the municipalities to audit the accounts of the previous fiscal year, verify the reality of investments, check on the results of public programs, certify the accordance of the procedures to the law and regulation. All of the findings compose the annual audit report where the recommendations and warnings are listed. Larger municipalities or those with more management challenges are monitored quarterly or, at the very least, every six months. These monitoring audits enable policies to be adjusted during the fiscal year. All findings are consolidated in the annual report.

Besides that, regularly, TCESP conducts thematical auditing, looking closely at some chosen subject in the public life. The so called *Fiscalizações Ordenadas* (Ordered Audits, in English) aim a particular theme as scholar transportation, vaccination or waste disposal and selective collection procedures, and congregate the efforts of hundreds of Auditors verifying the same theme, at the same time, in different cities. These Ordered Audits differ from performance ones on extension, representing just a photograph of the city's situation in certain day, but itis one of the most significant ways in which audit courts contribute to SDG localization, by integrating sustainability assessments into audit practices. Both performance and thematic audits are tools that allow Audit Institutions to go beyond compliance, promoting a culture of results and accountability.

2.4.2 Tools for improving technical knowledge

"In the last decades, many SAIs have embraced a role that goes beyond traditional oversight and holding governments accountable for public expenditures (...) through new approaches to audits and advisory work" (OECD, 2017, p. 15). TCESP expressly declares that to guide is part of the Court's mission⁴⁴, alongside with preventive auditing, in its Strategic Planning 2022-2026. Since one of the most

⁴⁴ TCESP's mission – "To monitor and to guide, through preventive and corrective action and the evaluation of acts and results, so that public resources are used appropriately and transparently, for the benefit of society." Available at: https://www.tce.sp.gov.br/gestao-estrategica/missao-visao-valores. Accessed on: 10 April 2025.

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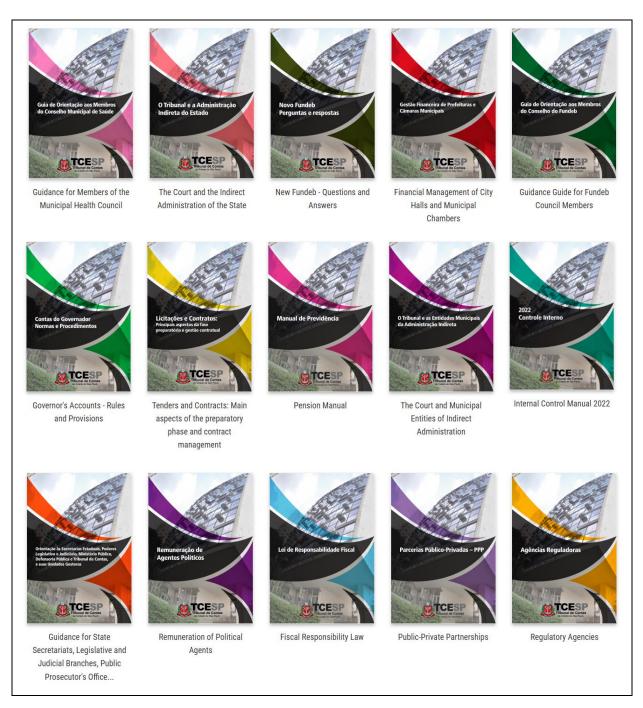
fundamental challenges in localizing SDGs in cities is the gap in knowledge and technical expertise at various levels of governance, SP Court of Audit can fill in this important gap in orienting yet respecting the administrative nature of the decisions policymakers take.

Furthermore, TCESP promotes within the course of every year regional and / or thematical encounters, where public managers, administrators and servants can improve their knowledge, learn about eventual changes in the legislation or procedures, discuss ideas and projects. It's an opportunity not only to learn from TCESP technical professionals and Auditors, but also to exchange experiences with others that face similar problems. Besides the shared technical know-how, benchmarking and partnerships can emerge from these encounters.

In addition, TCESP has in its *Escola Paulista de Contas Públicas* (EPCP – São Paulo School of Public Account, in English) a powerful tool for disseminating of knowledge through courses, events, online classes and lives. During all year, public servants and managers can access self-paced online courses on a variety of technical topics or can participate in free of charge in-person courses on specific topics such as education, health, waste management, among others.

Over the years and with each new change in legislation, the Court of Auditors prepares manuals and guides to guide public managers. These documents are made available on the TCESP website and are easily and free of charge for interested parties.

Figure 9 – Manuals in TCESP website



Source: TCESP's website⁴⁵.

Furthermore, 10 years ago, the SP Court of Audits developed a tool for municipal self-management and, at the same time, for monitoring and measuring public policies by the Court, the Municipal Management Effectiveness Index (IEG-M –

⁴⁵ Available at: https://www.tce.sp.gov.br/portal-controle-interno/manuais. Accessed on: 30 April 2025.

Índice de Efetividade da Gestão Municipal, in Portuguese). The index was created in 2015 to assess public policies in São Paulo's cities, with a focus on infrastructure and processes. The index concentrates in seven sectors of administration: planning, fiscal management, education, health, citizen protection (Civil Defense), environment and governance in information technology. The data is collected through a questionnaire answered by the auditees, which is subsequently confirmed (or not) by the auditors. Several questions from IEG-M reaches SDGs targets and indicators.

The questions and answers in IEG-M can generate improvements in two ways. The data requested to answer the form can serve as a guide for the public administrator to understand the legal requirements and necessary structures for implementing or improving sustainable public policies. Subsequently, the auditors analyze and confirm or correct the information provided by the auditees, on the form itself, generating a "final version", which will serve as a ranking of how much a municipality is in compliance with the legislation and delivering public policies that generate an impact on the lives of the population.

As noted by Nunes and Nascimento (2023, p. 1, personal translation), "there is a significant contribution from TCESP to the achievement of the 2030 Agenda, stemming from the correlation between the questions in the 'i-Amb', within the IEGM/TCESP framework, and the Sustainable Development Goals". However, the i-Amb dimension (related to the environmental sector of the administration) is not the only one that is related to the SDGs. As demonstrated on the figure 10, there are relationships between many sustainable development goals and different dimensions of the IEG-M. This demonstrates how IEG-M, as an SDG indicator, can produce data-driven diagnoses that support evidence-based decision-making at the local level.

ODS

1 DEMORACIÓN DI PRINCEZIO

2 DEMORACIÓN DI DEMORACIÓN

Figure 10 – Correlations between SDGs topics and IEG-M dimensions

Source: Santos; Nascimento, 2018, p. 8.

2.4.3 Tools for improving dissemination and engagement

TCESP has several panels of analysis of and information on specific subjects (such as, for example, ongoing engineering works) that are published on its webpage. Managers, servants and citizens in general can monitor the use of public resources and track progress or regress in municipal policies. Among them, the : SDG Panel stands out. This Panel brings to open public the correspondence between the SDGs and the criteria of IEG-M, alongside the city answer to that information, within the scope of each of the 644 cities under TCESP jurisdiction.

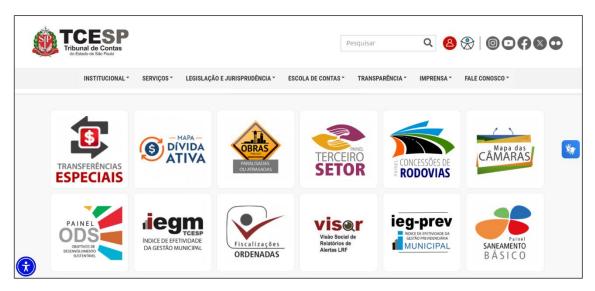


Figure 11 – Panels in TCESP website

Source: TCESP's website.

In 2017, from a partnership between TCESP and UNDP, the Observatory of the Future was created with the task of assisting the implementation of SDGs and to track its progress in both regional (State) and local (municipalities) levels of government. Through the Observatory, the Court discloses what the Institution has been doing to adopt the SDGs in its daily reality and informs the population about the global objectives, in a clear and simple manner. Furthermore, according to their website⁴⁶, "the SDG monitoring center will develop studies and training activities for civil servants, also collaborating in the systematization and dissemination of data and good practices". Aiming to reach public managers, servants and citizens with SDGs information and concepts, the Observatory makes available a free and online guide.

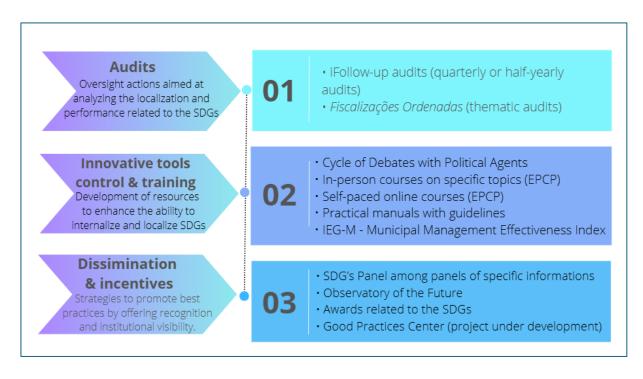
Through the Observatory, the Court has promoted several competitions for elementary school students over the last four years related to the SDGs. In 2022, the competition was for comic strips; in 2023, the best essay was awarded; in 2024, the best video production was awarded; and in 2025, the competition will be for music. Although the competitions are not directly related to public managers and servants, they help to publicize, raise awareness and engage with the global goals.

⁴⁶ Available at: https://www.tce.sp.gov.br/observatorio/o-que-e. Accessed on: 10 April 2025.

Finally, another incentive tool deserves to be highlighted. In 2024, among the projects developed by Court employees competing for the TCESP innovation award was the creation and structuring of the Good Practices Center. The project was not the winner, but the idea of analyzing and disseminating positive public management practices that bring effective results for the population and can be replicated (albeit with adaptations) was embraced by the Councilors. Thus, since 2024, the group has been closely monitoring municipal actions and preparing data for publication on the Court's website, generating inspiration and benchmarking.

In summary, as demonstrated, TCESP plays a multifaceted role that can promote advancing the localization of the SDGs goals and targets through governance oversight, capacity-building, and public engagement. As the primary external control body for 644 municipalities, the Court goes beyond traditional fiscal auditing by integrating policies assessments into its practices, aligning public administration with the 2030 Agenda. As illustrated in Figure 12, TCESP employs a range of tools designed: (1) to enhance evidence-based policymaking, reinforce transparency, and strengthen accountability, (2) to bridge knowledge gaps by offering training programs, technical guidance, and benchmarking opportunities for municipal administrators, and (3) to foster civic engagement, ensuring wider participation in the localization of the SDGs, through data dissemination platforms and public awareness campaigns.

Figure 12 – TCESP tools to foster better policies



Source: Own elaboration.

3 METHODOLOGICAL UNDERPINNINGS AND RESEARCH CONTEXT

An initial conceptual framework was developed, in Chapter 2, from literature situated at the intersection of localization of UN's Sustainable Development Goals in cities, the indexes that measure and monitor municipalities performance and Court of Audits role in this global commitment towards sustainability. The decision to narrow the research for city level was made because urban areas worldwide have increasingly been recognized as central to achieving the SDGs. Cities are home to more than half of the global population and are often at the forefront of sustainable development initiatives.

The review of extant research on the performance of local governments in localizing SDGs identified challenges municipalities face and the necessity of monitoring and publishing the results. The analysis of local achievements through indexes allows comparison among cities and makes possible the examination of the same city in different years, monitoring progress or highlighting the need for adjustments, if necessary, in a timely manner. A decision was made to not use the UN index in this dissertation – the SDG Index – because of its global or national level of data. The Sustainable Cities Development Index (IDSC) was chosen because it is tailor-made for local analysis and furnishes data from all the cities of the sample.

Additionally, the research verified the role Auditing Institutions could play in the fulfilment of the 2030 Agenda and the approaches for doing so. Most of the literature discusses national or federal Audit bodies, however, in Brazil the audit system is formed by the Federal Court and several State or Municipal Courts, which have similar responsibilities and are basically differentiated by their area of jurisdiction (national, state or municipal). This dissertation narrows its focus to regional Courts of Audit, since the author works for one of them (TCESP) and wanted to add field experience to this work, as well as to put any possible applications formulated into practice later. For that reason, most approaches must be considered in general matters and with the necessary adaptations, when applicable.

After forming the theorical framework, the study analyzed the actual situation of SP cities, in 2024 IDSC index, observing the municipalities' performance on localizing SDGs. The year of 2024 was chosen because it is the year of the last evaluations, the more updated data published.

Regarding the data sample, this study covers cities in the State of São Paulo for some reasons. First, due to the fact that the State is composed of a vast array of diverse yet urban places. São Paulo presents high demographic areas, some of the biggest cities in the country alongside with several smaller ones, rich and poor municipalities, territories with all degrees of technological, industrial and academical development.

Second, because these municipalities are under the jurisdiction of TCESP and form a large and diversified group of object of observation that is monitored (audited) on a regular basis, allowing the proposals resulting from this study to be implemented and monitored in the years to come. Moreover, the cities in TCESP's field of action were chosen because, as said, the author of this study works at this Court of Audit granting on-field knowledge and experience to the discussions made and also permitting to incorporate the new learning on daily work.

Among the 644 municipalities in the State of São Paulo under TCESP's jurisdiction, compliance with global sustainability targets varies significantly. The chosen municipal index (IDSC) reveals stark disparities: numerous cities face considerable challenges in meeting the global goals, scoring "low" on the index, while many others attain a "medium" rating, indicating persistent barriers to SDG localization. Notably, 78 municipalities achieved a "high" score, accounting for the majority of Brazil's 91 top-ranked cities (see Annex C for São Paulo full list). Nevertheless, even these high-performing cities exhibit gaps in fulfilling specific SDG indicators, encountering obstacles common across most municipalities. By narrowing the focus to these 78 cities – those with an IDSC score above 60.00 – this study aims to enhance the relevance and impact of its proposed measures, concentrating on jurisdictions where targeted interventions may yield the most significant progress and/or approaches can have better chances of being replicated.

The monitor and evaluating tool used was Sustainable Cities Development Index (IDSC), an index created by a partnership between a Brazilian institute – The *Instituto Cidades Sustentáveis* (Sustainable Cities Institute, in English) and the Sustainable Development Solutions Network (SDSN), a global initiative to promote integrated approaches to implement the SDGs (...) through education, research, policy analysis, and global cooperation (SDSN⁴⁷). The technical info is disseminated in a

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⁴⁷ Available at: https://www.unsdsn.org/. Accessed on 11 April 2025.

simple way, aiming to reach public managers with all backgrounds and make the data easier to analyze. "The methodology points out missing data to encourage technical bodies and public managers to fill the gaps and produce and integrate new databases" (IDSC⁴⁸).

The municipal index is a set of indicators that form the targets of each SDG. For example, to demonstrate whether a government is actually taking measures to end poverty in all its forms and everywhere (SDG 1), it is necessary to subdivide and analyze each of the indicators that constitute each of the various sustainable development targets. Figure 13 presents an example of this system.

Figure 13 – Exemplary list of SDG 1 targets and indicators



Source: Our World in Data49.

IDSC uses 100 indicators (see the complete list at Annex D), 98 of them based on public and official sources, to measure and evaluate the achievement of global

⁴⁸ Available at: https://idsc.cidadessustentaveis.org.br/methodology/. Accessed on 14 April 2025.

⁴⁹ Available at: https://ourworldindata.org/sdgs/no-poverty. Accessed on 10 May 2025.

targets, checking the public actions, activities and programs in a city. The scores are assigned in a range between 0 and 100, meaning a percentage of optimal performance. "The difference between the score obtained and 100 is therefore the distance in percentage points that a city needs to overcome to achieve optimal performance" (IDSC). The scores are segregated by colors and captions as shown on Table 4:

Table 4 – IDSC's color and caption rank

Caption	Color	Score
Very high		Above 80 until 100 points
High		Between 60 and 79,99 points
Medium		Between 50 and 59,99 points
Low		Between 40 and 49,99 points
Very low		Below 39,99 points

Source: Own elaboration based on IDSC' site.

The index developers defined a "desirable value" for each of the indicators, represented by the division between light green and dark green. Subsequently, the IDSC developers established the "green line" or "green threshold", the value from which the municipality is considered to have achieved compliance with the SDGs. This threshold is located on the dividing line between light green and warm colors. The complete list of indicators, desirable values, etc. is in the Annex D of this study.

The creators of the index considered the 17 SDGs an integrated set of elements, the reason why all the goals were weighed equally, even though they had different amount of indicators within each one. In this way, if a city aims to progress and move up in the rank, it shall invest in all 17 sustainable goals. "To compute the IDSC-BR, scores are calculated for each of the 17 goals, using the arithmetic mean of all indicators for that SDG. The average of these scores produces the result expressed by the index" (IDSC).

Despite being the only index that evaluates all SP cities (Brazilian cities, actually) in each of the SDGs, the index has its gaps, which are also embraced by the author as gaps for future research. First, not all the dimensions and targets on the 2030 Agenda are covered by IDSC due to a lack of information in public data lakes. Second,

some information is not updated because the reference year of the data is from several years ago.

São Paulo State have no city that scored "very high" (dark green) level of achievement of SDGs. Actually, until 2024, most of SP cities have just reached the middle of the evaluation in points⁵⁰. The 78 municipalities in the sample achieved the "high" score (light green) and represent 12,09% of all the municipalities in the State. They exceeded 60,00 points but obtained a maximum of 66,76 points of 100,00, demonstrating that there is still room for much - necessary - improvement.

After selecting the sample, the research verified whether the cities presented any characteristics that could be related to the barriers commonly faced by local managers, such as lack of awareness of the topic both within the administration and among the general population, few financial resources, low technical training, among others.

To categorize the size of cities and, therefore, the local administrative structure, the population density presented in the IDSC itself was considered. To identify the level of financial resources of the municipality, the GDP *per capita* value was obtained from the official website of the federal government. Considering that deficiencies in technical knowledge constitute an important obstacle to the full adoption of the 2030 Agenda, the proximity of cities to universities and technology centers were verified, areas where new skills could be developed.

Subsequently, the level of compliance of managers with the analyses already underway by SP Court was observed. The classification of each city in the TCESP's Municipal Management Effectiveness Index (IEG-M) revealed whether, after 10 years of evaluation by the index and ranking, managers had already improved their administration and the scores reached "highly effective" (grade A) or "very effective" (grade B+).

Finally, the study verified cities' proximity to the theme of 2030 Agenda and SDGs and its dissemination through the official communication channels of the municipalities. The objective was to analyze the level of awareness and sensitization for the sustainable goals and global agenda. By observing the first pages of the official websites of the cities and accessing the keyword search systems available online, it

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⁵⁰ Just a side information: São Paulo city, the Capital of the Stat, is among the cities that scored "medium" (yellow), with 55,58 points. Available at: https://idsc.cidadessustentaveis.org.br/profiles/3550308/. Accessed on: 22 April 2025.

was possible to see how current and frequent the theme was presented to the population, servants and managers.

According to Gil (2008, p. 27, translated by the author), "exploratory research has as its main purpose to develop, clarify and modify concepts and ideas, with a view to formulating more precise problems or researchable hypotheses for later studies". Its purpose is to deepen the understanding of the subject, and its procedures include bibliographical survey and analysis of preliminary documents, aiming to broaden the understanding of the phenomenon and identify relevant variables. Thus, this type of research is used when faced with a topic not explored in the specificities that are needed, so that precise and operationalizable hypotheses can be formulated about it (Gil, 2008, p. 27).

The exploratory nature of this research enabled deeper knowledge of the phenomena studied. The combination of data analyzed with informal observation in the author's daily work permits us to have a broader understanding of the aspects that can impact the achievement in some localities. The research embraced a deductive approach to use the framework structured by the theory in the beginning to analyze the data through these lenses. The objective is to build more solid ground for deciding the most effective interactions an Audit Institute could use to address the problems presented and design a personalized range of the contributions that TCESP could make to foster the localization of the SDGs in cities in São Paulo.

4 RESULTS AND FINDINGS

Previously, this research presente01d the barriers cities face globally to adopt the 2030 Agenda detailed in Section 2.2, analyzed the strategic role Audit Institutions play to foster sustainable development within municipalities in Section 2.3, and detailed the tools São Paulo's Court has to be a driving force in this process, in Section 2.4. Now using the methodology described in Chapter 3, this study aims to answer two areas of inquiry: the primary challenges faced by SP's cities in advancing the local adoption of the SDGs, and the tools and strategies employed globally by Audit Institutions to promote the 2030 Agenda.

To systematically assess the challenges cities are facing, Section 4.1 examine key municipal characteristics starting with population density (as per the IDSC classification) and GDP *per capita* (sourced from federal government databases), which reflect administrative capacity and fiscal constraints. Additionally, proximity to universities and technology centers was evaluated to gauge access to knowledge and innovation, factors critical for advancing sustainable development initiatives. Further investigation focused on the compliance capacity and response of municipal governments to problems already diagnosed over the past 10 years by the TCESP Municipal Management Effectiveness Index (IEG-M). Finally, the study scrutinized the visibility of the 2030 Agenda and SDGs within municipal communication channels. By analyzing official websites and keyword search systems, the research assessed the frequency and prominence of sustainability-related content, offering insights into the level of engagement and awareness among public officials and citizens.

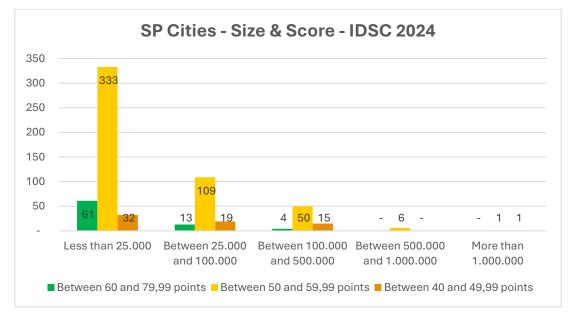
Section 4.2 presents some exemplary cases of actions taken by Audit Institutions around the world that resulted in improvements towards the full adoption of the SDGs. The guidance of the audit bodies occurred in various ways, whether through specific performance audit reports, training of managers and public servants, or by disseminating practices that can be replicated. Among the experiences brought, some from TCESP itself stand out, which have already yielded results for the community in the past. The analysis of these cases will highlight some gaps where an Auditing Entity could act more assertively.

4.1 Analyzing the SDG map of São Paulo State

First of all, the data analyze focused on the size of cities ranked with "high" (light green) achievement on the 2030 Agenda until 2024, which have made 60,00 up to 66,76 points of 100,00. The question remains: does the size of the city impacts SDG localization? It is expected that a smaller territory is easier to manage and demands fewer servants into the governmental machine. On the other hand, cities with a low number of inhabitants generally have older and less specialized populations (and, consequently, servants), due to the fact that younger and specialized people tend to move to big centers.

IDSC index divides the cities by population and presents five ranges to the sizes: small municipalities with less than 25.000 inhabitants, cities with 25.001 and 100.000, the ones that stand between 100.001 and 500.000, urban territories with 500.001 up to 1 million inhabitants, and the cities with the highest demographic aspect, which are home for more than 1 million people.

The data on graphic 3 shows that none of the bigger cities in the sample (urban areas with more than 500 thousand of inhabitants) scored "high" (light green). On the contrary, 61 of the best ranked municipalities are in the smallest cities group. 17 "high" scores go to urban areas that have between 25 thousand and 500 thousand inhabitants.



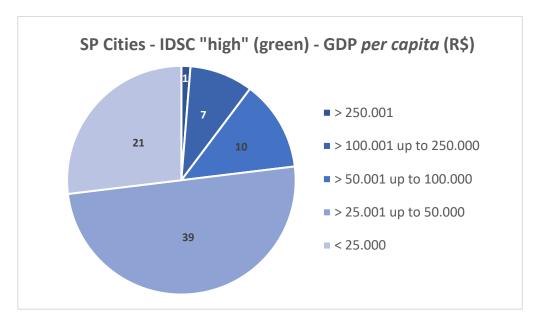
Graphic 3 – SP cities in IDSC 2024 ranking according to population numbers

Source: Own elaboration based on ICS - IDSC 2024.

Based on this information, the study focuses its analysis on the 78 cities with a "high" (light green) score on the IDSC, for two concurrent reasons. First, because the range of barriers they face is likely to be within the broader range presented by cities with lower scores. Also, because this study aims to increase the relevance and impact of the proposed measures, focusing on cities where targeted interventions can generate the most significant progress or approaches may have the greatest chance of being replicated.

Considering this direction, the second observation concerns the amount of financial resources an administration have to implement public policies. To determine this impact in sustainability, this study verified the GPD *per capita* in all the 78 cities with better scores ("high" level of SDG localization according IDSC index). Therefore, it is possible to analyze if it is possible to achieve 2030 Agenda targets without having big budgets.

The graphic 4 indicates that just one of the "high level" city had more than R\$ 250.000,00 of GDP (the city of Ilhabela, on the seaside of the State, had more than R\$ 385 million in GDP, in 2024, remaining with the 75th place of the rank). Although, the biggest share of cities deals with less than R\$ 50.000 GDP / inhabitants.



Graphic 4 – SP cities ranked "high" in IDSC 2024 sorted by GDP per capita

Source: Own elaboration based on ICS-IDSC and IBGE.

Another aspect to consider is whether the neighborhood can influence or not the growth of SDGs achievement. In Brazil, the best and largest universities and technological institutes are usually concentrated in large urban centers, which is not the case for most cities in the sample. Obviously, there may be exceptions, but the objective of this dissertation is to provide a general basis that can provide useful analyses for as many cities as possible.

For that matter, this study analyzed how distant from technological and academic poles are the cities better ranked on IDSC. For the purpose of this research, two regions were considered to have the more intense presence of universities, tech schools and industries: the South-Est region of the State, where the Capital and Campinas (the 2nd biggest SP city) are and the Center, including Bauru, São Carlos and Araraquara cities, territories filled with public universities, private investments and intellectual scene.

As the map on figure 14 shows, the proximity with the Capital or to the central region São Carlos – Araraquara doesn't seem to have influence in the SDG achievement, though cities around Campinas and close to Bauru benefits of their location. Moreover, it is important to highlight that there are dozens of cities who scored "high" that are far away from the two academic and technological advanced areas, in the North-West and Central-South of the State. The scenery clearly indicates that

having poles of development nearby is beneficial, but it is not an indispensable condition to accomplish the 2030 Agenda.

São Carlos Araraquara Bauru Campinas SP capital

Figure 14 – The academic and technological poles in SP State on Brazilian map colored from IDSC 2024 results

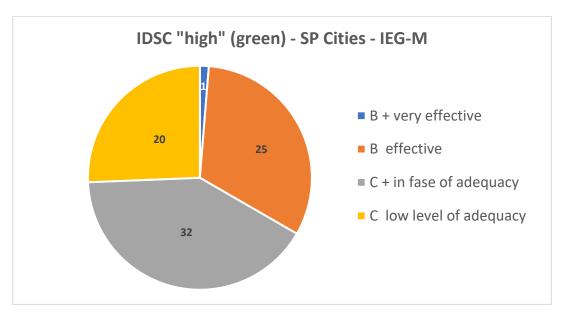
Source: Own elaboration based on ICS - IDSC - Interactive Map.

Next step was to verify if the 78 SP cities that score "high" (level of attendance on SDGs) in the IDSC Index also present high performance on TCESP's Municipal Management Effectiveness Index (IEG-M). As detailed on Subection 2.4.2, the index verifies compliance with legal rules and the effectiveness of municipal managers' actions in 7 different areas: planning, fiscal, education, health, environment, civil defense and information technology. Many of the issues verified in the IEG-M are directly related to targets and compliance with SDG indicators, such as the percentage of childhood vaccination, for example. In addition, the irregularities found in the noncompliance with IEG-M's requirements are included in the audit reports, as well as in the recommendations.

This observation allows us to go deeper into sustainable development, informing if the city is not just implementing some actions to check the box on SDGs targets, but also if the municipal public policies (in general) are effective. Furthermore, considering that the cities have been evaluated by IEG-M for 10 years, the analysis allows us to

verify the level of compliance with the Court's findings and commitment to the necessary changes recorded in the reports' recommendations.

According to the graphics, only one city (Narandiba, 45th place in IDSC rank, scoring 61,45 points and with a gross GDP – R\$ 129.106,16) reached "B+" (very effective) and ended up mirroring the SDG and the TCESP indexes. Considering the Court of Audit index, the majority of the cities in the sample were not effective, presenting "C+ – in process of adequacy" or "C – low level of adequacy" scores.



Graphic 5 – SP cities ranked "high" in IDSC 2024 under IEG-M index ranking

Source: Own elaboration based on ICS - IDSC and IEG-M - TCESP.

As occurred in the IDSC index, where no SP city reached the maximum score ("very high" level of SDG achievement), none of the cities in State of São Paulo reached the maximum score at IEG-M index ("A – highly effective").

Finally, one last assessment was made: the level of dissemination of the 2030 Agenda and the UN SDGs in SP cities, both internally (public managers, coordinators, servants, etc) and externally (citizens in general) population. The lack of awareness of the SDGs is a challenge to be overcome at different levels (leaders, civil servants, population, partners, etc.) and which affects different dimensions of the problem (governmental, financial and social), which makes awareness and familiarity with the subject of sustainable development even more essential. To investigate if local

administration is concerned about the subject, the study verified if the topic is present in the municipalities' website, cities wider form of communication with society.

This study mimics Winden's (2017) logic of indicators to verify the weight given to some subject by measuring quantity and facility / accessibility to find information. Therefore, the indicator settles on a scale from high to low depending on if there is mention of the SDGs and / or 2030 Agenda in the front page of public website (high), if there is mention of some action or procedure about after using the "search" function (medium), or if there isn't mention about the topic on public page (low). The following words or concepts were searched on the web pages: "SDG" (ODS, in Portuguese), "2030 Agenda" (*Agenda 2030*, in Portuguese) and "sustainable development" (desenvolvimento sustentável, in Portuguese).

According to the results founded, more than half of IDSC's best ranked SP cities don't mention SDGs, 2030 Agenda or the concept "sustainable development" in their websites. In the middle, 31 municipalities have news or projects related to the SDGs on their websites, but this requires some search engines. Nevertheless, the data presented in two cities showed that the topic is part of the municipal agenda and deserves a place on the first page of their websites. Anyone can find information on the subject without effort.

Graphic 6 – SP cities ranked "high" in IDSC 2024 according to site mention of SDG or the 2030 Agenda IDSC "high" (green) - SP Cities - site dissemination 50 45 45

40 35 31 30 25 20 15 10 2

medium

low

Source: Own elaboration.

high

Among the cities with "medium" score, Pontes Gestal is highlighted. Despite presenting information related to the SDGs or 2030 Agenda or sustainable development just after the use of "search function" in the website, the municipality displayed an SDG report 2024, showing the importance of the theme. Even though the info was not on the front page, when the citizen looks for deeper data, he/she can find a whole report on the subject.

2023
Relatório de Progresso

Progresso

PREFEITURA PONTES GESTAL

Figure 15 – Pontes Gestal's website

Source: https://www.pontesgestal.sp.gov.br/arquivos/ods_pontes_gestal - gab_07044424.pdf.

All the other municipalities ranked as "medium" level of importance of the theme presented some information regarding the topics, after research. Generally, the findings are older news, prizes from previous years and ancient projects or campaigns. This can occur due to the changes in administration (elections) or to weakness in the cycle of life of public projects and policies. If the importance of the theme was more disseminated into the local society and public servants, probably the mention to the topics will be more recurrent on the official web page.

Saint Anthony of Finhal

Administration

Residents of Santo Antônio do Pinhal can suggest actions to improve the city and the planet
The action is part of the Sustainable Development Goals (SDGs), a global action plan proposed by the UN with a target of
2023

Pulsahed on 07/30/202 at 4:26 pm

2023

Sape Antônio Pinhal surveys problems, needs and deficiencies
Pulsahed on 09/09/202 at 9:40 am

Administration

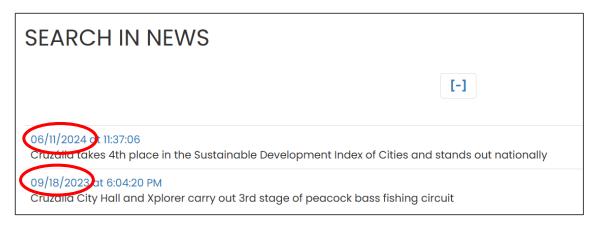
MUNICIPALITY MAKES SURVEY OF PROBLEMS, NEEDS AND DEFICIENCIES
Brazil, together with the 193 UN member states, have committed to adopting one of the most ambitious agendas in the history of internations. Solomory. Through it, nations will work to achieve the Sustainable Development Goals (SDGs).

Pulsahed on 09/09/202 at 15:40

Figure 16 – Santo Antônio do Pinhal's website

Source: https://www.santoantoniodopinhal.sp.gov.br/pesquisar.

Figure 17 – Cruzália's website



Source: https://www.cruzalia.sp.gov.br/.

Nonetheless, two cities demonstrated that it is possible to transform the SDGs into a current issue for managers, servants and society, and reached "high" level of dissemination. The findings are that these municipalities included the 2030 Agenda into the official and important subjects to figure at website's first page. Whether including the UN goals into all the public policies and therefore alongside the correspondent news in the site, as the city of Pedreira; whether given the subject a

particular and specific icon in the webpage, as São Manuel; the cities proved that it is conceivable to include the SDGs regularly into websites and lives.

Dedreira Education Department distributes Easter Eggs to students in the Municipal Network

Education

O4/16/2025 at 4:21 pm

O4/16/2025 at 4:21 pm

O4/16/2025 at 4:20 pm

Figure 18 – Pedreira's website

Source: https://www.pedreira.sp.gov.br/.

PUBLIC SERVICES EVALUATION SURVEY
Click to access

GOVERNMENT PLAN 2025 - 2028
REQUIREMENTS
Click to access

Click to access

Click to access

SDG - SUSTAINABLE DEVELOPMENT
GOALS
Click to access

Click to access

Figure 19 – São Manuel's website

Source: https://www.saomanuel.sp.gov.br/.

The challenges São Paulo's municipalities face in advancing SDGs reflect not only local policy limitations but also broader systemic barriers leading to situations that requires horizontal and vertical coordination, multi-stakeholder partnerships, and linking existing policy resources with formal procedures (Masuda *et al.*, 2021). In other

words, the lack of progress cannot be explained in isolation but should be understood through an integrated lens that considers local context.

The findings reveal key trends: top-ranked cities predominantly have populations under 25,000, while larger cities (500,000+ inhabitants) scored lower. Financially, 75% of municipalities reported a GDP *per capita* below R\$50,000. Notably, high-performing cities in the IDSC were often distant from the state's academic and technological hubs (southeastern and central regions). Over two-thirds of municipalities consistently demonstrated inadequate compliance levels in TCESP's decade-long effectiveness index. Lastly, only two cities provided substantial SDG-related information on the first pages of their official websites.

After understanding the realities and being aware of the results found in the municipalities on the sample, it is possible to design viable alternatives for the SDGs localization in SP cities and to articulate the best opportunities for TCESP to be a driving force in the induction of the 2030 Agenda.

4.2 Finding Audit Institutions' tools and strategies to foster the SDGs

To face the challenge of fully adopting the SDGs globally and in compliance with INTOSAI's determination to be part of the change, several Audit Institutions around the world have implemented practices seeking to foster and promote sustainable development. Some audit bodies have conducted performance audits, others have developed index, some have used new technologies, others have formed partnerships or engaged the community. Such actions demonstrate the broad repertoire of tools and strategies that can be used by auditors to guide the localization of the SDGs.

The Office of the Auditor General (OAG) of Canada conducted a performance audit to assess the federal government's preparedness to implement the 2030 Agenda. The audit revealed significant gaps, including the absence of a formal governance structure, lack of stakeholder engagement, and insufficient monitoring mechanisms. Despite Canada's commitment to the SDGs, the OAG found that key ministries had not aligned their policies or allocated adequate resources into it. The audit's recommendations led to improved interdepartmental coordination and the development of a national framework for SDG implementation, demonstrating how SAIs can drive accountability and systemic change.

In Latin America, the Brazilian Federal Court of Accounts (TCU) spearheaded a coordinated audit across 12 countries to evaluate preparedness for SDG implementation, with a focus on sustainable food production systems (SDG target 2.4). The audit employed innovative tools like the SDG Radar and Governance Assessment Scale, revealing policy misalignments, such as tax incentives for pesticides contradicting agroecology goals. The TCU's findings prompted reforms to harmonize policies and reduce fiscal inefficiencies, showcasing how regional audits can identify cross-border challenges and promote policy coherence. The audit also highlighted fragmentation in governance, leading to recommendations for integrated monitoring systems and stronger interministerial collaboration.

In Costa Rica, the General Comptroller Office (CGR) developed a standardized index to measure water quality, continuity of provision, and infrastructure conditions to analyze water service delivery in vulnerable communities, aligning with SDG 6 (clean water and sanitation). The results revealed significant deviations from national standards. By engaging local stakeholders in the evaluation process, the CGR not only highlighted systemic inefficiencies but also fostered community participation in accountability mechanisms. The audit's evidence-based recommendations prompted reforms in water management policies, demonstrating how SAIs can bridge gaps between national targets and local realities while advancing equitable service delivery.

The Audit Board of Indonesia (BPK) adopted a geospatial approach to monitor SDG progress in water management (SDG 6) and poverty reduction (SDG 1). In auditing the Brantas River watershed, BPK used NASA satellite data to track pollution levels and economic activity, revealing inefficiencies in waste management and sanitation policies. The audit found that industrial and domestic waste contamination increased water treatment costs by USD 2.04 million annually. BPK's recommendations led to the establishment of pollutant load thresholds and incentivized local governments to adopt integrated sanitation programs. Additionally, BPK's use of the UN's High-Level Political Forum (HLPF) themes to align audits with SDG targets, contextualizing global frameworks to local priorities.

Focusing on TCESP and highlighting some of the tools presented on Figure 12, the recommendations resulting from the audits have already brought several improvements to the municipalities that implemented them. For example, in 2020, the Court identified irregularities in solid waste management in municipalities in the

Sorocaba region, recommending the review of contracts and the implementation of sustainability policies. As a result, cities modernized their selective collection systems, increasing material recycling by 30%.

Another approach that yielded results was, for example, the preparation and dissemination of the Manual of Accounting Applied to the Public Sector (MCASP). In addition to making the material available online, the Court promoted training on the MCASP for municipalities, aiming at standardization and transparency in public accounting. Another action that stands out was the Ordered Inspections in health, during the Covid-19 pandemic. The Court issued technical recommendations and checklists for municipalities on the management of pandemic resources, helping to optimize resources and raise awareness among managers and citizens.

International case studies reveal diverse approaches to overcoming urban SDG implementation challenges. Canada's OAG addressed governance gaps through targeted training recommendations, while Brazil's TCU employed innovative tools to resolve policy fragmentation by raising stakeholder awareness. Costa Rica's CGR developed a specialized water quality index that engaged public participation in problem-solving. Indonesia's BPK utilized NASA technology to monitor environmental conditions, with findings addressed through policy recommendations and public disclosure. Similarly, TCESP has implemented practical solutions including management recommendations, technical manuals, and resource optimization checklists to enhance SDG adoption.

These case studies demonstrate how Audit Institutions can effectively address systemic barriers to SDG localization across governmental, financial, and social dimensions. Through their oversight and advisory functions, audit bodies help mitigate challenges including limited awareness, insufficient funding, low stakeholder engagement, inadequate governance structures, and technical capacity constraints in cities. These exemplificatory cases underscore the transformative potential of Audit Institutions in bridging policy gaps and helping governments to overcome the SDGs barriers.

5 DISCUSSION AND PRACTICAL APPLICATIONS

The empirical findings of Section 4.1 reveal distinct patterns in SDG localization challenges across municipalities: smaller cities (less than 25,000 inhabitants) outperformed larger urban centers, with 75% showing limited fiscal capacity (less than R\$ 50,000 GDP *per capita*) and most demonstrating persistent governance deficiencies. These challenges endure despite geographic distribution, as best-performing municipalities were frequently located outside major academic or technological hubs. The worst concerns are related to consistent inadequate compliance levels in TCESP's effectiveness index and lack of substantial SDG-related information on official municipal websites.

International comparative analysis on Section 4.2 demonstrates how Audit Institutions address such multidimensional barriers. There are examples in implementing capacity-building programs, developing policy alignment tools, and creating participatory monitoring systems. These approaches are mirrored in TCESP's technical guidance and assessment frameworks. These cases collectively illustrate Audit Institutions' capacity to mitigate systemic SDG localization obstacles through their dual oversight-advisory role.

While these findings provide substantive evidence, their interpretation must consider the broader theoretical framework established in Chapter 2, particularly regarding institutional capacity and multilevel governance dynamics.

5.1 Proposal for practical application – regarding the cities and policymakers

As discussed on Chapter 2, "strategies should be customized to reflect each country's distinct challenges and capacities, ensuring that interventions are relevant and effective in driving progress toward SDGs" (Awalia *et al.*, 2024, p. 12). It is also relevant to municipal and regional realities.

The customization of effective actions will depend on the ability of public managers to create a virtuous cycle for localizing the SDGs, which requires both strategic sequencing and coordination of multiple departments and actors at all levels of governance. This will make it possible to raise awareness among public leaders and servants, to prepare the team, to find resources, to execute the plan, to disseminate

and engage. And the more the process is evaluated and shaped, the faster and better the sustainable development will be achieved in its three dimensions: environmental, financial and social.

The first step to be taken by public managers in building this cycle is understanding the SDGs framework and identifying priority goals based on a city's specific challenges, capacities, and existing policy instruments. In other words, setting the cities' starting point for the next phase. The OECD (2020, p. 5) notes that a territorial approach to the SDGs helps policymakers "identify synergies and manage trade-offs; raise awareness; engage citizens; (re)shape local development strategies... and prioritize investments, budgets and resources". This prioritization must be grounded in a diagnostic process informed by territorial data and local needs. In this sense, selecting where to act first is not just strategic but essential to building institutional legitimacy and public support.

Once priority goals and targets are defined, the next step is to sensitize and capacitate public servants across sectors. Sustainable development actions are inherently intersectoral, and compartmentalized public structures often prevent coherent planning and execution. Encouraging cross-departmental dialogue and joint training initiatives strengthens internal policy coherence and builds a common vocabulary among servants around the SDGs, raising awareness and building commitment. And more: as the UNDP (2020, p. 1) stresses, localizing the UN goals requires a "whole-of-society approach" and innovation in the way "public institutions, private sector and citizens collaborate to achieve sustainable development". Cities that integrate SDG targets into sectoral plans, budgeting cycles, staff evaluations, etc., are more likely to maintain consistency and resilience throughout political transitions.

The modest progress that has been made in SP cities suggests that also more attention is needed to implementation, that becomes a matter of converting plans into integrated actions, guided by data and supported by inclusive governance. Studies on Chapter 2 suggest that implementation can be deepened by expanding the technical knowledge of public servants, strong coordination skills of leaders, and the creation of a sense of collectivity. Even because achieving the SDGs locally is not a linear task – it is a dynamic, interactive process shaped by cooperation, innovation, and institutional learning. Mainstreaming the SDGs requires above all coordination, multi-stakeholder partnerships, and linking existing policy resources with formal procedures (Masuda et

al., 2021). Once designed policies can simultaneously address multiple SDGs and their targets, teamwork will be vital. For achieving, for example, an integrated social program that implements education initiatives that focus on quality education (SDG 4.1), gender equality (SDG 5.1), and reduced inequalities (SDG 10.2), fostering social cohesion and empowerment, several servants from different areas shall participate.

The next step is (or should be) a part of public policy implementation lifecycle: monitoring and evaluating. For didactical purposes, this study stresses the importance of action by giving it a whole ring of the development chain. An evidence-based approach, generated by indicators tracking, performance reviews, feedback mechanisms and so, ensures continuous improvement and accountability. It is crucial to understand the processes to maintain the strengths, adjust the flaws, improve everything that is possible and to provide correct information about the progress of the implementation of the 2030 Agenda in the municipality. The data track also ensures a more precise public accountability and allows inspirational dissemination of the administrative advance on UN goals and targets, with accurate baseline. Local benchmarks can lead to a regional transformation, beyond the city only.

The final step would be to report and to publicize the progress and the obstacles. Communicating achievements, challenges, and lessons learned to stakeholders and the broader community can enhance transparency, trust, and mutual learning among cities. Moreover, reporting the last achievements will position the city as a proactive participant in the global sustainable development agenda, especially when done through the UN's Voluntary Local Reviews – VLR. On the other hand, publicizing the barriers and challenges allows other players to pay attention to it and gain some helpers, while making the road clear for other public managers and servants to make a detour. In a better scenario, it creates opportunities for cities to pave a road together, adapting for their own reality but solidifying the basic part in collaboration.

In conclusion, constructing a virtuous circle for SDG localization means institutionalizing a cycle that begins with local diagnosis and strategic prioritization, passes through the sensitization and capacitation of public servants, reaches coordinated implementation of actions, which will have a robust monitoring and evaluating, finalizing in social accountability and benchmarking by reporting and publishing. While this cycle cannot ignore differences among cities, it offers a framework that is both adaptable and scalable.

5.2 Proposal for practical application – regarding TCESP

As independent external control institutions, Courts of Audit are responsible for overseeing public resource management and evaluating the effectiveness of government policies. According to the literature analyzed in Chapter 2, Audit Institutions play a vital role in ensuring the effective implementation of the SDGs in cities, making sure that public policies are planned and executed in a transparent, efficient, and sustainable manner.

Beyond demanding the localization, these institutions can influence stakeholders towards 2030 Agenda, as Winden (2017, p. 14) highlighted:

The level of influence is dependent on the output of a Supreme Audit Institution, to be precise, the type and amount of information produced and disseminated, and the outcome, that is, the uptake and usage of this information by decision-makers (Biermann et al., 2009).

Whether through reports, guidance, indexes and ranking, courses or feedback mechanism:

Communication has been identified as crucial for a Supreme Audit Institution's influence on processes; thus, by directing their attention on the timing of reports and by providing a supportive rather than a critical message the effects of their contributions can be significantly enhanced (Winden, 2017, p. 61).

Drawing upon the theoretical framework established in this study, empirical findings from the IDSC analysis of São Paulo municipalities, and TCESP's institutional tools (Figure 12), this research proposes a range of strategic approaches to enhance SDG localization. These evidence-based recommendations constitute a flexible framework rather than an exhaustive prescription, allowing for tailored adoption based on individual municipalities' specific challenges, capacities, and developmental requirements.

5.2.1 Regular audits with special focus

Considering the deadline of 2030, TCESP could emphasize the analysis of actions that lead to sustainable development in the Courts annual report. Integrating

SDG criteria into audit process may change the focus of the municipal administration towards the 2030 Agenda. Incorporating assessments of SDG-related initiatives within routine audits of municipal accounts by evaluating how local governments are aligning their policies and expenditures with the SDGs, the Court can highlight areas needing improvement and commend successful practices.

Policy coherence and integration require systematic assessment across the entire policy cycle, from initial planning through implementation to evaluation and revision. Some cities have already aligned their municipal master plans with the SDGs, while others are still reviewing or drafting new plans. TCESP can assess the alignment and coordination among various municipal policies to ensure they collectively support the achievement of the SDGs. Identifying and addressing policy gaps or contradictions can enhance the overall effectiveness of local sustainable development efforts.

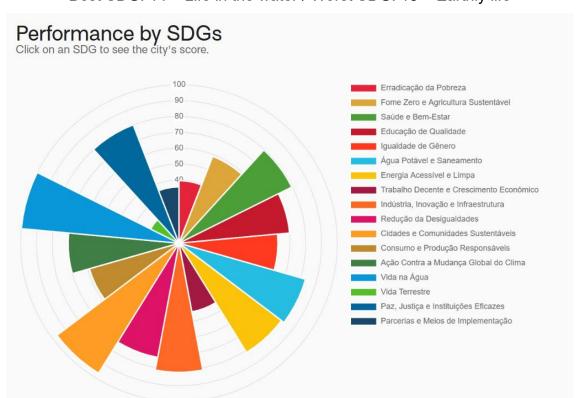
By accessing the IDSC index, it is possible to identify the goals that have more attention from public managers and the ones that need to be developed (example in the figure 13). From this point, it is possible to tailor a specific approach to each city (considering every reality) or propose a State-whole analysis, developing frameworks to systematically gather and communicate results of performance related to the SDGs.

| Indice de | Description | De

Figure 20 – Rank of the city of Alfredo Marcondes – IDSC 2024

Source: https://idsc.cidadessustentaveis.org.br/.

Figure 21 – Performance by SDG of the city of Alfredo Marcondes – IDSC 2024



Best SDG: 14 - Life in the water / Worst SDG: 15 - Earthly life

Source: https://idsc.cidadessustentaveis.org.br/profiles/3500808/performance/.

After selecting the goal or goals, the targets related could be analyzed one by one, to verify which are the gaps that need to be filled and the barriers that have already been trespassed. This data can also be reached into IDSC site:

Figure 22 - SDG 15 indicator - City of Alfredo Marcondes - IDSC 2024



Source: https://idsc.cidadessustentaveis.org.br/profiles/3500808/indicators/.

Therefore, this author understands a general approach is more viable and can bring better results, once it permits to follow the SDG development in the city through the years and allows a comparison among municipalities that have similar backgrounds, as population, revenue, size, etc. An approach of this format appears into another Brazilian State Court of Audits – the State of Santa Catarina, where on the report's second page, there is a list of the SDG targets evaluated in the audit's year (2021, in the case), in a very friendly and comprehensible way to general public, alongside with technical information into the text of report.

Chapecó exercício de 2021 Prefeito 227.587 IDH-M 0,790 João Rodrigues Habitantes (Alto) Agenda 2030 Indicadores analisados nas contas governamentais ODS 3 Meta 2.4 -Meta 16.1 - Taxa de Homicidios Meta 3.2 - Taxa de Mortalidade 13,62 casos por 100 mil Certificação de Infantil produtores 12,8 casos por mil nascidos habitantes Taxa de Feminicídios orgânicos pelo Ministério da Meta 3.4 - Taxa de Mortalidade 1,32 casos por 100 mil por Suicídio 13,62 casos por 100 mil habitantes Meta 16.6 - Ouvidoria Municipal Possui Agricultura habitante Nota do Município no Mapa Brasil Transparente Mortalidade por abuso de 9,47 de 10 pontos drogas entorpecentes e uso Meta 16.7 - Conselhos nocivo do álcool **Municipais Ativos** 2,20 casos por 100 mil Possui os principais habitantes 17 OBJETIVOS Mortalidade por Município Transparência Brasil 9,47 de 10 pontos Acidentes de Trânsito 169 METAS Requisitos mínimos de mil habitantes Cumpriu ODS 4 Meta 4.2 - Taxa de **ODS 11** Atendimento em Creches Meta 11.3 - Plano Diretor Participativo Taxa de Atendimento Meta 6.1 - Proporção da população atendida com 83,74% (4 a 5 anos) Existência de Conselho Municipal setorizado serviços de água potável ODS 5 Meta 5.2 - Taxa de Meta 6.2 - Percentual da Meta 11.4 - Conselho Municipal população atendida com Mortalidade por de Cultura e Patrimônio esgotamento sanitário Feminicidio Público ossui Conselho Municipal desta natureza 1,32 casos por 100 mil habitantes Gestão.gov.br icio 2021): R\$216.513.162,63

Figure 23 – Example of the 2nd page of a audit report from the TCESC

Em andamento

To increase TCESP's influence on auditees,, it is important to monitor the implementation of recommendations. Follow-up mechanisms ensure that suggested corrections are adopted, closing the audit cycle and creating a culture of compliance and continuous improvement (McClain, 2024). Through monitorization, these

institutions not only evaluate progress but also encourage continuous improvement in government practices, significantly contributing to achieving the objectives set by the 2030 Agenda.

5.2.2 Performance audits

Another option to drive the attention to SDGs is to conduct in-depth audits focused on specific policies or thematic areas (such as sustainability, gender equality, healthcare). This action helps identify systemic inefficiencies, to provide in-depth analysis and recommend targeted improvements. Auditors can use indicators, comparisons and set specific milestones to monitor cross-cutting policies and give direction to auditees.

The purpose is to analyze whether municipal governments have clear strategies, appropriate governance structures, and monitoring mechanisms to implement a specific sustainable goal or target. Conduct performance audits on programs and policies SDG-related helps to highlight unobserved legislation and to provide a beneficial checklist to the accomplishment of 2030 Agenda.

Cities' managers and leaders improve administration by reading and studying the recommendations and applying them, when receiving the results of their audits. A formal but comprehensive report paves the way to the opportunities for improvement of administrative actions, giving the reasons why the failures did occur and creating possibilities for a better future.

5.2.3 Creating capacities

To be even more assertive and effective, getting straight to the point of instructing public administrators and servants, TCESP could develop and teach SDG-related courses. Offering structured training programs and technical guidance for public managers and servants fosters improved policy formulation and implementation, especially in areas like environmental governance (Nunes; Nascimento, 2023). This action will provide municipalities with standard-setting frameworks that clarify legal and administrative responsibilities, in addition to enabling the exchange of experiences between students.

The SP School of Public Accounts (EPCP, in Portuguese) is a part of TCESP with specialized and qualified professionals for exactly this role. They can guarantee the material elaboration and classes execution, whether in presential or online meetings, of high-level courses about 2030 Agenda to both internal and external public.

5.2.4 Disseminating best practices

Benchmarking is usually a clever strategy among politicians and public leaders. TCESP could develop an specific platform or panel to share successful strategies and case studies from other municipalities that have effectively implemented SDG-related policies. By providing a repository of best practices, SP Court can serve as knowledge hub, enabling cities to learn from each other's experiences and adopt proven approaches. Inspirational reports and stories can set light into the path for the ones with less innovative ideas, resources and capacities to develop a strategy from the beginning

For the public point of view, municipal disclosure promoted by TCESP can strengthen the Courts relationship with society at the same time as advocates for talking about sustainability. Encouraging public involvement ensures that SDG initiatives are responsive to community needs and foster a sense of ownership among residents, strengthening public trust in government institutions.

According to one of the Substitute Counselor of the Court of Auditors of Santa Catarina (TCESC, in Portuguese), there are benefits in publicizing any good practices found in the analysis of municipalities. Some of them are: encouragement of new initiatives, appreciation of the work carried out, encouraging the reproduction of successful actions by other managers, and reducing the costs and time required to develop new solutions (TCESC, 2023).

Benchmarking can both empower (for those in the leadership) and inspire (for those that are behind).

By adopting these strategies, SP Court of Audit can significantly influence municipalities to embrace and effectively localize the SDGs goals and targets, fostering a more sustainable and equitable future at the local level. At the end, these attitudes will also strengthen the relationship of TCESP with SP society, achieving by this action the SDG 16 – peace, justice and strong institutions.

6 FINAL CONSIDERATIONS

The Sustainable Development Goals (SDGs) represent a crucial agenda for the future of the planet and humanity. Their fulfillment is not just a matter of political commitment but a necessity to ensure a fairer, more balanced, and sustainable world. Brazil, as one of the largest developing countries, has a great responsibility and opportunity in implementing measures that drive this agenda forward; São Paulo, as one of the most capable and resourceful Brazilian States shall march a ready.

The research underscores the critical role of cities in localizing the SDGs and highlights the disparities in SDG achievement among São Paulo's municipalities, as measured by the IDSC (Sustainable Cities Development Index – Brazil). Although the cities of São Paulo have the best evaluations in the municipal index, the data show that the best score achieved was 66.76 out of 100.00, suggesting that there is a lot of room for improvement. Key findings reveal that best-ranked cities are smaller ones, with limited financial resources, that have not demonstrated that sustainability is a common topic on their official websites. Furthermore, many of the municipalities are not close to study or technology centers and have not taken effective action regarding other problems highlighted by the São Paulo State Court of Audit (TCESP) in ordinary inspections.

These findings reinforce the challenges highlighted in the literature selected as the most commonly faced by urban spaces in the world, regarding SDGs. Systemic barriers such as lack of awareness, fragmented governance, lack of technical expertise, few financial resources and insufficient public engagement persist, hindering broader SDG localization.

The study also identifies tools and strategies that Audit Institutions have been using, globally, to increase awareness of the topic and promote the localization of the SDGs. Since the beginning of the 2030 Agenda, Courts of Audit are performing as a pivotal actor in overcoming these challenges through performance audits, analysis of a specific goal or target, and dissemination of information about the subject.

The answer to the research question comes from the combination of these two observations: (i) the challenges cities face to fully adopt sustainable development and (ii) the tools and strategies Auditing Institutions around the world and within TCESP have and can use to foster the global agenda. The intersection of these findings

presents how can Audit Institutions, particularly the Court of Audit of the State of São Paulo (TCESP), enhance the localization of the Sustainable Development Goals (SDGs) in municipalities.

Considering the non-judicial role of Brazilian Courts of Audit, it is important that they act to raise awareness and instruct public managers, servants and citizens about the essential nature of sustainable development. This task can be performed by TCESP through various mechanisms, such as conducting audits focused on the SDGs, performing performance audits, providing training courses and disseminating good practices, generating benchmarking. These actions can help combat the most common barriers, such as lack of awareness on the subject and low technical qualifications of leadership (to plan and coordinate) and civil servants (to execute). In addition, the adoption of the adjustments recommended by TCESP will result in better use of public money, also helping with the issue of limited financial resources.

In this way, the research achieves its objective of identifying critical gaps hindering local sustainable development efforts while proposing actionable mechanisms through which Audit Institutions, particularly TCESP, can strengthen municipal capacities, improve accountability, and accelerate progress toward the 2030 Agenda.

For academics, this research contributes to the literature on SDG localization by emphasizing the importance of tailored approaches and the role of regional oversight institutions. It bridges theoretical frameworks with practical governance, offering insights into how auditing bodies can enhance municipal sustainability. For public managers, actionable recommendations include integrating SDGs into local policies, fostering cross-sectoral collaboration, and leveraging data-driven tools like the IDSC for targeted interventions. Courts of Audit, particularly TCESP, are advised to expand their advisory role, prioritize SDG-focused audits, foster capacity-building, and promote transparency through benchmarking and public reporting.

The study has limitations such as reliance on the IDSC index, which may lack updated or comprehensive data for all SDG targets. The focus on 2024 data also restricts longitudinal analysis. Moreover, this research focused only on 78 SP cities that are fulfilling more sustainable indicators and scoring better in Brazil, but even these municipalities are far behind reaching full achievement of the SDGs.

Future research could explore dynamic SDG progress over time, incorporate qualitative case studies to contextualize quantitative findings, and investigate the impact of specific TCESP interventions on municipal performance. Additionally, expanding the scope to include other SP cities, other Brazilian states or international comparisons could yield broader insights into effective SDG localization strategies.

As the TCESP experience illustrates, their contributions can align local management practices with broader development agendas. In doing so, this institution plays a pivotal role in ensuring that the aspirations of the 2030 Agenda are translated into tangible outcomes for urban populations. By combining audits, training, dissemination and stimulating benchmarking, TCESP can uniquely bridge the gap between global SDG targets and municipal implementation, addressing both technical and governance barriers.

In conclusion, achieving the 2030 Agenda demands coordinated efforts between local governments and oversight institutions. By addressing systemic barriers and leveraging TCESP's influence, the Court can accelerate SDG localization, ensuring no city is left behind in the global sustainability agenda.

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APPENDIX A – Results of analysis in SP Cities including rank and score in IDSC, revenue / GDP *per capita*, score in IEG-M, importance of SDG / 2030 Agenda / sustainable development showed on the city official website

IDS - Rank	City	IDSC -	Revenue/GE capita	IEG-N	\	Website importante of the subject	High, *
1	Alfredo Marcondes	66,76	28.649,11	С		https://www.alfredomarcondes.sp.g	low
·	,, eaca. coacc	00,10	20.0.0,			ov.br/index.php	
2	Uru	65,55	40.623,52	C+		https://www.uru.sp.gov.br/	low
4	Cruzália	64,7	68.116,76	C+		https://www.cruzalia.sp.gov.br/	medium
5	Jumirim	64,64	61.724,71	C+		https://www.jumirim.sp.gov.br/	low
6	Pongaí	64,41	27.887,43	C+		https://www.pongai.sp.gov.br/	medium
7	São João do Pau d'Alho	64,11	27.920,27	С		https://www.paudalho.sp.gov.br/	medium
8	São Caetano do Sul	64,03	95.640,71	C+		https://www.saocaetanodosul.sp.go v.br/home	low
9	Santa Clara d'Oeste	63,82	45.847,14	С		https://santaclaradoeste.sp.gov.br/	medium
11	São Bento do Sapucaí	63,61	37.283,14	В		$\frac{https://saobentodosapucai.sp.gov.b}{r \! /}$	medium
12	Cosmorama	63,59	69.530,67	С		https://www.cosmorama.sp.gov.br/i ndex	low
13	Fernão	63,56	46.552,10	В		https://www.fernao.sp.gov.br/	medium
14	Jaguariúna	63,48	233.328,91	C+		https://municipio.jaguariuna.sp.gov. br/	low
15	Pontes Gestal	63,23	49.170,31	C+		https://www.pontesgestal.sp.gov.br	medium
16	Santópolis do Aguapeí	63,14	16.609,02	В		https://santopolisdoaguapei.sp.gov. br/index.php	low
17	Alvinlândia	63,12	17.965,24	В		https://www.alvinlandia.sp.gov.br/	low
18	Emilianópolis	63,08	24.451,77	C+		https://www.emilianopolis.sp.gov.br	low
19	Taguaí	62,97	23.824,33	В		https://www.taguai.sp.gov.br/	low
21	Paulistânia	62,9	26.505,01	В		https://www.paulistania.sp.gov.br/	low
23	Morungaba	62,74	45.445,18	C+	\bowtie	https://www.morungaba.sp.gov.br/	low
24	Flora Rica	62,62	30.176,19	C+		https://www.florarica.sp.gov.br/	low
25	Lucianópolis	62,54	29.214,50	В		https://www.lucianopolis.sp.gov.br/ index	medium
26	Cerquilho	62,52	46.293,89	В		https://www.cerquilho.sp.gov.br/	medium
28	Pedranópolis	62,47	32.369,01	С		https://pedranopolis.sp.gov.br/inde <u>X</u>	low
30	Jambeiro	62,41	51.684,83	В		https://www.jambeiro.sp.gov.br/	medium
31	Sarutaiá	62,35	26.651,32	В		https://www.sarutaia.sp.gov.br/	medium

32	Saltinho	62,03	44.465,92	В		https://saltinho.sp.gov.br/index	medium
33	Floreal	62,01	28.393,24	C+		https://www.floreal.sp.gov.br/	medium
34	Fartura	61,9	29.419,47	В		https://www.fartura.sp.gov.br/	medium
35	Pedreira	61,78	30.658,23	В	M	https://www.pedreira.sp.gov.br/	high
36	Anhumas	61,75	25.316,58	C+		http://anhumas.web2118.uni5.net/index.php	low
37	Elisiário	61,73	20.323,57	В		https://www.elisiario.sp.gov.br/	low
38	Oriente	61,73	19.753,85	В		https://www.oriente.sp.gov.br/	low
39	Itaju	61,69	58.993,27	C+		https://www.itaju.sp.gov.br/	low
40	Parisi	61,65	24.630,17	C+		https://www.parisi.sp.gov.br/	low
41	Murutinga do Sul	61,6	19.453,50	В		https://www.murutingadosul.sp.gov .br/	low
42	Rinópolis	61,56	35.113,28	В		https://www.rinopolis.sp.gov.br/	low
43	Piratininga	61,55	20.048,02	C+		https://www.piratininga.sp.gov.br/	low
44	Dolcinópolis	61,55	27.963,37	C+		https://www.dolcinopolis.sp.gov.br/	low
45	Narandiba	61,45	129.106,16	B+		https://narandiba.sp.gov.br/	low
46	Nantes	61,44	44.261,55	C+		https://www.nantes.sp.gov.br/index .php	low
47	Álvaro de Carvalho	61,33	11.012,49	С		https://www.alvarodecarvalho.sp.go v.br/	low
48	Aspásia	61,27	21.788,35	В		https://www.aspasia.sp.gov.br/	low
49	Boracéia	61,26	105.669,34	C+		https://www.boraceia.sp.gov.br/	low
50	Cabrália Paulista	61,25	24.368,03	C+		https://www.cabralia.sp.gov.br/	low
52	Piraju	61,16	30.945,65	С		https://www.estanciadepiraju.sp.go v.br/	low
54	Itupeva	61,07	130.938,58	С		https://itupeva.sp.gov.br/	medium
56	Rubinéia	61,03	32.233,41	С		https://rubineia.sp.gov.br/	medium
57	Jundiaí	61,03	135.081,20	В	M	https://jundiai.sp.gov.br/	medium
58	Catanduva	61,02	42.386,42	C+		https://www.catanduva.sp.gov.br/	medium
59	Sagres	61	22.566,69	В		https://www.sagres.sp.gov.br/	medium
60	Nova Castilho	60,85	47.027,11	В		https://www.novacastilho.sp.gov.br	low
61	Santo Antônio do Pinhal	60,81	21.690,65	С		https://www.santoantoniodopinhal. sp.gov.br/	medium
62	Nova Luzitânia	60,75	14.278,82	C+		https://www.novaluzitania.sp.gov.br	low
63	Lençóis Paulista	60,74	70.818,58	В		https://www.lencoispaulista.sp.gov.	medium

65	São Manuel	60,6	32.463,42	C+	https://www.saomanuel.sp.gov.br/	high
66	Nova Guataporanga	60,52	15.762,88	C+	https://www.novaguataporanga.sp.	low
68	Águas de Santa Bárbara	60,47	35.378,64	С	https://www.aguasdesantabarbara. sp.gov.br/	low
69	Mineiros do Tietê	60,47	17.373,68	С	https://www.mineirosdotiete.sp.gov .br/index	low
70	Dirce Reis	60,45	38.685,19	В	https://www.dircereis.sp.gov.br/	low
71	Bragança Paulista	60,44	46.153,09	В	https://www.braganca.sp.gov.br/	medium
72	São João de Iracema	60,44	26.507,78	С	https://www.saojoaodeiracema.sp.g ov.br/	low
74	Jales	60,37	40.212,72	С	https://jales.sp.gov.br/	medium
75	Ilhabela	60,36	385.605,85	В	https://www.ilhabela.sp.gov.br/	medium
76	Pompéia	60,32	87.425,49	C+	https://www.pompeia.sp.gov.br/	low
77	Manduri	60,32	29.272,78	С	https://www.manduri.sp.gov.br/	low
78	Mesópolis	60,32	42.887,61	C+	https://mesopolis.sp.gov.br/	low
79	Getulina	60,3	18.806,06	C+	https://www.getulina.sp.gov.br/	medium
80	Santa Rita d'Oeste	60,3	27.518,08	С	https://www.santaritadoeste.sp.gov .br/	low
81	Socorro	60,29	26.870,22	С	https://www.socorro.sp.gov.br/	medium
82	Santa Ernestina	60,28	18.714,85	С	https://www.santaernestina.sp.gov. br/	medium
83	Ouroeste	60,26	51.226,69	C+	https://www.ouroeste.sp.gov.br/	medium
84	Rifaina	60,26	52.357,63	С	https://rifaina.sp.gov.br/	low
85	Lourdes	60,26	18.818,34	С	https://www.lourdes.sp.gov.br/	medium
86	Ipeúna	60,21	121.154,37	C+	https://ipeuna.sp.gov.br/	medium
87	Riversul	60,19	17.299,84	C+	https://www.riversul.sp.gov.br/	low
88	Ilha Solteira	60,18	26.261,81	C+	https://ilhasolteira.sp.gov.br/	low
89	Vinhedo	60,17	154.054,53	C+	https://www.vinhedo.sp.gov.br/	medium
91	Espírito Santo do Pinhal	60,03	46.311,65	C+	https://www.pinhal.sp.gov.br/	low

Sources:

IDSC Rank, IDSC Score: available at https://idsc.cidadessustentaveis.org.br/rankings/ Revenue/PIB per capita: available at https://cidades.ibge.gov.br/brasil/sp/panorama available

at

https://painel.tce.sp.gov.br/pentaho/api/repos/%3Apublic%3Aieg_m%3Aiegm.wcdf/generatedContent?userid=anony&password=zero#col-imagem



: "Sustainable Cities Programm" signatory city

ANNEX A - SDG Index 2024 - World ranking



13	L atvia	80.99
14	Spain	80.70
15	Estonia	80.46
16	Portugal	80.22
17	Belgium	80.04
18	Japan	79.87
19	lceland	79.54
20	Hungary	79.53
21	Slovak Republic	79.35
22	+ Switzerland	79.30
23	■ Italy	79.29
24	Netherlands	79.21
25	I ◆ I Canada	78.83
26	New Zealand	78.81

27	■■ Moldova	78.81	
28	■ ■ Ireland	78.72	
29	Greece	78.71	
30	Belarus	78.60	
31	Lithuania	78.12	
32	Chile	77.82	
33	Korea, Rep.	77.33	
34	Uruguay	77.09	
35	Serbia	77.03	
35 36	Serbia Malta	77.03	
36	* Malta	76.95	
36	* ■ Malta *** Australia	76.95 76.88	
36 37 38	* Malta * Australia Luxembourg	76.95 76.88 76.81	
36 37 38 39	Malta Australia Luxembourg Cuba	76.95 76.88 76.81 76.74	

43	∷ Georgia	74.91
44	Ukraine	74.81
45	Thailand	74.67
46	United States	74.43
47	- Argentina	74.40
48	Kyrgyz Republic	74.19
49	Armenia	74.09
50	■ Bosnia and Herzegovina	73.99
51	North Macedonia	73.80
52	Srazil	73.78
53	■ Israel	73.53
54	★ Vietnam	73.32
55	Dominican Republic	73.12
56	Russian Federation	73.10
57	Montenegro	73.05

58		72.92
59	Costa Rica	72.88
60	Tunisia	72.53
61	<u>⊮</u> Bhutan	72.52
62	≋ ≢ Fiji	72.29
63	■ Azerbaijan	72.20
64	■ Peru	71.88
65	Singapore	71.41
66	Kazakhstan	71.11
67	Maldives	70.93
68	China	70.85
69	Morocco	70.85
70	United Arab Emirates	70.52
71	Algeria	70.47

72	○ Türkiye	70.47
73	Mauritius	70.45
74	Colombia	70.30
75	Ecuador	70.14
76	Suriname	70.01
77	➤ Jamaica	69.51
78	Indonesia	69.43
79	Malaysia	69.32
80	■ Mexico	69.28
81	U zbekistan	69.24
82	₩ Barbados	69.19
83	Egypt, Arab Rep.	69.15
84	≟ Panama	69.09
85	► Jordan	69.06
86	■ Iran, Islamic Rep.	68.96

87	El Salvador	68.61
88	Cabo Verde	68.21
89	T ajikistan	68.09
90	Bolivia	68.08
91	== Paraguay	68.02
92	Philippines	67.47
93	Sri Lanka	67.43
94	Turkmenistan	67.13
95	Nepal	67.07
96	Brunei Darussalam	67.04
97	Guyana	66.73
98	Namibia	66.54
99	Mongolia	66.31
100	Coman	66.11
101	Belize	65.55

102	Qatar	64.93
103	Saudi Arabia	64.91
104	Cambodia	64.90
105	Gabon	64.88
106	Nicaragua	64.66
107	Bangladesh	64.35
108	Iraq	64.18
109	India	63.99
110	Lebanon	63.89
111	Kuwait	63.76
112	► Bahamas, The	63.73
113	Bahrain	63.56
114	Botswana	63.44
115	South Africa	63.44
116	I Senegal	63.39

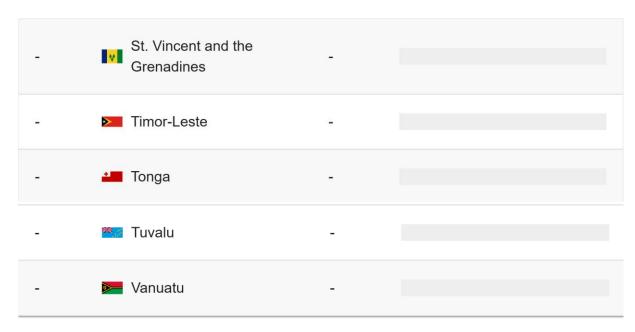
117	G hana	63.05	
118	Sao Tome and Principe	63.01	
119	Lao PDR	62.95	
120	s Myanmar	62.82	
121	Cote d'Ivoire	62.72	
122	Venezuela, RB	62.46	
123	≕ Kenya	62.17	
124	Honduras	62.00	
125	Trinidad and Tobago	61.83	
126	Rwanda	60.87	
127	Syrian Arab Republic	60.60	
128	■ Guatemala	59.41	
129	≛ Togo	58.37	
130	Tanzania	58.20	
131	Sierra Leone	58.19	

132	Mauritania	58.17
133	Eswatini	57.76
134	Zimbabwe	57.76
135	Gambia, The	57.61
136	Cameroon	57.28
137	c Pakistan	57.02
138	Mali	56.81
139	Benin	56.77
140	Malawi	56.75
141	Guinea	56.42
142	Uganda	56.13
143	🔀 Burundi	56.08
144	Lesotho	55.54
145	■ Ethiopia	55.24
146	■ ■ Nigeria	54.58

147	Z ambia	54.44	
148	Mozambique	54.35	
149	Burkina Faso	52.92	
150	Congo, Rep.	52.70	
151	Haiti	52.68	
152	Liberia	52.48	
153	Comoros	52.38	
154	Papua New Guinea	51.99	
155	Angola	51.93	
156	■ Guinea-Bissau	51.86	
157	D jibouti	51.68	
158	Madagascar	51.22	
159	S udan	49.91	
160	Niger	49.86	
161	Congo, Dem. Rep.	48.71	

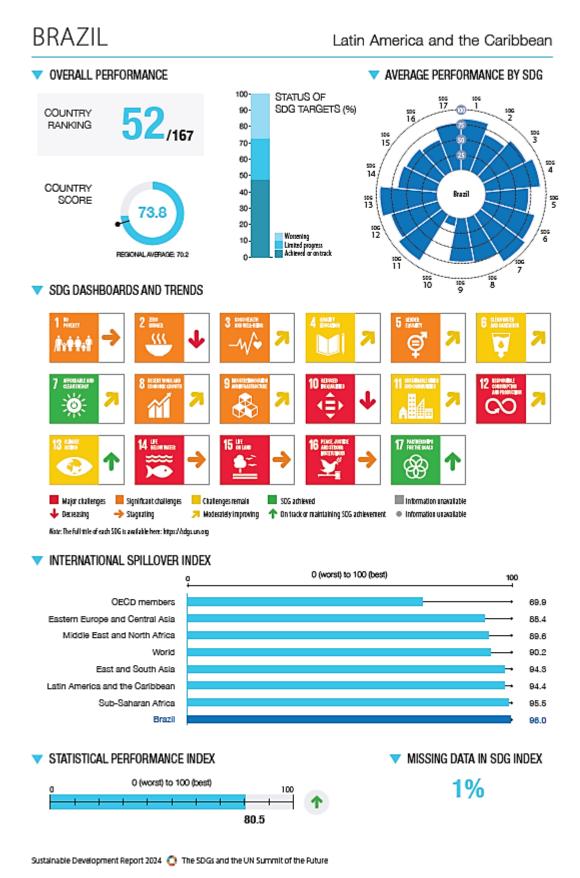
162	Afghanistan	48.24	
163	Yemen, Rep.	46.87	
164	★ Somalia	45.42	
165	■ Chad	45.07	
166	Central African Republic	44.21	
167	South Sudan	40.14	
-	• Andorra	-	
-	Antigua and Barbuda	-	
-	■ Dominica	-	
-	Equatorial Guinea	-	
-	Eritrea	-	
-	⊠ Grenada	-	
-	Kiribati	-	
-	Korea, Dem. Rep.	-	
-	■ Libya	-	

- Liechtenstein	-
- Marshall Islands	-
- Micronesia, Fed. Sts.	-
- Monaco	-
- Nauru	-
- Palau	-
- Samoa	-
- San Marino	-
- Seychelles	-
- Solomon Islands	-
- St. Kitts and Nevis	-
- St. Lucia	-



Source: https://dashboards.sdgindex.org/rankings

ANNEX B - SDG Index 2024 - Brazilian Country Profile



BRAZIL

Performance by Indicator

SDG1 – No Poverty	Value Year Ra			SDG9 – Industry, Innovation and Infrastructure	Value Year Rat	ting	ltend
Poverty headcount ratio at \$2.15/day (2017 PPP, %)	6.4 2024			Rural population with access to all-season roads (%)	97.0 2024	•	
Poverty headcount ratio at \$3.65/day (2017 PPP, %)	11.5 2024	•	<u> </u>	Population using the internet (%)			1
SDG2 – Zero Hunger				Mobile broadband subscriptions (per 100 population)	93.1 2022		1
Prevalence of undernourishment (%)	4.7 2021			Logistics Performance Index: Infrastructure score (worst 1–5 best)	3.2 2023	•	1
Prevalence of stunting in children under 5 years of age (%)	7.2 2019		•	The Times Higher Education Universities Ranking: Average score of top 3 universities (worst 0–100 best)	48.9 2024	•	1
Prevalence of wasting in children under 5 years of age (%)	3.1 2019		•		0.4 2022		_
Prevalence of obesity, BMI > 30 (% of adult population)	28.1 2022		٠	Articles published in academic journals (per 1,000 population)			
Human Trophic Level (best 2–3 worst)	2.4 2021		?	Expenditure on research and development (% of GDP)	1.1 2020	-	*
Cereal yield (tonnes per hectare of harvested land)	4.9 2022		?	SDG10 – Reduced Inequalities	52.9 2021		
Sustainable Nitrogen Management Index (best 0–1.41 worst)	0.4 2018		•	Gini coefficient Palma ratio			
Exports of hazardous pesticides (tonnes per million population)	0.3 2021	•	•	SDG11 – Sustainable Cities and Communities	2.9 2016	•	0
SDG3 – Good Health and Well-Being	77.7.7070		ı.		140 7015		
Maternal mortality ratio (per 100,000 live births)	72.2 2020		*	Proportion of urban population living in slums (%) Annual mean concentration of PM2.5 (µg/m²)	14.9 2016		
Neonatal mortality rate (per 1,000 live births)	8.6 2022		Ţ	43 -	99.8 2022		
Mortality rate, under-5 (per 1,000 live births)	14.0 2022		Ť	Access to improved water source, piped (% of urban population) Population with convenient access to public transport in cities (%)			
Incidence of tuberculosis (per 100,000 population)	49.0 2022			SDG12 – Responsible Consumption and Production	86.0 2020	-	_
New HIV infections (per 1,000 uninfected population)	0.2 2022	•	7		1.0 7010		
Age-standardized death rate due to cardiovascular disease, cancer, diabetes, or chronic respiratory disease in adults aged 30–70 years (%)	15.5 2019	•	ተ	Municipal solid waste (kg/capita/day) Electronic waste (kg/capita)	1.0 2018	•	0
Age-standardized death rate attributable to household air pollution and				Electronic waste (kg/capita) Production-based air pollution (DALYs per 1,000 population)			
ambient air pollution (per 100,000 population)	29 2019	•	•	Air pollution associated with imports (DALYs per 1,000 population)	1.2 2024		1
Traffic deaths (per 100,000 population)	15.7 2021	•	1	Production-based nitrogen emissions (kg/capita)	55.7 2024		1
Life expectancy at birth (years)	72.8 2021	• .	4	Nitrogen emissions associated with imports (kg/capita)	4.0 2024		*
Adolescent fertility rate (births per 1,000 females aged 15 to 19)	42.6 2021	•	ተ	Exports of plastic waste (kg/capita)	0.0 2023		1
Births attended by skilled health personnel (%)	98.2 2021	•	1	SDG13 - Climate Action	0.0 2023	-	-
Surviving infants who received 2WHO-recommended vaccines (%)	81 2022	•	ψ.	CO2 emissions from fossil fuel combustion and cement production (tCQ/capita)	2.3 2022		4
Universal health coverage (UHC) index of service coverage	80 2021		•	GHG emissions embodied in imports (tCO ₂ /capita)	1.0 2021		4
(worst 0-100 best)				CO2 emissions embodied in fossil fuel exports (kg/capita)	630.5 2023		T
Subjective well-being (average ladder score, worst 0–10 best)	6.6 2023	•	<u>↑</u>	SDG14 – Life Below Water	0303 2023	÷	_
SDG4 – Quality Education				Mean area that is protected in marine sites important to biodiversity (%)	71.7 2023		→
Participation rate in pre-primary organized learning	89.0 2021	•	ተ	Ocean Health Index Clean Waters score (worst 0–100 best)			4
(% of children aged 4 to 6)	049 2021		,	Fish caught from overexploited or collapsed stocks (% of total catch)			4
Net primary enrollment rate (%)		0		Fish caught from overexploited or conspsed stools (se or total catch)	16.2 2019		Ţ
Lower secondary completion rate (%) Literacy rate (% of population aged 15 to 24)	99.3 2022		Ť	Fish caught that are then discarded (%)	33.7 2019		-
SDG5 – Gender Equality	99.3 2022	_	T	Marine biodiversity threats embodied in imports (per million population)	0.0 2018		
Demand for family planning satisfied by modern methods				SDG15 - Life on Land	0.0 2010		
(% of females aged 15 to 49)	89.3 2006	•	ተ	Mean area that is protected in terrestrial sites important to biodiversity (%)	45.7 2023		->
Ratio of female-to-male mean years of education received (%)	105.6 2022		φ.	Mean area that is protected in freshwater sites important to biodiversity (%)			·
Ratio of female-to-male labor force participation rate (%)	72.8 2023		÷	Red List Index of species survival (worst 0–1 best)			4
Seats held by women in national parliament (%)	17.5 2024		-	Permanent deforestation (% of forest area, 3-year average)	0.5 2022		
SDG6 – Clean Water and Sanitation				Imported deforestation (m ³ /capita)	1.8 2022		
Population using at least basic drinking water services (%)	99.6 2022	•	φ.	SDG16 – Peace, Justice and Strong Institutions	1.0 2022	-	•
Population using at least basic sanitation services (%)	90.9 2022		÷	Homicides (per 100,000 population)	21.3 2021		7
Freshwater withdrawal (% of available freshwater resources)	1.5 2021			Crime is effectively controlled (worst 0–1 best)	0.56 2022		4
Anthropogenic wastewater that receives treatment (%)	52.4 2020		•	Unsentenced detainees (% of prison population)		-	4
Scarce water consumption embodied in imports (m ³ H ₂ O eg/capita)	442.0 2024	•	>	Birth registrations with civil authority (% of children under age 5)			÷
SDG7 – Affordable and Clean Energy				Competion Perceptions Index (worst 0–1 best)			Ĭ.
Population with access to electricity (%)	99.5 2021	•	•	Children involved in child labor (%)			*
Population with access to clean fuels and technology for cooking (%)	96.5 2021		1		3/4 2013		_
CO ₂ emissions from fuel combustion per total electricity output (MtCO ₂ /TWh)	0.7 2022		1	Exports of major conventional weapons (TIV constant million USD per 100,000 population)	0.0 2023	•	•
Renewable energy share in total final energy consumption (%)	46.4 2020		4	Press Freedom Index (worst 0–1 best)	58.6 2024	•	*
SDG8 – Decent Work and Economic Growth	TOT EURO		•	Access to and affordability of justice (worst 0–1 best)	0.64 2022	•	?
	-1.7 2022			Timeliness of administrative proceedings (worst 0–1 best)	0.25 2022	•	+
Adjusted GDP growth (%) Victims of modern slavery (per 1,000 population)	5.0 2022		0	Expropriations are lawful and adequately compensated (worst 0–1 best)	0.60 2022	•	+
Adults with an account at a bank or other financial institution or with a				SDG17 – Partnerships for the Goals			
mobile-money-service provider (% of population aged 15 or over)	84.0 2021	•	ተ	Government spending on health and education (% of GDP)	10.3 2021	•	1
Unemployment rate (% of total labor force, ages 15+)	7.6 2024	• -	>	For high-income and all OECD DAC countries: International concessional	NA NA		0
Fundamental labor rights are effectively guaranteed (worst 0–1 best)	0.47 2022		ı.	public finance, including official development assistance (% of GNI)		_	_
Fatal work-related accidents embodied in imports				Other countries: Government revenue excluding grants (% of GDP)	30.1 2022	•	1
(per million population)	0.2 2018	•	Ť	Corporate Tax Haven score (best 0–100 worst)	0 2021	•	
Victims of modern slavery embodied in imports	6.5 2018			Statistical Performance Index (worst 0–100 best)	80.5 2022		1
(per 100,000 population)		-	-	Index of countries' support to UN-based multilateralism (worst 0–100 best)	77.2 2023	_	

* imputed data point, ** Not applicable NA = Data not available

ANNEX C - IDSC 2024 - SP State - Cities ranking on SDG

Índice de Desenvolvimento Sustentável das Cidades Brasil					
Classification↑	City	State	Scoring	Performance by SDGs	
1	Alfredo Marcondes	SP	66.76		
2	= Uru	SP	65.55		
4	Cruzália	SP	64.70		
5	= Jumirim	SP	64,64		
6	Pongai	SP	64.41		
7	Saint John of the Garlio	SP	64.11		
8	Sao Caetano do Sul	SP	64.03		
9	Santa Clara d'Oeste	SP	63.82		
11	Saint Benedict of Sapucai	SP	63.61		
12	Cosmorama	SP	63.59		

13	€ Femão	SP	63.56	
14	Jaguariuna	SP	63.48	
15	Gestal Bridges	SP	63.23	
16	Santopolis of Aguapei	SP	63.14	
17	Alvinland	SP	63.12	
18	Emilianopolis	SP	63.08	
19		SP	62.97	
21	Paulistania	SP	62.90	
23	■ Morungaba ♥	SP	62.74	
24	Rich Flora	SP	62,62	
25	Lucianopolis	SP	62.54	
26	⊕ Hash	SP	62.52	
28	Pedranopolis	SP	62.47	
30	rose apple	SP	62.41	
31	Sarutaya	SP	62.35	
32	Little jump	SP	62.03	
33	Floral	SP	62.01	
34	Abundance	SP	61.90	
35	Quarry 🙀	SP	61.78	
36	Anhumas	SP	61.75	
37	Elisiário	SP	61.73	

38	⊜ East	SP	61.73	
39	⊕ Itaju	SP	61.69	
40	Parisi	SP	61.65	
41	Murutinga of the South	SP	61.60	
42	Rhinopolis	SP	61.56	
43	Piratininga	SP	61.55	
44	Dolcinopolis	SP	61.55	
45	Narandiba	SP	61.45	
46	Nantes	SP	61.44	
47	Alvaro de Carvalho	SP	61.33	
48	Aspasia	SP	61.27	
49	Boraceia	SP	61.26	
50	Cabralia Paulista	SP	61.25	
52	Piraju	SP	61.16 •	
54	ltupeva	SP	61.07	
56	Rubineia	SP	61.03	
57	Jundiai	SP	61.03	
58	Catanduva	SP	61.02	
59	Sagres	SP	61.00	
60	New Castilho	SP	60.85	
61	Saint Anthony of Pinhal	SP	60.81	

62					
65	62	⊕ New Luzitania	SP	60.75	
66	63	Paulista Sheets	SP	60.74	
88	65	Saint Manuel	SP	60,60	
88	66	New Guataporanga	SP	60.52	
70	68		SP	60.47	
71	69	Miners of Tietê	SP	60.47	
72	70	Dirce Reis	SP	60.45	
74	71	Braganca Paulista	SP	60.44	
75	72	Saint John of Iracema	SP	60.44	
76	74	Jales	SP	60.37	
77	75	Ilhabela	SP	60.36	
78	76	Pompeii	SP	60.32	
79	77	Manduri	SP	60.32	
80	78	Mesopolis	SP	60.32	
81	79	Getulina	SP	60.30	
82	80	Santa Rita d'Oeste	SP	60.30	
83	81	● Help ₩	SP	60.29	
84	82	Saint Ernestine	SP	60.28	
	83	Ouroeste	SP	60.26	
85	84	Rifaina	SP	60.26	
	85	■ Lourdes	SP	60.26	

86	⊜ ∣peuna	SP	60.21	
87	Riversul	SP	60.19	
88	Single Island	SP	60.18	
89	Vineyard	SP	60.17	
91	Holy Spirit of Pinhal	SP	60.03	
93	E Louis Antonio	SP	59.96	
95	Candido Rodrigues	SP	59.87	
96	Gabriel Monteiro	SP	59.87	
97	Paulista Sponsorship	SP	59.86	
98	Saint Anthony of Joy	SP	59.86	
99	Santana da Ponte Thinks	SP	59.86	
101	Corumbatai	SP	59.82	
102	Silver Waters	SP	59.81	
103	Fernandopolis	SP	59.79	
104	Bilac	SP	59.78	
105	Brauna	SP	59.76	
106	Marinopolis	SP	59.75	
107	■ Gaul	SP	59.74	
109	Pirangi	SP	59.72	
110	Nuporanga	SP	59.71	
111	Fernando Prestes	SP	59.69	

113	Cocar Bressane	SP	59.64	
114	■ Balm	SP	59.63 👴	
115	Itajobi	SP	59.61 🦲	
116	Happy Port	SP	59.60 👝	
117	Ocauçu	SP	59.59	
118	■ Guarantã	SP	59.57	
120	€ Charqueada	SP	59.55	
122	San Francisco	SP	59.55	
123	■ Taciba	SP	59.55 👴	11111111111
124	Guaracaí	SP	59.54	
125	Zacharias	SP	59.46	
126	Araraquara	SP	59.46	
127	President Alves	SP	59.44	
128	Eldorado	SP	59.42	
129	⊕ Holambra	SP	59.40	
130	Itapira	SP	59.38	
132	Stone Tower	SP	59.38	
133	Green Wave	SP	59.35	
134	Parapuã	SP	59.35	
135	Saint Salette	SP	59.33	
136	Paulista Inubia	SP	59.31	

137	€ Come on	SP	59.29	
138	Long Island	SP	59.29	
140	Ipiguá	SP	59.24	
142	St. Joseph of Rio	SP	59.21	
143	Sebastianópolis do Sul	SP	59.20	
145	Dracaena	SP	59.16	
146	■ Western Guarani	SP	59.15 😑	
147	fittle brown	SP	59.13 😑	
148	New Alliance	SP	59.12	
151	Ubirajara	SP	59.07	
152	Junqueirópolis	SP	59.07	
153	Itatiba	SP	59.05	
154	Chapaporá	SP	59.05	
157	Baron of Antonina	SP	59.00 👴	
158	Borborema	SP	58.98	
159	Amerigo of Campos	SP	58.96	
160	Marapoama	SP	58.95	
161	Silveiras	SP	58.94	
163	■ Mendonça	SP	58.93	
164	Silveria	SP	58.91	111111111111111111111111111111111111111
165	Santa Fe do Sul	SP	58.91	

166					
168	166	Paulista Union	SP	58.90 👴	
170	167	Crowned	SP	58.90 👴	
New Canaan Paulista SP 58.86	168	Block	SP	58.89	
173	170	Julio Mesquita	SP	58.87	
174	172	New Canaan Paulista	SP	58.86	
175	173	⊕ Monsoons	SP	58.85	
176	174		SP	58.83	
177	175	Macedonia	SP	58.83	
179	176	■ Taiaçu	SP	58.81	11 11 11 11 11 11 11 11 11 11 11 11 11
180	177	Piacatu	SP	58.79	
181	179	Santa Cruz do Rio Pardo	SP	58.75	
183	180	Florinea	SP	58.74	
185	181	Joanópolis	SP	58.73	
186	183	American	SP	58.72	
187	185	Taubate	SP	58.66	
188	186	Paulista Pebbles	SP	58.66	
189	187	Lupercio	SP	58.65	
190	188	Votuporanga	SP	58.64	
	189	Palmares Paulista	SP	58.64	
192	190	■ Botucatu	SP	58.61	
	192	Dumont	SP	58.60	

193	Saint Louis of Paraitinga	SP	58,57	
194	Barueri	SP	58.53	
195	Duartina	SP	58.49	
196	Happy View from Above	SP	58.47 👴	
197	Florida Paulista	SP	58.46	
200	Sandovaline	SP	58.41	
201	Rubiaceae	SP	58.40	
208	Little backlands	SP	58.32	
209	Piracicaba	SP	58.31	
213	Taruma	SP	58.27	
214	Queiroz	SP	58.26	
215	Tourmaline	SP	58.26	
218	Valinhos	SP	58.21	
220	Magda	SP	58.17	
221	Bernardino de Campos	SP	58.17	
222	Black Mountain	SP	58.16	
223	Stream Current	SP	58.16	
225	White House	SP	58.10	
226	Jose Bonifacio	SP	58.09	
229	Victory Brazil	SP	58.08	
230	⊕ Tupá	SP	58.05 😑	

231	Piquerobi	SP	58.04	
233	Divinolandia	SP	58.02 👴	
234	Maracai	SP	58.02 👴	
235	Itaoca	SP	58.01	
236	Suzanápolis	SP	58.01	
237	■ John Ramalho	SP	58.00 👴	
239	€ Hill	SP	57.98 👴	
240	Jeriquara	SP	57.98 👴	
241	Itatinga	SP	57.98	
243	■ Louveira	SP	57.97	
244	Ubarana	SP	57.96	
245	South Stream	SP	57.95	
246	■ Jaborandi	SP	57.95	
247	Assis	SP	57.94 👴	
249	Irapuã	SP	57.93	
250	New Horizon	SP	57.92	
251	⊕ Saint John of Boa Vista	SP	57.91	
253	Plateau	SP	57.90 👴	
254	Saint Joseph of the Fields	SP	57.90 🥚	
256	Promise	SP	57.89 👴	
257	Ribeirao Grande	SP	57.88	

259					
262	259	⊕ Ipua	SP	57.82	
263	261	Saint Charles	SP	57.80 👴	
264	262	Meridian	SP	57.79	
266	263	Little Pirapo	SP	57.79	
267	264	Ribeirao Preto	SP	57.77	
268	266	Pontalinda	SP	57.76	
270	267	Quintana	SP	57.75	
271	268	Bariri	SP	57.74 👴	
273	270	fime tree	SP	57.73	
274	271	Quata	SP	57.73	
276	273	Saint Albertina	SP	57.72	
277	274	Mirassolandia	SP	57.71	
278	276	■ Urania	SP	57.70 👴	
280	277	Indaiatuba	SP	57.69 🥚	
281	278	⊕ Jau	SP	57.69 👴	
283	280	Brotas	SP	57.66	
284	281	Altinopolis	SP	57.65 🥚	
286	283	⊕ Mombuca	SP	57.62	
	284	Slap	SP	57.62 👴	
288	286	Paulinia	SP	57.61 👴	
	288	lacanga	SP	57.60 👴	

290	Regent Feijo	SP	57.59	
291	Altair	SP	57,58	
292	♠ Angatuba	SP	57.56	
293	Araçatuba	SP	57.56	
294	Taiuva	SP	57.55	
295	Turiuba	SP	57.55	
296	Green Gold	SP	57.55	
297	ftirapua 🍧	SP	57.53	
299	Guararapes	SP	57.50 👴	
300	Lucélia	SP	57.50	
301	Urupês	SP	57.50 👴	
303	Gentle Valentine	SP	57.49	
309	Bady Bassitt	SP	57.46	
310	Cabreuva	SP	57.46	
311	Nhandeara	SP	57.44	
312	Saints 😽	SP	57.44	
314	Saint John of the Two Bridges	SP	57.42	
315	Poloni	SP	57.41	
316	♣ Tripe	SP	57.41	
317	Clementine	SP	57.40 👴	
318	Engineer Coelho	SP	57.39 😑	

320	Pereira Barreto	SP	57.37	
322	True Cross	SP	57.35	
323	Star Look	SP	57.34 👴	
325	Saint Gertrude	SP	57.32	
327	Support	SP	57.28	
328	France	SP	57.27	
330	Holy Spirit of Turvo	SP	57.25	
331	Paraguaçu Paulista	SP	57.23	
333	Pindorama	SP	57.17 👴	
334	Pear trees	SP	57.16 👴	
335	⊜ Jump ₩	SP	57.16 😑	
337	Platinum	SP	57.15 👴	
340	Holy Cross of Conception	SP	57.09 👴	
341	Aramine	SP	57.06 👴	
343	Bastos	SP	57.04 👴	
346	Itaporanga	SP	57.03	
347	Guaimbe	SP	57.03	
348	Louisiana	SP	57.03 👴	
349	Penapolis	SP	57.02	
350	Saint Anthony of the Garden	SP	57.01	

354	Hawk Peixoto	SP	56.95 👴	
355	Irapuru	SP	56.95 👴	
356	Caiabu	SP	56.95	
357	President Bernardes	SP	56.94 👴	
360	Jaboticabal	SP	56.94 👴	
364	Sabino	SP	56.92	
365	Saint Joseph of Barreiro	SP	56.89	
367	President Wenceslau	SP	56.88	
368	Saint Joseph of Rio	SP	56.87	
369	f Indianpora	SP	56.86	
371	Guzoland	SP	56.85	
372	Paulista Orange Grove	SP	56.84	
373	Atibaia	SP	56.83	
375	⊜ Itu	SP	56.80	
378	Saint Sebastian	SP	56.78 👴	
379	Herculandia	SP	56.78 👴	
380	Guareí	SP	56.77	
382	Alto Alegre	SP	56.75 👴	
384	Orindiúva	SP	56.74	
388	Caraguatatuba	SP	56.72 👴	
389	⊕ Turvo Bar	SP	56.70 👴	

392	⊕ Heron √	SP	56.69	
394	● Poa	SP	56.66	
397	Pradopolis	SP	56.63	
398	New Europe	SP	56.63 👴	
400	■ Tambau	SP	56.60 👝	
406	■ Martinopolis	SP	56.53	
408	Glycerium	SP	56.52	
410	Clear River	SP	56.50	
411	Square	SP	56.49	
413	Timburi	SP	56.47	
415	Orlandia	SP	56.45 😑	
416	President Prudente	SP	56.44	
417	Paulista Crystals	SP	56.44	
419	♠ Aruja ₩	SP	56.41	
421	Osvaldo Cruz	SP	56.37	
425	Saint Expedite	SP	56.34	
426	⊕ Campinas ₩	SP	56.32	
428	Little golds	SP	56.32	
432	ftirapina	SP	56.28	
436	Buritama	SP	56.27	
440	Cesario Lange	SP	56.25	

448	Sud Mennucci	SP	56.19	
451	Mongagua	SP	56.18 😑	
452	Novais	SP	56.17	
454	Trabiju	SP	56.16	
455	New Odessa	SP	56.15 🛑	
456	● Piracaia	SP	56.15	
457	Gaston Vidigal	SP	56.15 🛑	
459	Colombia	SP	56.15	
462	⊕ Lins	SP	56.14	
463	Boituva	SP	56.13 😑	
465	Cloves	SP	56.09	
468	Mirandópolis	SP	56.07	
469	■ Guara	SP	56.07	
470	Aparecida d'Oeste	SP	56.07	
471	Tanabi	SP	56.06	
472	Alvares Machado	SP	56.05 😑	
474	■ Monte Alto	SP	56.03	
478	■ Tapirai	SP	56.01	
482	Capão Bonito	SP	55.99	
485	Cranberry	SP	55.97	
486	Bocaina	SP	55.95 😑	

487					
491	487	Benedict of Abreu	SP	55.94 👴	
493	490	Pindamonhangaba	SP	55.93 👴	
497	491	Saint Anastasius	SP	55.91	
499	493	€ Flints	SP	55.91 😑	
501	497	Colonel Macedo	SP	55.88	
506	499	Tupi Paulista	SP	55.86	
508	501	Catiguá	SP	55.85	
509	506	⊕ Waters of Lindóia	SP	55.81	
512	508	⊕ Three Frontiers	SP	55.79 👴	
514 ♠ Avare SP 55.76	509		SP	55.78	
517	512	Itabera	SP	55.76	
518	514	Avare	SP	55.76	
521	517	Taquarivai	SP	55.75	
523	518	Two Streams	SP	55.73	
525	521	■ Mogi Mirim	SP	55.72	
526	523	Sandbank	SP	55.71	
527	525	Pariquera-Açu	SP	55.69	
	526	Itapeva	SP	55.69	
533	527	Waters of Saint Peter	SP	55.69	
	533	Vargem	SP	55.65	
534	534	€ Motuca	SP	55.65	

536	Rainbow	SP	55.64	
537	Brodowski	SP	55.63	
538	Canitar	SP	55.63	
541	Adolfo Adolfo	SP	55.63	
542	findian Creek	SP	55.62	
544	Paranapuã	SP	55.61	
546	Macaws	SP	55.60	
550	São Paulo	SP	55.58	
551	Saint Anthony of Aracanguá	SP	55.58	
555	Southern Pillar	SP	55.54	
556	Nativity of the Mountains	SP	55.54	
564	Candido Mota	SP	55.49	
566	Paulista Snows	SP	55.49	
567	■ Barretos	SP	55.49	
576	Peruibe	SP	55.41	
578	Palmital	SP	55.40	
581	⊕ Howler monkey	SP	55.38	
584	■ Birigui	SP	55.35	
585	Alvares Florence	SP	55.34	
586	Adamantine	SP	55.34	
588	Guaiçara	SP	55.33	

592	⊕ Barbosa	SP	55.31 👴	
594	Tapiratiba	SP	55.30 👴	
596	Macaubal	SP	55.28	
604	Pleasant Mount	SP	55.22 0	
605	⊕ Monteiro Lobato	SP	55.21	
606	⊕ Beautiful Bar	SP	55.21 👴	
607	New Independence	SP	55.20 👴	
608	Taquarituba	SP	55.20 👴	
609	Avanhandava	SP	55.20	
614	Jordan Fields	SP	55.14	
617	♣ Nipoan	SP	55.13 👴	
625	Itapetininga	SP	55.07	
626	€ Lutetia	SP	55.07 🛑	
631	Cajati	SP	55.05 👴	
632	Saint Mercedes	SP	55.04 👴	
633	Paradise	SP	55.03 👴	
634	Chapel of the High	SP	55.03 👴	
635	■ Tietê	SP	55.02 👴	
641	Iracemapolis	SP	54.98	
646	Hortolandia	SP	54.95	
650	Macatuba	SP	54.93	

655					
658	655	Rancheria	SP	54.87	
659	657	Cerqueira Caesar	SP	54.86	
664	658	North Star	SP	54.86	
666	659	Seven Bars	SP	54.84 👴	
668	664	⊕ Jaci	SP	54.83	
668	666	Good Success of Itararé	SP	54.83	
676	668		SP	54.79	
682	672	⊕ Borebi	SP	54.77	
684	676	Salesópolis 😽	SP	54.73	
688	682	Potatoes	SP	54.71	
697	684	Pauliceia	SP	54.70 🛑	
698	688	Western Star	SP	54.68 👴	
699	697	Happy Swamp	SP	54.65 👴	
700	698	Blue Mountain	SP	54.64 👴	
703	699		SP	54.63	
707	700	Vargem Grande do Sul	SP	54.62 👴	
	703	Holy Cross of Palms	SP	54.61 🧑	
TOO STATE OF THE PARTY OF THE P	707	Big Beach ₩	SP	54.56	
708 Saint Rose of Viterbo SP 54.56	708	Saint Rose of Viterbo	SP	54.56	
718	718	Appeared	SP	54.50	

724	⊕ laras	SP	54.48	
725	Turning point	SP	54.48	
728	🔓 Lavinia	SP	54.47 👴	
731	Monte Castelo	SP	54.46	
732	Descalvado	SP	54.45	
733	Caçapava	SP	54.45	
742	Castilho	SP	54.40	
744	€ Little tower	SP	54.38	
747	Pacaembu	SP	54.37	
751	Paranapanema	SP	54.36	
753	Sorocaba	SP	54.34	
757	⊕ Ibira	SP	54.30 👴	
759	Alambari	SP	54.29	
761	President Epitacio	SP	54.28	
763	Mirassol	SP	54.27	
768	Panorama	SP	54.24	
772	Buriti plantation	SP	54.20	
773	Arapeí	SP	54.20	
774	Valparaiso	SP	54.20	
776	Vargem Grande Paulista	SP	54.19	
777	Populina	SP	54.19	

778	fpaussu	SP	54.19 👴	
779	Mogi Guaçu	SP	54.18	
785	Pirassununga	SP	54.15 👴	
788	Campina do Monte Alegre	SP	54.14 👴	
789	ftuverava	SP	54.13 👴	
795	■ Sands	SP	54.10 👴	
800	Santa Barbara of the West	SP	54.07	
801	New Campina	SP	54.07	
805	Severinia	SP	54.06 👴	
806	floate	SP	54.06 👴	
810	Lagoinha	SP	54.03 👴	
812	West Palm	SP	54.01	
816	Cassia of the Coconut Trees	SP	54.00 👴	
818	lce cream	SP	53.98	
819	Cardoso	SP	53.98	
820	Juquiá	SP	53.97	
829	Canaanite	SP	53.92	
830	■ Jacarei	SP	53.92	
837	Theodore Sampaio	SP	53.91	
840	Bamboo	SP	53.90 👴	

844	⊕ Mogi das Cruzes ↓	SP	53.89 👴	
845	Tatui	SP	53.89 👴	
846	flarare	SP	53.89	
847	Taba puá	SP	53.89	
851	Guararema	SP	53.86	
858	Rosanna	SP	53.82	
861	Pine forest	SP	53.80 👴	
868	€ Itobi	SP	53.78	
874	⊜ lacri	SP	53.75	
878	Saint Adelia	SP	53.73	
883	Boulder	SP	53.71	
886	Itapolis	SP	53.67	
893	Pontal	SP	53.65	
894	Riolandia	SP	53.64	
905	Purple Earth	SP	53.59	
909	Santa Maria da Serra	SP	53.56	
911	Paul of Faria	SP	53.56	
914	Monte Alegre do Sul	SP	53,53	
917	Brine	SP	53.51	
920	Andradina	SP	53.50	
921	Ibirarema	SP	53.49	

923	Registration	SP	53.49 👴	
927	General Salgado	SP	53.46 👴	
928	Saint Anthony of Posse	SP	53.45	
934	Embauba	SP	53.42	
939	€ Cedral	SP	53.39 👴	
941	Banana plantation	SP	53.38	
955	Redemption of the Mountains	SP	53.32	
967	Saint Peter	SP	53.25	
968	Saint Sebastian of the Grass	SP	53.25	
973	■ Igarapava	SP	53.24	
975	⊕ Uchoa	SP	53.24 👴	
978	⊜ Guaruja ₩	SP	53.23 👴	
979	⊕ Galden	SP	53.23	
981	Analandia	SP	53.21	
982	Santana of Parnaiba	SP	53.21	
995	Cordeiropolis	SP	53.13	
997	Serra Araçoiaba 🤎	SP	53.12	
999	Saint Andrew	SP	53.11	
1019	fapui	SP	53.01	
1026	● Mococa	SP	52.98	

1029	Saint Michael the Archangel	SP	52.98 👴	
1035	♠ Lorena	SP	52.95	
1036	Tabatinga	SP	52.95	
1037	Sharp Hill	SP	52.94 👴	
1040	Itapura	SP	52.94	
1043	♠ Avai	SP	52.92	
1045	Cajobi	SP	52.92	
1067	Ribeirão Branco	SP	52.82	
1087	Iguape	SP	52.73	
1094	■ Iporanga	SP	52.70	
1102	Taquaritinga	SP	52.65	
1109	🏐 Itai	SP	52.59	
1110	Auriflame	SP	52.59	
1113	Cashew nut	SP	52.59	
1118	Paulista floodplain	SP	52.56	
1123	Arealva	SP	52.54	
1130	Elijah Faust	SP	52,51	
1138	Pirapora Falls	SP	52.47 🥚	
1149	Areiopalis	SP	52.41	
1156	Sarapui	SP	52.36	
1157	Votorantim	SP	52.34	

1163	fgarata garata	SP	52.30	
1164	Suzano ₩	SP	52.30 👴	
1171	🖨 Itapirapua Paulista	SP	52.26	
1176	Balbinos	SP	52.24 👴	
1182	■ lepê	SP	52.23	
1190	Rafard	SP	52.19	
1193	Miguelópolis	SP	52.18	
1196	Marabá Paulista	SP	52.17	
1200	Shells	SP	52.16	
1215	Nazareth Paulista	SP	52.11	
1219	Pires Stream	SP	52.10	
1225	Giant otter	SP	52.08 👴	
1252	Olympia	SP	51.98 👴	
1259	Saint Rita of Passa Quatro	SP	51.96 👝	
1260	■ Tremembe	SP	51.94 👴	
1271	⊕ Osasco	SP	51.90 👴	
1276	Cruise	SP	51.87	
1286	■ Ipero	SP	51.84	
1289	Caiua	SP	51.82	
1301	Holy Cross of Hope	SP	51.76 👴	
1304	Beautiful Stone	SP	51.75 👴	

1310	St. Joachim of Barra	SP	51.70 👴	
1315	Guaira	SP	51.67 👴	
1324	Maria polis	SP	51.63 👴	
1330	Mercy	SP	51.62 👴	
1337	■ Guata para	SP	51.58 😑	
1340	River of Stones	SP	51.56 👴	
1344	Drinking fountain	SP	51.56 👴	
1345	Porangaba	SP	51.54 👴	
1353	Big Jump	SP	51,51 👴	
1357	Tarabai	SP	51.49 👴	
1362	Clean Field of Paulista	SP	51.49 🥚	
1378	⊕ Capybara	SP	51.42 👴	
1380	Igaraçu River of Tietê	SP	51.42 👴	
1384	Guapiara	SP	51.41	
1394	Saint Bernard of the Field	SP	51.38	
1423	Good Hope of the South	SP	51.29	
1443	Guaratinguetá	SP	51.24	
1457	Sales	SP	51.17 👴	
1463	Potirendaba	SP	51.15 😑	
1474	⊕ Lindóia	SP	51.11 👝	
1477		SP	51.10 👝	

1492	Aluminum	SP	51.00 👴	
1494	■ Bar	SP	51.00 👴	
1509		SP	50.97 👴	
1514	⊜ Cotia	SP	50.96	
1517	Paulista Waterfall	SP	50.94 👴	
1520	Juquitiba	SP	50.93 😑	
1526	■ Buri	SP	50.92	
1531	findian	SP	50.91	
1533	Maua	SP	50.89 👴	
1535	Bertioga	SP	50.88	
1559	Paraibuna	SP	50.82 👴	
1573	Ubatuba	SP	50.78 👴	
1577	Cajamar	SP	50.77	
1587	Apiai	SP	50.74	
1594	Bauru	SP	50.71	
1610	Guapiaçu	SP	50.64	
1619	Guaraci	SP	50.62	
1629	Mount Mor	SP	50.59	
1638	Palestine	SP	50.56	
1649	Conchal	SP	50.53 😑	
1671	⊕ New Granada	SP	50.42	

1676	Reginapolis	SP	50.41	
1687	Chavantes	SP	50.36	
1726	Pirajui	SP	50.23	
1730	Euclid of the Paulista Cunha	SP	50.21	
1765	Saint Vincent	SP	50.06	
1819	Pitangueiras	SP	49.84	
1829	Rosebush	SP	49.81	
1845		SP	49.77	
1849	Gerbi Stowage	SP	49.76	
1856	Tuiuti	SP	49.75	
1861	Itanhaem	SP	49.72	
1873	Jarinu	SP	49.68	
1892	€ comer	SP	49.60	
1908	Jacupiranga	SP	49.57	
1930	Cubatao	SP	49.52	
1960	Saint Lucia	SP	49.39	
1968	● Oil	SP	49.37	
1984	● Porto Ferreira	SP	49.30	
1987	Saint Elizabeth	SP	49.28	
2025	Tejupa	SP	49.16	
2039	Saint Roch	SP	49.11 🛑	

2052	€ Embu of the Arts	SP	49.04 🛑	
2086	Riverside	SP	48.93 🛑	
2112	f lbitinga	SP	48.84	
2114	Guarulhos	SP	48.83	
2117	Saint Joseph of Bela Vista	SP	48.82	
2123	= Lavrinhas	SP	48.78	
2124	Anhembi	SP	48.78	
2127	♣ Aguai	SP	48.76	
2150	Wedge	SP	48.70 🛑	
2190	New Fields of São Paulo	SP	48.57	
2234	€ Ibiuna	SP	48.43	
2235	Saint Lawrence of the Mountains	SP	48.42	
2264		SP	48.31	
2275	■ Diadem	SP	48.28	
2338	Itariri	SP	48.06	
2392	€ Embu-Guaçu	SP	47.86	
2393	⊕ Taboao da Serra	SP	47.86	
2396	Beautiful Stream	SP	47.85 🛑	
2413	♠ Arthur Nogueira	SP	47.79 🛑	
2421	Potim	SP	47.77	

2424	Araçariguama	SP	47.76 🛑	
2430	Miracatu	SP	47.74 🛑	
2551	⊕ Hat Bar	SP	47.35 🛑	
2556	Mairinque	SP	47.33	
2580	Itapecerica da Serra	SP	47.24 🛑	
2592	Sales Oliveira	SP	47.19 🛑	
2610	Peter of Toledo	SP	47.13 🛑	
2659	Saint Simon	SP	46.98 🔵	
2661	Canes	SP	46.98 🛑	
2691	● Marilia	SP	46.88	
2697	🚔 Biritiba Mirim	SP	46.86	
2748	Pirapora of Bom Jesus	SP	46.72 🛑	
2790	Good Jesus of Forgiveness	SP	46.61	
2791	Ferraz de Vasconcelos	SP	46.60 🛑	
2803	Sumare	SP	46.57 🛑	
2850	Rio Grande da Serra	SP	46.42 🛑	
2874	Caconde	SP	46.33	
2890	Queluz	SP	46.30	
2896	Caieiras	SP	46.26	
2948	Coffeeland	SP	46.10 🔵	
2969	Cosmopolis	SP	46.03	

2978	♣ Picket	SP	46.00	
3061	Santa Branca	SP	45.73	
3151	Carapicuiba	SP	45.39 🛑	
3161	Jandira	SP	45.35 🛑	
3185	Serrana	SP	45.28	
3258	Itaquaquecetuba	SP	45.03 🛑	
3267	Franco da Rocha	SP	45.01 🔵	
3295	Américo Brasiliense	SP	44.93	
3297	Jardinópolis	SP	44.92	
3744	● Francisco Morato	SP	43.36	



ANNEX D – IDSC 2024 – SP State – Indicators framework

Table 3 Qua	antitative thresholds and target value	s			
SDGs	Indicator	Target value	Green threshold	Red threshold	Lower limit
1	Families registered in the Single Registry for social programs (%)	96	87	64	48
1	Percentage of people registered in the Single Registry who receive Bolsa Família (%)	96.6	80.5	42.82	22.96
1	Percentage of people below the poverty line in the Single Registry after Bolsa Família (%)	0	1	5	10
1	People with income of up to 1/4 of the minimum wage (%)	0.18	4.45	5.74	15.45
2	Childhood obesity (%)	0	5	10	20
2	Low birth weight (%)	0	6	11	13
2	Child malnutrition (%)	0	1	3	5
2	Family farming producers with support from PRONAF (%)	100	75	55	6
2	Establishments practicing organic farming (%)	20	7	2	0
3	Vaccination coverage (%)	100	95	60	40
3	Suicide mortality (100,000 inhabitants)	0	2.44	15.7	44.2

SDGs	Indicator	Target value	Green threshold	Red threshold	Lower limit
3	Infant mortality (children under 1 year old) (thousand live births)	0	12	19	45
3	Maternal mortality (thousand live births)	0	0.61	3.21	6.7
3	Infant mortality (thousand live births)	0	25	37	50
3	Neonatal mortality (children aged 0 to 27 days) (thousand live births)	0	12	20	36
3	AIDS mortality (100,000 inhabitants)	0	6	15	19
3	Dengue incidence (100,000 inhabitants)	0	138.4 3	553.7 2	5386. 65
3	Premature mortality due to chronic non-communicable diseases (100,000 inhabitants)	21.7	236	518	700
3	Municipal health budget (Reais per capita)	4680	1300	476	395
3	Population served by family health teams (%)	100	86	60	0
3	Hepatitis detection (100,000 inhabitants)	0	10	40	70
3	Insufficient prenatal care (%)	0	10	38	59
3	Basic Health Units (thousand inhabitants)	0.55	0.08	0.04	0
3	Average age at death (Years)	75	70	65	55
3	Teenage pregnancy (%)	0	9.98	23.46	30.81

SDGs	Indicator	Target value	Green threshold	Red threshold	Lower limit
3	Incidence of tuberculosis (100,000 inhabitants)	0	6	60	150
4	Internet access in primary and secondary schools, in the public network (%)	100	95	75	20
4	Percentage of children aged 0 to 3 enrolled in daycare centers (%)	100	84	40	20
4	Schools with facilities suitable for people with disabilities (%)	100	60	10	0
4	Schools with resources for Specialized Educational Assistance (one thousand enrollments)	3.69	1.32	0.25	0
4	Basic Education Development Index (IDEB) - final years (IN)	7.38	5.25	3.6	2.9
4	Basic Education Development Index (IDEB) - initial years (IN)	8.98	6.65	4.67	3.8
4	Young people with completed secondary education by the age of 19 (%)	100	70	42	5
4	Teachers with higher education - Early Childhood Education - public network (%)	100	90	70	40
4	Teachers with higher education - Elementary Education - public network (%)	100	96	86	65
4	Ratio of enrollment to preschool teachers (Ratio)	10	12	22	28

SDGs	Indicator	Target value	Green threshold	Red threshold	Lower limit
4	Ratio between enrollment and teacher numbers in elementary education (Rate)	12	15	24	28
4	Age-grade distortion rate in public elementary school (Rate)	0	12	30	48
4	Illiteracy in the population aged 15 and over (%)	0	3	17	30
4	Cultural centers, cultural houses and spaces (100 thousand inhabitants)	358.83	35.28	7.95	0
4	Children and young people aged 4 to 17 at school (%)	100	95	87	82
5	Young women aged 15 to 24 who neither study nor work (%)	0.83	20.46	39.4	47.06
5	Presence of female councilors in the City Council (%)	50	50	40	30
5	Gender pay gap (ratio)	1	0.9	0.6	0.5
5	Percentage difference between young women and men who neither study nor work (Percentage points)	0	1	13	25
5	Feminicide rate (100,000 women)	0	1	2	3
6	Diseases related to inadequate environmental sanitation (100,000 inhabitants)	0	136.2 1	367.4 3	967.1 2
6	Loss of treated water in distribution (IN)	0	12.1	39.99	72.96

SDGs	Indicator	Target value	Green threshold	Red threshold	Lower limit
6	Population served by sewage systems (%)	100	70	50	0
6	Sewage treatment rate (%)	100	80	60	0
6	Total population served by water supply (%)	100	85	53	0
7	Households with access to electricity (%)	100	99	90	80
7	Energy Vulnerability (IN)	0.23	0.47	0.73	0.77
8	Employed population between 10 and 17 years old (%)	0	7.59	25.93	41.32
8	GDP per capita (R\$ per capita)	56000	3800 0	2300 0	7300
8	Unemployment (Rate)	0	3	10.27	15.57
8	Youth unemployment (Rate)	0	5.18	16.94	25.18
8	Young people aged 15 to 24 who neither study nor work (%)	1.61	14.76	30.72	38.03
8	Formal employment of people aged 16 and over (%)	91.81	68.19	48.13	38.7
9	Public investment in urban infrastructure per inhabitant (R\$ per capita)	4091.1 3	3382. 49	630.6 8	111.5 8
9	Share of formal jobs in knowledge and technology intensive activities (%)	43.28	14.3	1.92	0
10	Municipal income appropriated by the poorest 20% (%)	20	10	7	1.5

SDGs	Indicator	Target value	Green threshold	Red threshold	Lower limit
10	Gini coefficient (IN)	0.28	0.3	0.4	0.63
10	Difference in infant mortality rate between children of PPI and BA mothers (Difference between rates/per 1,000 live births)	0	2	5	10
10	Difference in teenage pregnancy rate between PP and BA mothers (Difference between rates (%))	0	2	5	10
10	Difference in the age-grade distortion rate in the initial years of Elementary School between PP and BA (Difference in years)	0	1	1.5	2
10	Difference in the age-grade distortion rate in the final years of Elementary School between PP and BA (Difference in years)	0	1	1.5	2
10	Difference in homicide rate between PPI and BA (Difference between rates/per 100 thousand individuals)	0	1	2.5	5
10	Difference in the femicide rate of women in PPI and BA (Difference between rates/per 100,000 individuals)	0	1	2.5	5
10	Difference in male juvenile homicide rate between PPI and BA youth (Difference between rates/per 100,000 individuals)	0	1	2.5	5
10	Ratio of average real income between PP and BA (Ratio (R\$))	1	0.9	0.5	0.3

SDGs	Indicator	Target value	Green threshold	Red threshold	Lower limit
10	Access to primary health care equipment (%)	0	2	30	100
10	Violence against the LGBTQIA+ population (100,000 inhabitants)	0	0.5	6	18
10	Percentage of PPI councilors in Municipal Chambers (%)	50	50	40	30
11	Percentage of low-income population with commuting time to work exceeding one hour (%)	0	5	15	35
11	Traffic deaths (100,000 inhabitants)	0	6.8	29.08	72.86
11	Population living in substandard settlements (%)	0	0.8	5	22
11	Households in slums (%)	0	1.04	5.55	13,12
11	Municipal sports facilities (100 thousand inhabitants)	142.51	28.66	6.61	0
11	Percentage of black population in substandard settlements (%)	0	1	5	27
12	Household solid waste collected per capita (kg/day/inhabitant)	1	1.5	2	3.2
12	Recovery of selectively collected urban solid waste (%)	60.01	25.48	3.74	0
12	Population served by selective collection (%)	100	70	60	0

13	SDGs	Indicator	Target value	Green threshold	Red threshold	Lower limit
13	13	capita (tons of CO ² e per	0	2	4	20
13	13	outbreaks (thousand	0	0.18	1.05	1.63
risk areas 13	13	management and prevention of environmental	100	80	20	0
Sewage treated before reaching the sea, rivers and streams (%) Sewage treated and 100 70 40 0	13		0	0.19	0.8	1
14 reaching the sea, rivers and streams (%) 100 70 40 0 15 Hectare of forested and natural areas per inhabitant (Ha/hab) 146.6 25,25 8.94 0.15 15 Conservation units for full protection and sustainable use (%) 100 28.69 7.97 0 15 Maturity level of environmental protection financing instruments (%) 100 80 20 0 16 Male juvenile homicide (100,000 inhabitants) 0 0.5 4 22 inhabitants) 16 Deaths by firearms (100,000 inhabitants) 0 0.25 1 1.5	13	_	0	0.05	0.5	1.5
15 natural areas per inhabitant (Ha/hab) 146.6 25,25 8.94 0.15 15 Conservation units for full protection and sustainable use (%) 100 28.69 7.97 0 15 Maturity level of environmental protection financing instruments (%) 100 80 20 0 16 Male juvenile homicide (100,000 inhabitants) 0 0.5 4 22 16 Homicide rate (100,000 inhabitants) 0 1.5 3 38	14	reaching the sea, rivers and	100	70	40	0
15 protection and sustainable use (%) Maturity level of environmental protection financing instruments (%) Male juvenile homicide (100,000 on the inhabitants) Male juvenile homicide rate (100,000 on the inhabitants) Deaths by firearms (100,000 on the inhabitants) 28.69 7.97 on the inhabitants of the inhabitants	15	natural areas per	146.6	25,25	8.94	0.15
15 environmental protection financing instruments (%) Male juvenile homicide (100,000 o 0.5 4 22 inhabitants) Homicide rate (100,000 inhabitants) Deaths by firearms (100,000 o 0.25 1 1.5	15	protection and sustainable	100	28.69	7.97	0
16 homicide (100,000 0 0.5 4 22 inhabitants) 16 Homicide rate (100,000 0 1.5 3 38	15	environmental protection	100	80	20	0
inhabitants) Deaths by firearms (100,000 0 0.25 1 1.5	16	homicide (100,000	0	0.5	4	22
	16		0	1.5	3	38
	16		0	0.25	1	1.5

SDGs	Indicator	Target value	Green threshold	Red threshold	Lower limit
16	Degree of structuring of the internal control and anticorruption policy (%)	100	80	20	0
16	Degree of structuring of policies for participation and promotion of human rights (%)	100	80	20	0
16	Degree of structuring of transparency policies (%)	100	80	20	0
17	Public investment (R\$ per capita)	2253.8 8	563.2 6	239.1 1	60.79
17	Total municipal revenue collected (%)	51.35	19.73	3.9	1.19