



Feasibility Analysis:

The CO₂ Performance Ladder in Brazil

Assessing the policy, legal, market, and institutional conditions for implementing a low-carbon certification system within Brazilian public procurement.

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CO₂ PERFORMANCE LADDER

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ABOUT THIS REPORT

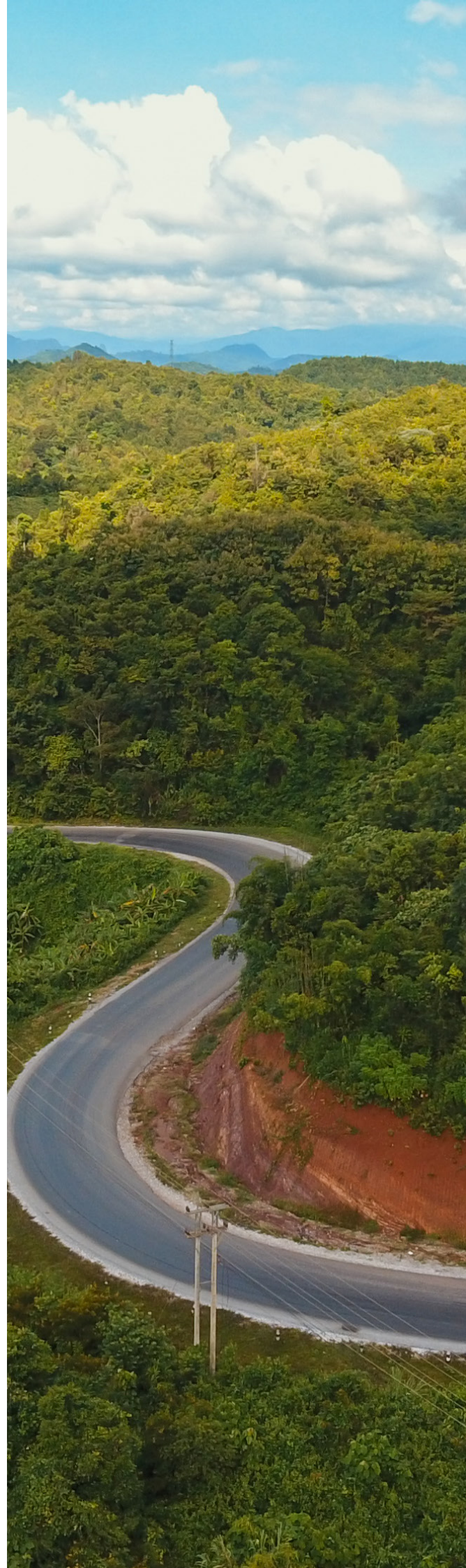
Brazil's public procurement market — worth approximately USD 273 billion annually — represents a powerful lever for driving economic decarbonisation. This report assesses the feasibility of introducing the CO₂ Performance Ladder (CO₂PL) in Brazil, drawing on desk research, legal assessment, and interviews with expert practitioners across government, industry, and civil society. It examines existing policy frameworks, procurement mechanisms, market readiness, and key challenges to sustainable public procurement, putting forward seven priority recommendations for implementation.

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Any errors or omissions remain the sole responsibility of the authors.



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INSTITUTO JATAÍ

Instituto Jataí is a Brazilian nonprofit organisation dedicated to transforming public procurement into a strategic lever for sustainable and inclusive development. Our work bridges policy design, institutional capacity-building, and applied research, focusing on how governments can use their purchasing power to drive systemic transitions in food systems, low-carbon economies, and sustainable supply chains.

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ACRONYMS AND ABBREVIATIONS

AGU - The Attorney General's Office

BPQR - Best price-quality ratio

CICS - Interministerial Commission for Public Procurement for Sustainable Development

CO₂PL - CO₂ Performance Ladder

ENCP - National Public Procurement Strategy for Sustainable Development

GHG - Greenhouse Gas

GPP - Green public procurement

Inmetro - National Institute of Metrology, Standardisation, and Industrial Quality

MGI - Ministry of Management and Innovation in Public Services

NDC - Nationally Determined Contribution

NIB - New Industry Brazil

Novo PAC - The New Growth Acceleration Plan

PAC - Growth Acceleration Program

PNAE - National School Feeding Programme

SDGs - Sustainable Development Goals

SMEs - Small and Medium Enterprises

SOE - State-owned Enterprise

SPP - Sustainable public procurement

PTE - Ecological Transformation Plan

SEBRAE - Brazilian Macro and Small Business Support Service

SENAI - Brazilian National Service for Industrial Training

VfM - Value for Money

EXECUTIVE SUMMARY

Brazil holds one of the world's most significant levers for driving systemic changes towards aligning growth with decarbonisation: a public procurement market worth approximately USD 273 billion annually (around 12.5% of the country's GDP), which is responsible for a substantial share of carbon emissions across supply chains. The country's procurement policy and regulatory frameworks already provide legal entry points for carbon-related criteria, such as value for money, margins of preference, points system, and performance contracts. **However, the potential of public procurement as a climate policy instrument in Brazil remains largely untapped. Governance fragmentation, legal uncertainty, limited technical capacity among public buyers, and uneven market readiness, especially among micro and small enterprises, represent barriers to implementing low-carbon public procurement initiatives.**

The CO₂ Performance Ladder (CO₂PL) offers a concrete, internationally validated pathway for promoting low-carbon procurement through clear market signals to invest in decarbonisation and supplier performance verification. Developed in the Netherlands in 2009 and now recognised by the OECD, IPCC, and World Economic Forum as a best practice for aligning procurement with climate goals, the **CO₂PL is a certification and management system that rewards companies demonstrating measurable progress in reducing carbon emissions and energy consumption — and translates that progress into competitive advantages in public tenders.**

This study assesses the feasibility of introducing the CO₂PL in Brazil, examining the policy, legal, market, and institutional conditions for its implementation. Based on literature and interview findings, the study puts forward a set of recommendations for implementing the CO₂PL and promoting low-carbon public procurement, organised into seven priority areas:

- 1. Strengthen governance and coordination.**
Establish a coherent national strategy for low-carbon public procurement by strengthening central coordination mechanisms and fostering collaboration across ministries, agencies, and subnational entities. A dedicated multistakeholder committee should be created to connect government bodies, market actors, and civil society around a shared implementation agenda.
- 2. Enhance legal certainty and regulatory clarity.**
Reduce perceived risks for public buyers by developing clearer guidelines, aligning regulatory frameworks with control agencies, and standardising procurement procedures. A dedicated regulatory instrument — such as a Decree — should be developed to formally support the use of certification systems, including the CO₂PL, within public procurement processes.
- 3. Promote standardisation and pilot the use of certification systems.** Foster the standardisation of sustainability criteria linked to third-party certifications. Pilot implementation should prioritise organisations with greater technical capacity and regulatory flexibility — such as central purchasing bodies and State-owned Enterprises — to build evidence and disseminate the CO₂PL as a credible instrument for low-carbon procurement.
- 4. Build supplier capacity and support market access.**
Develop support mechanisms and structures that provide technical assistance, training programmes, and simplified access channels — including digital marketplaces and accreditation systems — to help suppliers, particularly micro, small and medium-sized enterprises, meet CO₂PL requirements and compete within sustainable procurement markets.

- 5. Use incentives and demand signals to drive market transformation.** Deploy demand-side instruments to reward sustainability performance whilst maintaining competition, such as points system and performance-based contracts. Performance-based contracting is particularly well-suited, as it allows uncertified suppliers to compete and be selected, whilst creating structured financial incentives for them to achieve CO₂PL certification during contract execution.
- 6. Foster stakeholder dialogues to align understandings and expectations.** Promote structured dialogues bringing together government bodies — including control agencies — and market actors to build shared understanding of the CO₂PL, clarify legal interpretations, and align expectations around its implementation. These dialogues are essential to reduce uncertainty and build the institutional trust needed for broader uptake.
- 7. Establish a working group for local adaptation of the CO₂PL.** Create a dedicated working group comprising representatives from government, industry, and civil society to assess CO₂PL requirements against Brazil's regulatory, market, and regional contexts. The working group should identify opportunities to simplify processes — such as carbon inventory requirements and certification costs — and propose adaptations that ensure the instrument is both credible and accessible across different sectors and regions.

Public procurement is a policy instrument that governments can act on directly, influencing supply chains and market behaviour. Brazil has the scale, the policy momentum, and the regulatory foundations to make it count for climate. The CO₂PL offers a structured path to do so at scale — if implemented with the care, adaptation, and institutional commitment that the context demands.



1. INTRODUCTION

Public procurement has been contributing to sustainability efforts by using the notable government purchasing power (around 13% of global GDP, see UNEP, 2022) to foster sustainable consumption and production (Brammer & Walker, 2011; Caranta, 2023). Several countries have been developing sustainable public procurement (SPP) initiatives, aiming to support more sustainable business practices and address economic, environmental, and social issues (UNDP, 2022; UNEP, 2023).

In this context, public procurement has been oriented towards developing low-carbon solutions, contributing to reducing environmental harm throughout the life cycle of products, services, and works and meeting national

commitments on mitigating the impacts of climate change (OECD, 2024; Stockholm Environment Institute, 2023).

Public procurement is responsible for around 15% of global carbon dioxide (CO₂) emissions (WEF & BCG, 2022), representing one of the most powerful levers to accelerate economic decarbonisation. In tandem with regulation, incentives, and financing, procurement stands out as a tool that governments can act on directly, generating immediate impacts on supply chains and shaping sustainable markets across various sectors, including construction, energy, mobility, and food systems (Mazzucato et al., 2025; Spanó & Mazzucato, 2026). However, several challenges to implementing low-carbon or green public procurement have been

highlighted by the literature (e.g. lack of knowledge and awareness, lack of monitoring) (Vejaratnam et al., 2020), requiring the development of collaborative and innovative approaches to overcome them (Kadefors et al., 2021; Witjes & Lozano, 2016).

The CO₂ Performance Ladder (CO₂PL) has been highlighted as an innovative approach to promoting low-carbon public procurement (IPCC, 2022; Kadefors et al., 2021; World Bank, 2021). CO₂PL entails a collaborative system that certifies businesses' efforts towards managing carbon and energy (e.g. decarbonising their production and provision processes) (Rietbergen et al., 2017).

CO₂PL-based requirements can be included in public procurement (through award advantages such as extra points and fictitious discount in bids evaluation, see IISD, 2024), providing benefits to governments (e.g. reducing monitoring costs), businesses (e.g. building competitive advantage), and society (e.g. fighting climate change). These requirements mainly intend to offer bonuses to businesses that have been and are aimed at working towards inventorying and reducing carbon emissions and energy consumption (Rietbergen et al., 2017).

The CO₂PL was initially implemented in the Netherlands and subsequently disseminated to other countries (e.g. Belgium, Ireland) engaged in low-carbon public procurement practices. Brazil stands out as a promising context for further implementation of the CO₂PL, as it has been developing low-carbon policies and initiatives to steer public procurement toward addressing sustainable development needs (Mazzucato et al., 2024), including promoting the Belem Declaration on Sustainable Public Procurement in the 2025 Conference of the Parties to the United Nations Climate Change Conference (COP30).

1.1 THE PURPOSE OF THE STUDY

The purpose of this study is to explore and discuss the challenges and opportunities of implementing the CO₂PL in Brazil, focusing on understanding how this system can contribute to Brazilian SPP efforts. The specific questions discussed in this study are:

What policies could support the implementation of the CO₂PL?

How could the CO₂PL be implemented following the procurement regulations and practices?

What is the size and composition of the market that could be influenced by the CO₂PL implementation?

What are the key stakeholders that could support the implementation of the CO₂PL?

What SPP challenges in the Brazilian context could hinder efforts towards implementing the CO₂PL?

1.2 WHAT IS THE CO₂PL?

The CO₂PL is a sustainability certification and management system created in 2009 in the Netherlands to reduce carbon emissions in public infrastructure procurement (IISD, 2024). Recognised by organisations such as the OECD, IPCC, and World Economic Forum as a best practice for aligning public procurement with climate goals (IPCC, 2022; OECD, 2024; WEF & BCG, 2022), it has since become the country's leading sustainability tool for public tenders (OECD, 2024). Initially focused on infrastructure projects, the CO₂PL is now applied across multiple economic sectors and used

by hundreds of public and private organisations to reduce their carbon footprint (IISD, 2024). Today, it covers more than 8,000 certified organisations and over 300 contracting authorities, and it is being adopted beyond the Netherlands, with implementation underway in Belgium, France, Germany, Ireland, Portugal, and the United Kingdom.¹ The results are promising: the Ladder's first project in Ireland, for instance, delivered a 21% CO₂ reduction.²

The system is managed by SKAO (the Foundation for Climate-Friendly Procurement and Business), a Dutch non-profit organisation that supports companies and governments in reducing CO₂ emissions by sharing knowledge and fostering collaboration.

The CO₂PL supports the transition to a low-carbon economy by recognising companies that demonstrate concrete

efforts to cut emissions with a competitive advantage in public tenders (Rietbergen et al., 2017). The certification framework assesses organisations across three dimensions: internal emissions reduction, supply chain emissions reduction, and the commitment to net zero by 2050 (SKAO, 2025).

The CO₂PL can contribute to promoting systemic changes by using the government's purchasing power to foster CO₂ awareness and reduction throughout suppliers' organisations, production processes, and supply chains (SKAO, 2023). The CO₂PL can work as a driver for existing organisations to change their practices towards decarbonisation - and support new organisations based on more sustainable business models. The CO₂PL's theory of change can be presented in Figure 1:

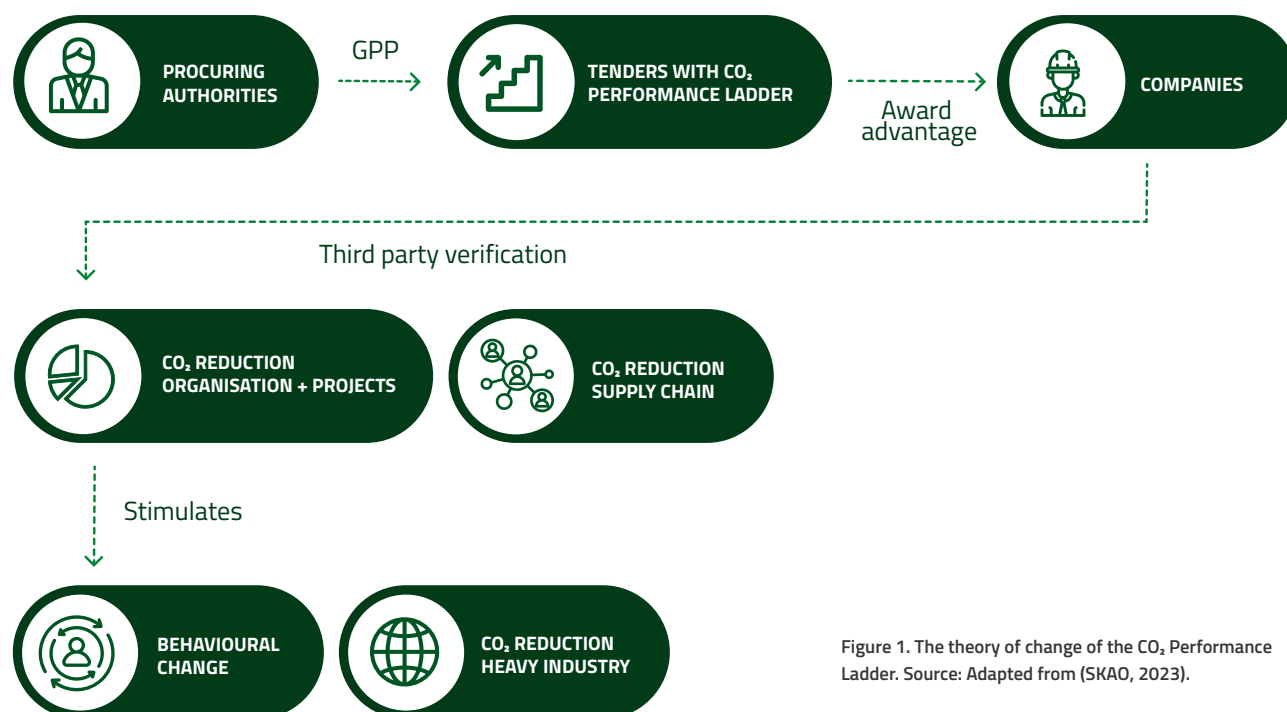


Figure 1. The theory of change of the CO₂ Performance Ladder. Source: Adapted from (SKAO, 2023).

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1.The updated list of countries implementing the CO₂PL can be accessed at the website: <https://www.co2performanceladder.com/countries/>.

2.The first project supported by the CO₂PL in Ireland was aimed at decarbonising motorway maintenance: <https://www.co2performanceladder.com/blog/how-the-co2-performance-ladder-drives-low-carbon-innovation-in-irelands-road-infrastructure/>.

How the CO₂ Performance Ladder works in practice

The CO₂ Performance Ladder 4.0 operates simultaneously as a carbon and energy management system and as a procurement tool. **Its certification framework is organised around three steps**, reflecting increasing levels of ambition in emissions reduction:

- ◆ **Step 1: CO₂ reduction within the organisation's own operations**
- ◆ **Step 2: CO₂ reduction across the supply chain**
- ◆ **Step 3: Commitment to net-zero emissions by 2050**

In procurement, the CO₂PL is usually applied as an award criterion under a best price–quality ratio (BPQR) approach. Contracting authorities include the CO₂PL Award Criterion in tender documents, defining CO₂PL Award Levels and the corresponding award advantage (typically a fictitious discount or additional points) for each level. Bidders then declare, at the time of submission, at which CO₂ Ambition Level they commit to implementing the contract.

A key feature of the instrument is its flexibility: bidders are not required to hold a CO₂PL certificate at the time of bidding. Compliance can be demonstrated either through a CO₂ Performance Ladder Certificate issued by an accredited certification body, or through a project-specific statement. This means that companies not yet certified can still compete, while being incentivised to pursue certification during contract execution. Within one year of contract award (and annually thereafter) the contractor must provide evidence of compliance with the declared CO₂ Ambition Level, failing which a penalty clause applies.

The CO₂PL is designed as an incentive-based, rather than exclusionary instrument: it rewards ambition in place of penalising non-compliance at the selection stage. For this reason, it is not suitable as an eligibility or selection criterion, as requiring certification prior to bidding would discriminate against organisations that have not yet adopted the system, and would be disproportionate under procurement law principles of equal treatment, transparency, non-discrimination, and proportionality (SKAO, 2025).

1.3 METHODS

The work was conducted through an inductive approach and comprised a three-step data collection, entailing desk research, legal assessment, and interviews with key stakeholders. The desk research included efforts to gather documents discussing the CO₂PL, academic and policy papers on sustainable and green public procurement, policy documents presenting Brazilian sustainability and procurement strategies, and guidelines describing best practices to implement low-carbon public procurement. The legal assessment was based on an in-depth interpretation of Brazilian public procurement regulations and related case-law.

Interviews with 10 practitioners were conducted during the research process. These practitioners were selected considering their expertise on sustainability and procurement practices in Brazil, and organised into three categories: procurement experts, control agencies, industry and civil society. The interviewee's profiles are presented in Annexe 1, and the interview guide, comprising questions on sustainability, procurement, and the CO₂PL implementation, is disclosed in Annexe 2. The data was analysed using qualitative techniques, including thematic analysis for the interview data and hermeneutics for the legal assessment.

1.4 STUDY STRUCTURE

This study is organised as follows. After this introduction, Section 2 discusses the context and policy framework that can drive the implementation of the CO₂PL in Brazilian public procurement. Section 3 examines best practices and mechanisms that can facilitate such implementation. Section 4 discusses market readiness and key stakeholders in this context. Section 5 presents the main challenges to implementing SPP in Brazil, highlighting forces that could eventually hinder efforts to implement the CO₂PL. Section 6 outlines recommendations to overcome challenges to implementing the CO₂PL in Brazil. Section 7 presents this study's conclusions and key recommendations.



2. CONTEXT AND POLICY FRAMEWORK

2.1 SIZE OF BRAZILIAN PUBLIC PROCUREMENT

Brazil stands out as a country of large numbers: in 2024, it had a USD 2,18 trillion GDP (10th largest economy) and 213 million inhabitants (7th in the world), who live in the 5th biggest country in the world (8,5 million km²). These numbers are also reflected in the country's public budget and, consequently, in its purchasing power. The Brazilian government spent USD 908 billion in 2024, of which USD 273 billion were related to public procurement (around 12.5% of the country's GDP, as proposed by Ribeiro & Inácio Júnior, 2019). This implies that, taken as a standalone entity, Brazilian public procurement would rank 69th globally in

terms of economic size, surpassing the GDPs of multiple countries.

This notable government purchasing power also implies complexity. The country has three government levels: federal, regional or State-level, and local. Ribeiro & Inácio Júnior (2019) estimate that each level of government has a large contribution to the country's purchasing power: 54.4% at the federal, 17.6% at the regional, and 25.6% at the local level. The Brazilian federal level has a notable procurement share when compared to OECD countries, in which local

governments are usually the most expressive buyers. This can be explained by Petrobras' share: the federal oil and gas State-owned enterprise (SOE) spends around 4.2% of the country's GDP through public procurement (33,6% of the country's government purchasing power).

Brazil's public procurement potential has been used to address sustainability issues, although inclined towards tackling more economic and social challenges considering its historical development. Initiatives driving changes in production and consumption systems through public procurement are gaining momentum and have an untapped potential. The experience with the National School Feeding Programme (PNAE) illustrates this potential in practice, demonstrating how public procurement can be leveraged to advance social, environmental, and economic goals simultaneously (Spanó & Mazzucato, 2026).

This overview of Brazilian public procurement contributes to understanding the country's high potential to develop more sustainable businesses through using its purchasing power. Several policies have been proposed to address sustainability issues in the country, including efforts to build a more sustainability-oriented public procurement system, as presented in the next section.

2.2 POLICY FRAMEWORK

Brazil's policy framework for sustainable public procurement has evolved significantly in recent years, shaped by the country's climate commitments, industrial transformation agenda, and institutional reforms. This section examines four interconnected dimensions of this framework: Brazil's updated Nationally Determined Contribution (NDC), which sets the country's climate ambition; the economic transformation agenda, which integrates sustainability into industrial and development policy; and two key institutional instruments that directly govern sustainable public

procurement, the Interministerial Commission for Strategic Procurement (CICS) and the National Strategy for Sustainable Public Procurement (ENCP).

2.2.1 CLIMATE SCENARIO IN BRAZIL'S MOST RECENT NDC

Brazil submitted its first Nationally Determined Contribution (NDC) in 2015, under the Paris Agreement framework, committing to reduce greenhouse gas (GHG) emissions by 37% by 2025 relative to 2005 levels, and indicating a further 43% reduction by 2030. The country outlined a range of mitigation measures to meet these targets, including eliminating illegal deforestation, restoring 12 million hectares of forests, expanding low-carbon agricultural practices, increasing the share of bioenergy and other renewable sources in the national energy mix, and improving energy efficiency across sectors (Laboissière, 2015).

Brazil revised its NDC between 2020 and 2022 by recalculating the 2005 emissions baseline. The percentage reduction targets were formally maintained, but the methodological change resulted in a higher absolute emissions allowance, effectively weakening the ambition of the targets. As a result, the revised NDC allowed higher absolute emissions and was widely criticised by experts and international organisations as signalling a climate policy backslide.

Brazil updated its NDC once again in 2024, reaffirming the 37% emissions reduction by 2025 and increasing the 2030 target to 53%, still relative to 2005 levels (Brasil, 2024). The updated contribution also formalised the goal of achieving climate neutrality by 2050 and reinforced the commitment to ending illegal deforestation by 2030, acknowledging the central role of land-use change in national emissions. This latest revision was well received by specialists and international bodies, as it corrected previous ambiguities and placed Brazil back on a trajectory more consistent with the objectives of the Paris Agreement.

Despite the renewed formal ambition, Brazil's principal challenge remains the effective implementation of its commitments—particularly with regard to curbing deforestation, advancing large-scale forest restoration, and accelerating the transition toward more sustainable energy and production models.

2.2.2 ECONOMIC TRANSFORMATION AGENDA: PTE, NOVO PAC, NIB, AND PLANO CLIMA

Brazil has been advancing an ambitious economic transformation agenda that integrates sustainability, industrial revitalization, and social inclusion as central policy objectives, especially since 2023. The agenda seeks to reconcile economic growth with decarbonisation, improved productivity, and reduced inequality, signaling a shift toward a development model aligned with long-term environmental and social goals.

The Ecological Transformation Plan (Plano de Transformação Ecológica, PTE) represents a central pillar of Brazil's economic transformation agenda. It is conceived as an initiative to promote sustainable development through the reorientation of economic, technological, and cultural paradigms. The plan seeks to align GDP growth with the reduction of GHG emissions, the creation of quality jobs, and a fairer distribution of wealth, positioning Brazil on a new trajectory of sustainable and technological development. Its overarching objective is to achieve significant reductions in GHG emissions, with carbon neutrality by 2050. PTE focuses on mobilising investments for strategic projects that combine economic expansion with environmental responsibility, ensuring that the benefits of development are shared more equitably and that the transition remains socially inclusive, with the potential to generate approximately two million jobs by 2035 (Ministério da Fazenda, 2025b).

The New Growth Acceleration Plan (Novo PAC)

is a federal investment program designed to accelerate economic growth, promote social inclusion, and generate employment through a joint effort across different levels of government and the private sector. Its overarching objective is to reverse Brazil's long period of underinvestment by boosting infrastructure, expanding access to essential services, and reducing social and regional inequalities.

Aligned with the PTE, Novo PAC incorporates investments that support the ecological transition, including low-carbon energy and fuels, decarbonization in construction, and improved waste management and logistics (Casa Civil, 2024). This alignment ensures that major infrastructure projects and investments are consistent with Brazil's emissions reduction and deforestation targets, while leveraging the country's strengths in renewable energy and natural resources.

The New Industry Brazil (Nova Indústria Brasil, NIB)

launched in January 2024, is Brazil's flagship initiative to revitalise its industrial base and foster sustainable growth through 2033. The policy integrates industrial development with climate and innovation objectives structured around six strategic missions: a) sustainable and digital agri-food chains; b) strong Health-Industrial Complex; c) sustainable infrastructure, housing, and mobility; d) digital transformation of industry; e) bioeconomy, decarbonisation, and energy transition; and f) technologies for national sovereignty and defence. It also incorporates preferential procurement mechanisms, which authorise a 10% margin of preference for national manufactured goods, services, or recyclable, reusable, or biodegradable products, and an additional margin (up to 20%) for innovative domestic solutions (Ministério da Fazenda, 2025a).

The National Climate Plan (Plano Clima) is a comprehensive policy framework that guides Brazil's response to climate change through 2035. It is structured around two main pillars: the National Mitigation Strategy, aimed at reducing GHG emissions for a net-zero trajectory, and the National Adaptation Strategy, designed to reduce the vulnerability of cities, communities, and natural ecosystems. Both pillars are operationalised through a series of sector-specific plans, covering key economic and social areas such as energy, transport, agriculture, industry, health, and infrastructure (Ministério do Meio Ambiente e Mudança do Clima, n.d., 2024). The plan is grounded in scientific evidence and was developed through a participatory process with public consultations through digital platforms for citizen engagement, ensuring transparency and participation.

By setting clear targets and governance mechanisms, Plano Clima provides the strategic backbone for Brazil's climate action, aligning national policies with the country's updated Nationally Determined Contribution (NDC), which commits to a 59%–67% reduction in greenhouse gas emissions by 2035 compared to 2005 levels (Brasil, 2024). In doing so, it ensures that major initiatives such as the Ecological Transformation Plan (PTE), Novo PAC, and the New Industrial Policy (NIB) remain consistent with Brazil's long-term pathway to climate neutrality by 2050.

Together, the PTE, Novo PAC, NIB, and Plano Clima constitute an integrated policy framework for Brazil's sustainable economic transformation. PTE sets the overall vision, Novo PAC operationalises infrastructure investments, NIB drives industrial transformation, and Plano Clima ensures alignment with climate targets. Combined, these initiatives create an enabling environment for advancing sustainable public procurement and supporting the transition to a low-carbon and inclusive economy.

2.2.3 INTERMINISTERIAL COMMISSION FOR STRATEGIC PROCUREMENT

The Interministerial Commission for Public Procurement for Sustainable Development (Comissão Interministerial de Contratações Públicas para o Desenvolvimento Sustentável - CICS), established by Decree No. 11,890 of 2024, was created to promote the integration of sustainability criteria into federal public procurement practices in Brazil. As a high-level coordination body, the commission convenes key federal ministries, the Chief of Staff's Office (Casa Civil), and strategic public development and innovation organisations.

CICS plays a strategic role in aligning procurement policies with broader national objectives related to sustainable development, climate action, and responsible public spending. Its mandate includes proposing guidelines, technical criteria, and normative measures aimed at strengthening innovation and embedding environmental and social considerations into public purchasing procedures (Ministério da Gestão e da Inovação em Serviços Públicos, n.d.). The commission has advanced initiatives to encourage the acquisition of locally produced and domestically developed goods and services, fostering shorter supply chains and strengthening national productive capacities. By promoting more strategic and sustainability-oriented procurement practices, the Commission reinforces the use of the State's purchasing power as a policy instrument to support inclusive and sustainable economic development.

2.2.4 NATIONAL STRATEGY FOR PUBLIC PROCUREMENT FOR SUSTAINABLE DEVELOPMENT

Brazil's National Strategy for Sustainable Public Procurement (Estratégia Nacional de Contratações Públicas para o Desenvolvimento Sustentável - ENCP) represents a major step toward strengthening the role of public procurement as a policy instrument for sustainable development. Led by the

Ministry of Management and Innovation in Public Services (MGI), the ENCP was developed through a broad participatory process launched in 2023, involving stakeholders from civil society, academia, professional associations, and public bodies across the three levels of government. The contributions were consolidated into four strategic axes and sixteen objectives, formalised by Decree No. 12,771 of 2025.

The ENCP builds on the legal and institutional framework established by Brazil's New Public Procurement Law (Law 14,133/2021), which expressly includes sustainable nation-

al development among the governing principles of public procurement. By emphasising coordination, governance, and implementation capacity, the ENCP seeks to move beyond a cost-only approach and support the incorporation of sustainability requirements in purchasing decisions. Its collaborative design is expected to strengthen institutional legitimacy and improve adherence to diverse regional realities, fostering intergovernmental coordination as a key condition for effective implementation of sustainability into public procurement processes and initiatives.



3. SUSTAINABLE PUBLIC PROCUREMENT PROCESS IN BRAZIL

The public procurement process in Brazil is oriented towards finding the best solution to the public organisation's needs, considering competitiveness and integrity as key priorities. The main principles of this process include equal treatment, non-discrimination, planning, proportionality, and transparency. Sustainable development from a national perspective is also proposed as a key principle, supporting decisions on incorporating sustainability issues into public procurement. This process is intensely regulated by the New Public Procurement Law (Law 14,133 of 2021), which is followed by federal and subnational organisations, except for State-owned Enterprises (SOEs), which are regulated by the SOEs Law (Law 13.303 of 2016), entailing a more discretionary approach to public procurement.

Both regulations prescribe a general 3-phase public procurement process, comprising the 1) preparation phase, 2) supplier selection phase, and 3) contract execution and management phase. This process can be related to the Prepare-Purchase-Perform (3-P) model of Public Procurement described by Grandia et al. (2023), entailing an initial phase aimed at exploring needs and developing a procurement strategy, a tendering phase designed to connect demands (i.e. buyers) to offers (i.e. suppliers), and an implementation phase steered by delivering solutions (e.g. products, services) to fulfil the needs. Figure 2 presents the 3-P model of Public Procurement:

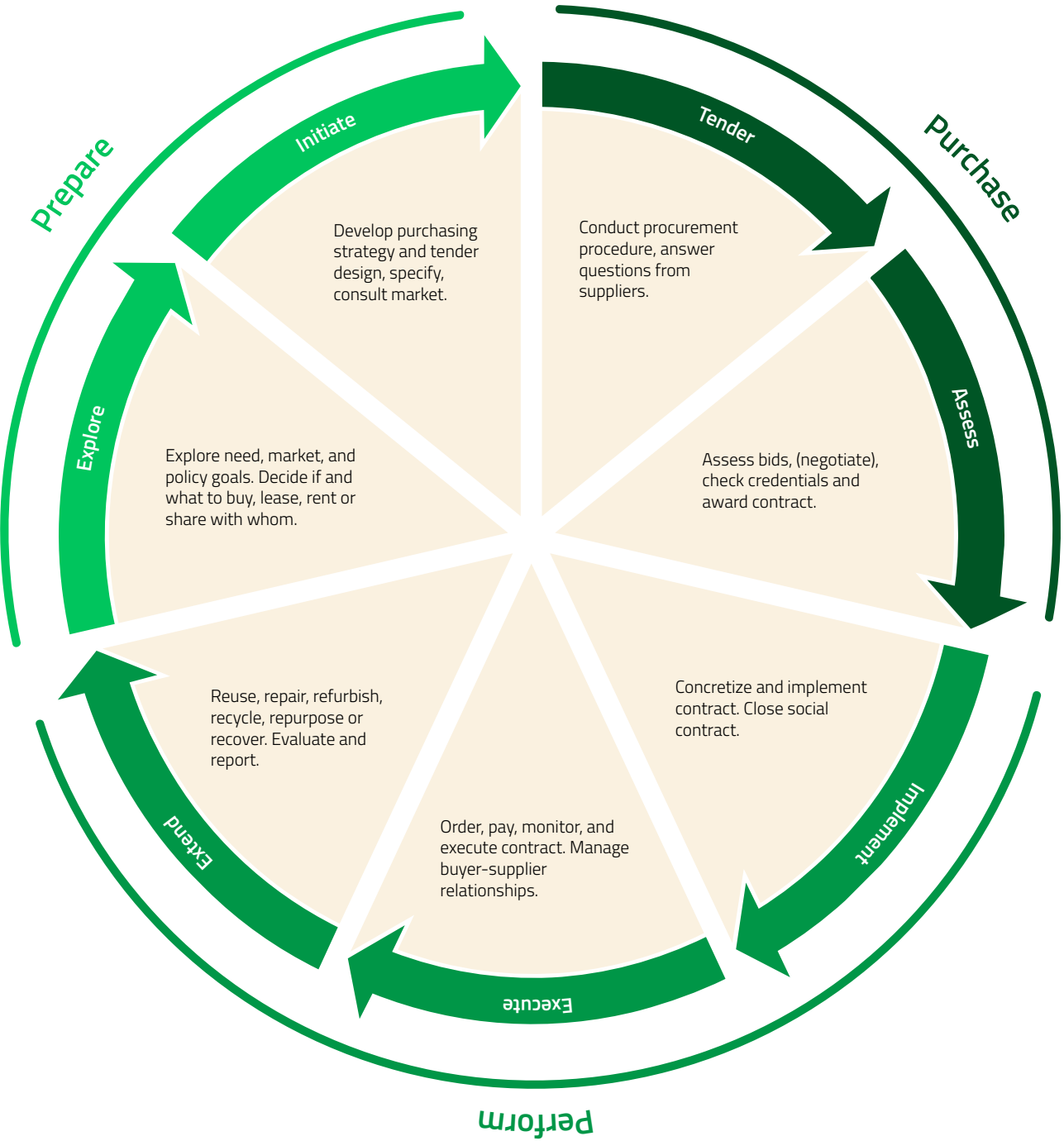


Figure 2. The 3-P model of public procurement. Adapted from (Grandia et al., 2023)

Several entry points for including sustainability in public procurement can be explored through the general process prescribed by Brazilian regulations. For example, **in the preparation phase**, a technical study must be developed to assess the organisation's needs and explore potential solutions. This study can describe sustainability issues that need to be addressed by the intended procurement, even proposing non-buying decisions. The study also includes a mandatory section on environmental impacts, resource consumption, reverse logistics, and recycling, which should be described when applicable.

Procurement requirements are also developed during the preparation phase, including explicit entry points for environmental and social issues. Environmental issues in the procurement requirements are supported by a life-cycle approach included in the regulations. The New Public Procurement Law requires a description of the subject matter of the proposed contract (e.g. products, services, solutions) that considers life cycle and, for construction works, socio-environmental studies. The SOEs Law requires addressing the environmental impacts of each procurement whilst planning and developing procurement requirements, supporting life cycle assessments.

Social issues explored in the procurement requirements include a mandatory minimum percentage of women victims of domestic violence in the suppliers' workforce, following the New Public Procurement Law. A federal regulation (Decree 11,430 of 2023) presents the strategy for requiring this percentage: public buyers at the federal level must require a percentage (at least 8%) of women victims of domestic violence in the suppliers' workforce when procuring on-site services (i.e. in which the suppliers need to maintain a workforce at the buyers' site, e.g. cleaning services). Transgender individuals, cross-dressers, and other women's gender possibilities were considered in the strategy, which also prioritises black and multiracial (i.e., "pardo") women.

Social issues (along with economic and environmental ones) should also be considered by SOEs whilst developing procurement requirements, as proposed by the SOEs Law.

The supplier selection or purchasing phase can also be used to address sustainability issues, as mandated by Brazilian public procurement regulations. This stage is aimed at achieving the most advantageous tender, supporting decisions considering selection criteria other than the lowest price. Competitiveness still needs to be the key guiding factor in supplier selections, but efforts to build criteria that address sustainability are fostered, considering value for money. For instance, most of the tenders are designed as a reverse auction procedure (*pregão*) with the lowest price criterion, with sustainability requirements contributing to obtaining the best value. However, the best price-quality ratio can be used in other selection procedures, valuing quality standards over the minimum requirements, although restricted to buying more complex services (e.g. consultancy) and works, information technology solutions, and needs fulfilment that can be satisfied by different solutions. Restricted procedures for pre-selected suppliers can also be designed, requiring an open and permanent selection based on product and supplier requirements.

The small and medium enterprises (SMEs) play a key role in the supplier selection phase, following mandatory regulations driven by economic issues, aiming to develop local businesses and supply chains. These regulations include reserved contracts, price preference, and lots division for such businesses (Supplementary Law 123, 2006). The threshold in reserved contracts for SMEs is R\$ 80,000.00 (around USD 14,000.00). Price preference gives a 10% bonus for local and regional SMEs. Lots division includes reserving lots (25%) for SMEs. Subcontracting SMEs is fostered by a non-mandatory provision, influencing services and works procurement. Exceptions to applying the SMEs' mandatory regulations follow market availability and risks due to the procurement complexity.

The **contract execution and management phase** also comprises legal support for including sustainability in public procurement. Social issues are specially considered, such as mandatory regulations on monitoring work conditions and rights. Established targets and key performance indicators (e.g. reducing CO₂ emissions and energy consumption) can be monitored, leading to sanctions such as automatically reducing payment.

SOEs follow the general procurement process adopted in other public organisations, but have more discretion in building their procurement regulations and procedures, following the main provisions of the SOEs Law. For instance, SOEs can design procedures more freely, provided that their regulations are publicly available, justifying decisions by aiming to follow best practices in their industry.

The procurement process in Brazil is regulated by internationally aligned legislation, providing several entry points for including sustainability issues. Specific mechanisms will be explored in the following subsections, aiming to discuss how the CO₂PL can be implemented in this context.

3.1 VALUE FOR MONEY AND LIFE CYCLE ANALYSIS

Value for money (VfM) is related to considering the economic, environmental, and social implications of spending, including cost-benefit analysis grounded on the whole life cycle of products and services (UNEP, 2022). In this context, public procurement can create value (e.g. sustainability) for and with different stakeholders, influencing public buyers, suppliers, supply chains, and citizens (Malacina et al., 2022).

Brazilian regulations foster the VfM approach to public procurement. For instance, supplier selection procedures aim at achieving the most advantageous tender, considering the

life-cycle of products and services, and promoting national sustainable development. This approach supports decisions on including sustainability issues into procurement requirements, such as sustainability labels and key performance indicators.

Life cycle approaches contribute to using the VfM approach to public procurement by considering products' (and services') impacts from raw materials extractions to final disposal. Different approaches have been used (OECD, 2024): life cycle costing (LCC) monetises external factors and integrates them into the total cost of ownership (TCO) of products and services; life cycle assessment (LCA) focuses on environmental assessment rather than on monetisation. However, practical experiences on applying life cycle approaches to public procurement are still limited due to a lack of knowledge, data, and methodological standards (Abu-Ghaida & Lizin, 2024).

Life cycle and VfM approaches can help the implementation of the CO₂PL by strengthening the motivation for adopting this system. The Ladder promotes a life cycle approach to product and service production and consumption, considering CO₂ emissions from cradle to grave, thereby enabling public buyers to create value throughout their supply chains.

3.2 MARGINS OF PREFERENCE

Fictitious discounts or margins of preference (*margens de preferência*) have been adopted in Brazil, following Law 14.133 and CICS' decisions. This practice is based on the mandatory use of fictitious discounts according to product and service characteristics, such as nationally produced and developed, providing an award advantage for potential suppliers that comply with such requirements. Recycled, recyclable, and biodegradable products can also be included in a fictitious discounts approach, according to Decree 11,890

of 2024, which proposes CICS' competences. The discounts are regularly up to 10 per cent, but can reach 20 per cent if the products and services are nationally developed (versus products and services offered from or developed in other countries).

Fictitious discounts have been used to offer an award advantage for businesses that meet CO₂PL requirements (e.g. in Belgium) (IISD, 2024). Although the Brazilian regulations may hinder efforts to establish fictitious discounts for businesses that meet CO₂PL requirements directly, this practice can be adopted to foster a more circular economy approach to public procurement, considering recycled, recyclable, and biodegradable products. A fictitious discount can provide an award advantage for potential suppliers offering products that comply with such characteristics. In this context, the discount design can explicitly include the CO₂PL as a way of verifying businesses' ability to work with circular production processes. The Ladder verification process can contribute to reducing public buyers' burden in verifying if products offered are recyclable and biodegradable, using a more structured and effective approach.

3.3 ECOLABELS AND CERTIFICATIONS

Ecolabels aims to provide information on the environmental performance of products (Tátrai & Diófási-Kovács, 2021), contributing to reducing the information asymmetry that may hinder buyers' initiatives on including environmental requirements in procurement processes (Behraves et al., 2022). UNEP (2021) illustrates five ecolabel types that can be used in SPP initiatives, based on the International Organisation for Standardisation (ISO) and other experiences:

1. Type I (ISO 14024): voluntary, multiple criteria, and certified by a third-party, considered the gold standard (e.g. EU Ecolabel, Nordic Swan);
2. Type II (ISO 14021): voluntary, non-verified by a third-party, self-declared label (e.g. a logo, a commercial);
3. Type III (ISO 14025): voluntary, based on a set of parameters and life-cycle analysis, and validated by a third-party (e.g. Environmental Product Declaration);
4. Type I-like: certification similar to Type I, but focused on specific impacts and sectors (e.g. energy consumption and energy-using appliances); and
5. Mandatory: required to commercialise a product (e.g. energy label).

Production processes and businesses have also been eco-certified (similarly to eco-labelled) (de Moura, 2013), contributing to more qualified consumption and procurement decision-making. Efforts on developing information disclosure to foster sustainable consumption have also contributed to disseminating sustainability labels, which can be based on economic, environmental, and social characteristics of products (Sanye Mengual et al., 2024).

Eco- and sustainability labels and certifications can be used in Brazilian public procurement. The general public procure-

ment law supports the inclusion of such labels and certifications in procurement requirements when linked to products, production processes, and organisational capacity (materials and technical staff). Conformity of the subject-matter of the contract (e.g. products, services, works) can also be demonstrated by labels and certifications, provided they are linked to proof of quality upon delivery. The SOEs law clearly prescribes eco- and sustainability labels and certifications on products and production processes as procurement requirements, but SOEs can publish regulations supporting a broader use of such practices. Both laws require that labels and certifications must be issued by an independent third-party. However, when required as an award condition, they must be issued by an organisation accredited by the National Institute of Metrology, Standardisation, and Industrial Quality (Inmetro).

Control agencies have been monitoring the use of eco- and sustainability labels and certifications in Brazil, highlighting the need to motivate this use and ensure competition. Challenges in using these labels include a lack of understanding of the difference between product labels and business certifications, lack of motivation, and lack of market knowledge. The agencies also identified corruption risks in using labels and certifications to hinder competition (e.g. as an award criterion when there is a lack of market readiness). However, there are opportunities for using eco- and sustainability labels and certifications in this context, supported by case law changes following the recent implementation of the new public procurement law. For instance, control agencies have been supporting piloting experiences led by public buyers that are explicitly motivating the use of labels and certifications, especially when based on evidence and technical reasons - this support was identified even during the period of the previous law, when less clear support to labels and certifications was in effect.

The CO₂PL can be considered a voluntary and third-party verified certification, based on declarations of conformity with a structured set of requirements aimed at improving the decarbonisation approach of businesses. Public buyers in Brazil can include the CO₂PL Steps as a certification: for instance, as a production process and organisational capacity certification, when applicable, and as proof of quality upon delivering products, services, and works. However, market readiness (i.e. assuring competitiveness) can be a key element for using this certification as a procurement requirement. Nonetheless, regulations support a combination of certification and other practices (e.g. not related to awarding the contract, but to bonuses), reinforcing the possibility of implementing the Ladder in this context.

3.4 POINTS SYSTEM

The best price-quality ratio included as a selection criterion (*técnica e preço*) in Brazilian public procurement regulations can be used as a points system for addressing sustainability issues. This criterion is based on assigning points to price and quality standards over the minimum requirements, which can foster the selection of suppliers more engaged with sustainability. These points must be linked to the subject-matter of the contract (e.g. products, services, works) (Tátrai & Diófási-Kovács, 2021) and can be based on technical (descriptive and functional requirements), non-technical (provision requirements), and socio-cultural (interaction requirements) specifications (as proposed by Lozano et al., 2022).

The general public procurement law describes this points system as an award criterion that can use a life-cycle approach to achieving the most advantageous tender. However, this selection criterion can only be used for buying

works, more complex services (e.g. consultancy), information technology solutions (including complex products and services), and needs fulfilment that can be satisfied by different solutions by different solutions (Spanó et al., 2022). An unrestricted approach to the points system is supported by the SOEs Law, considering that each SOE can describe in their regulations to which procurement category this criterion applies. Control agencies have supported the use of certifications as a scoring criterion in points system-based tendering processes, provided that the absence of certification does not result in the disqualification of a bid (e.g. by failing to meet the minimum score threshold).

The CO₂PL and its specifications (i.e. what must be accomplished to be certified) can be used in a points system to foster quality standards over the minimum requirements, providing a bonus for businesses that meet the Ladder requirements (in advance or during contract execution). However, the Ladder certification can only be required explicitly if the certification requirements (e.g. issued by an Inmetro-accredited institution) are fulfilled. The general law restrictions can hinder this practice due to subject-matter limitations, but a wider use by SOEs might be a relevant pilot opportunity.

3.5 PERFORMANCE CONTRACTS

Performance contracts can be used to promote sustainability in public procurement by providing a framework for developing more sustainable business models. Contracts based on performance clauses are designed to finance improvements in qualitative aspects of products and services provided by suppliers (European Commission, 2016), considering a public buyer's intention to pay a bonus to suppliers that deliver outcomes beyond minimum standards (Kadefors et al., 2021).

The premise of such contracts is that suppliers will be selected according to minimum requirements, as in a regular procurement process, even based on the lowest price selection criteria. The primary difference between performance and regular contracts is that, in the former, performance requirements and clauses are written into the procurement documents to establish a framework for developing better practices, including additional payment for suppliers that meet expected levels of performance following contract monitoring efforts. Contract monitoring is a key component in developing performance contracts and mitigating the risk of buyers paying bonuses to suppliers who fail to comply with performance requirements (Schooner & Matsuda, 2021).

Law 14.133 prescribes that performance contracts can be based on targets, quality standards, environmental sustainability requirements, and delivery time (see article 144), following principles previously established by Law 13.303 for the SOEs' procurement. However, the general regulations prescribe the use of performance contracts in buying products and services, including works, whilst the SOEs regulations specify such contracts only for buying works. Nonetheless, considering the SOEs' capacity to define their procurement regulations and procedures, there is a clear pathway for such organisations to incorporate performance contracts for buying products and services into their practices.

The mechanism within performance contracts can be presented in Figure 3. Performance ones establish a minimum requirement, comprising standards that will be followed during the contract management phase and can lead to sanctioning suppliers (e.g. reducing payments and even contract break) if they fail to comply with the expectations, similar to regular contracts. For instance, these standards can include quality and sustainability issues, such as suit-

able and toxic-free food. The performance requirements are designed to provide a bonus for suppliers that can deliver better outcomes, beyond the minimum requirements. For example, fresh and organic food could be requirements for a first-level performance bonus, whilst optimised delivery

logistics (e.g. shorter routes, reducing fuel consumption and CO₂ emissions) and women-owned businesses could lead to a second-level bonus.

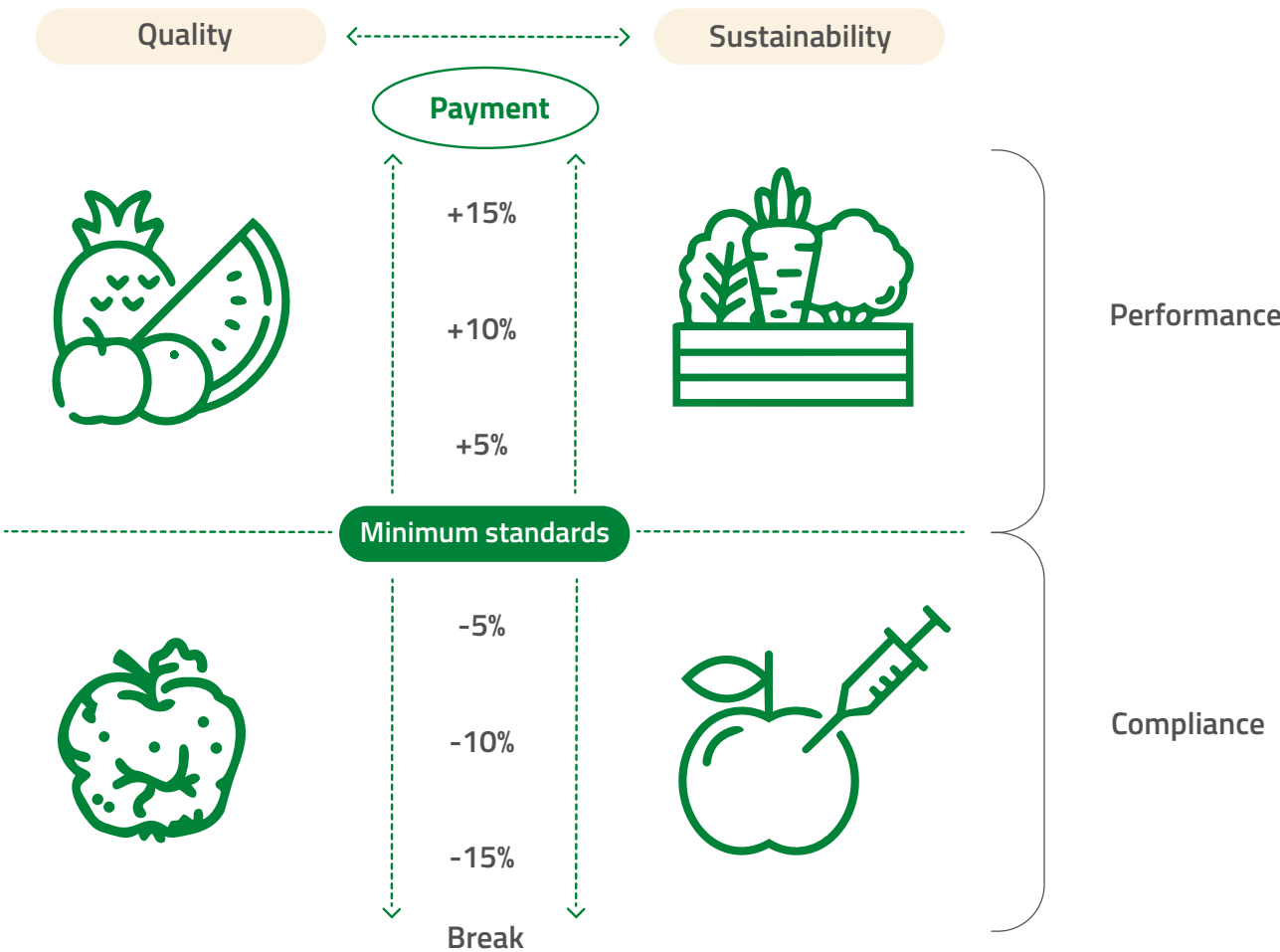


Figure 3. Mechanism of performance contracts.
Source: Authors' diagram.

The performance contracts could be used to implement the CO₂PL in the Brazilian context by establishing bonuses for suppliers that could present their Step certifications during the contract management phase. The Ladder could be included as a performance requirement, allowing suppliers that are not yet certified to compete and be selected. The performance requirements would serve as a financing tool to reward suppliers able to accomplish the Ladder certifications, fostering the development of more sustainable business models. The Ladder's certification model contrib-

utes to the credibility of performance contracts, mitigating the risks of paying bonuses to greenwashing suppliers. Market assessments could be needed to define whether the performance contract will still be a useful tool, as presented in Figure 4: more mature markets, with several certified suppliers, could be approached with the Ladder as a minimum requirement, but those markets that need support for disseminating Ladder certifications could still benefit from the performance requirements.

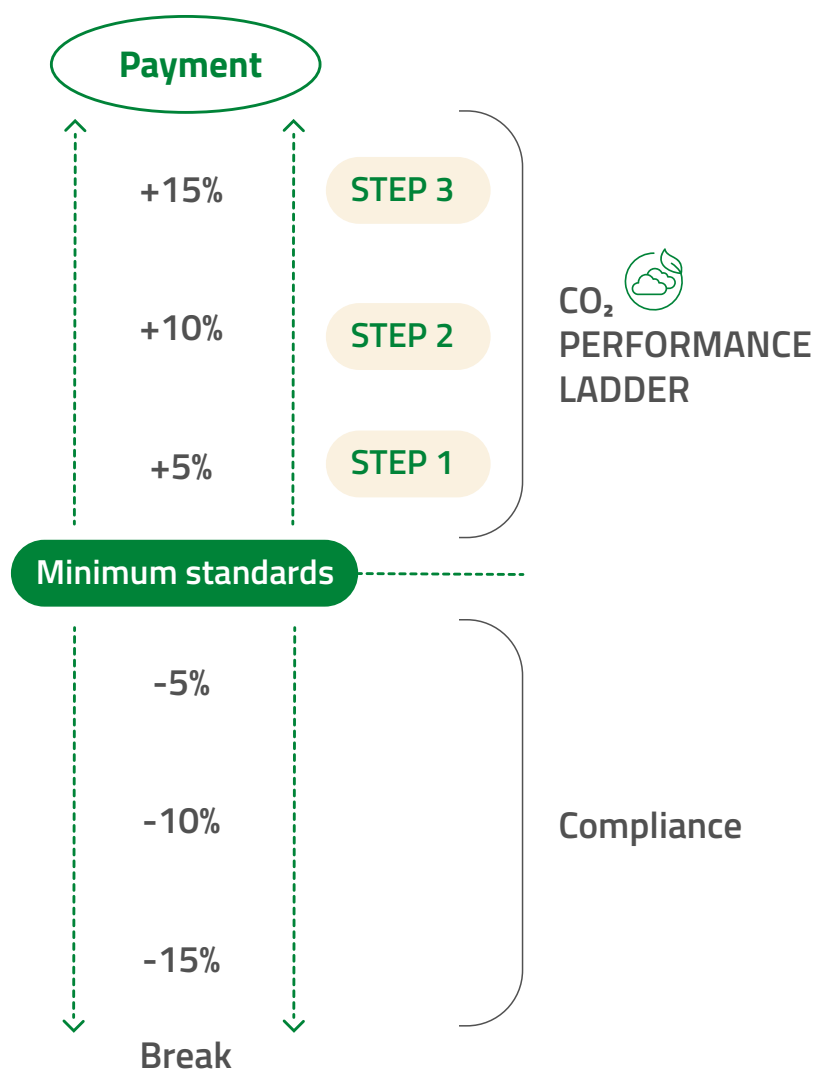


Figure 4. Performance contracts' mechanism based on the CO₂ Performance Ladder. Source: Authors' diagram.

Table 1 summarises the mechanisms that can contribute to implementing the CO₂PL in Brazil, considering the country's legal framework and best practices. Performance contracts emerge as the most flexible and promising pathway, offering financial incentives for suppliers to pursue certification during contract execution.

Table 1. Mechanisms for implementing the CO₂ Performance Ladder in Brazil

Mechanisms	Contributions
Value for money and life cycle analysis	Regulations require procurement to pursue the most advantageous tender considering the full life cycle of products and services. This supports the inclusion of carbon-related criteria and sustainability certifications as procurement requirements. The CO ₂ PL promotes a cradle-to-grave approach to CO ₂ emissions, strengthening the motivation for adopting the system by enabling public buyers to create value throughout their supply chains.
Margins of preference	Margins of preference (fictitious discounts up to 10%, or 20% for nationally developed solutions) can be used as award advantages for suppliers meeting certain product or service criteria. Although direct discounts for CO ₂ PL certification may face regulatory constraints, this mechanism can support circular economy approaches (e.g. recyclable, biodegradable products) and the CO ₂ PL can be explicitly embedded as a verification tool within such discount schemes, reducing monitoring burden for public buyers.
Certifications	Brazilian procurement law supports the use of voluntary, third-party verified certifications linked to products, production processes, and organisational capacity. The CO ₂ PL qualifies as such a certification and can be included as a procurement requirement — for instance, as evidence of production process quality or organisational capacity. Effective use requires market readiness to ensure competitiveness, and certifying bodies must be accredited by Inmetro when the certification serves as an award condition.

Mechanisms	Contributions
Points system	The best price–quality ratio criterion (técnica e preço) allows points to be awarded to suppliers exceeding minimum quality standards, including sustainability criteria linked to the subject-matter of the contract. CO₂PL may be used as an award advantage if certified bodies are accredited by Inmetro. However, CO₂PL specifications can be used as quality benchmarks within this mechanism, providing a competitive bonus to certified suppliers or those committing to be certified during contract execution. Under general law this criterion is limited to complex services, IT solutions, and works; however, SOEs have greater regulatory discretion and represent a key pilot opportunity for broader application.
Performance contracts	Performance contracts establish minimum requirements and offer financial bonuses for suppliers delivering outcomes beyond those standards, making them a strong mechanism for implementing the CO₂PL. The Ladder's Step certifications (Steps 1–3) can serve as performance milestones: uncertified suppliers can compete and be selected, then be incentivised — through additional payment — to achieve certification during contract execution.

Source: Authors.



4. MARKET READINESS AND KEY STAKEHOLDERS

Public procurement can play a key role in shaping market behaviour and promoting market readiness. The introduction of clear, consistent, and verifiable criteria can foster the ability of suppliers to understand, comply with, and respond to sustainability and carbon reduction requirements embedded in public procurement processes. That includes not only technical capacity to measure and reduce emissions, but also awareness, incentives, and familiarity with sustainable procurement procedures.

The Brazilian market for sustainable public procurement is still developing and remains uneven across sectors and company sizes. There is evidence that sustainability criteria have been successfully applied in specific sectors, such as

furniture and IT equipment, and that parts of the private sector—particularly those exposed to international markets—are already adapting to environmental requirements. Large companies, in particular, tend to be more prepared, often driven by global value chain pressures, regulatory requirements from other jurisdictions, and market positioning strategies.

However, significant challenges remain. A large share of Brazilian suppliers consists of micro, small and medium-sized enterprises, which often face structural constraints, including limited financial capacity, technical expertise and access to information. Interviewees also highlighted practical barriers to participating in public

procurement, such as lack of familiarity with procedures and difficulties navigating bureaucratic processes. In some cases, limited understanding of sustainability requirements and attempts to circumvent them in order to reduce costs appear to be driven by weak incentives and insufficient enforcement mechanisms.

At the same time, certifications were identified as important enabling mechanisms, helping to structure and signal compliance. Brazil has relevant players managing certification networks that have been supporting environmental and social certification initiatives. Nevertheless, broader systemic challenges persist, including logistical constraints linked to Brazil's continental scale and uneven sectoral readiness. These findings suggest that while there is a foundation to build upon, scaling the adoption of instruments such as the CO₂PL in Brazil will require targeted support for suppliers, clearer incentives, and coordinated action among key public and private actors.

4.1 KEY STAKEHOLDERS

Stakeholder interactions are a key element in the implementation of SPP (Lozano et al., 2022), supporting collaborative arrangements that can foster knowledge-sharing (Johnson & Klassen, 2022) and foster the co-development of sustainable solutions (Alhola et al., 2019). Collaboration between stakeholders in SPP can be developed with the support of facilitators (Lozano et al., 2020), which can help buyers to overcome cultural and operational walls that may hinder purposeful interactions between public organisations and other stakeholders (Erridge & Greer, 2002).

Efforts on mapping stakeholders in the Brazilian SPP scenario were conducted by Oliveira et al. (2020), who provided a list of stakeholders organised by salience. Control agencies such as the Federal Court of Accounts (TCU) and the Federal Public Prosecutor's Office (MPU) have been more relevant in driving SPP implementation than policy agencies such as the Ministry of Environment and Climate Change.

Brazil has developed SPP through a praxis-based approach (see Santos et al., 2024), more related to practitioners' efforts in navigating the public procurement pathways than structured policies and support from national organisations. Recent initiatives in promoting national policies, such as the ENCP, supported by an updated regulatory and policy framework, have been shifting the country's approach towards a more policy-oriented state.

Interview findings reinforce and complement this perspective by highlighting the central role of both public and private actors in driving SPP in Brazil. On the public side, respondents pointed out central government bodies as key enablers, particularly those responsible for regulatory frameworks and oversight, such as ministries linked to economic management and industry, as well as control agencies. These actors are perceived as key in structuring legal frameworks, setting standards, and signalling priorities to the market. At the same time, sectoral organisations and public agencies with technical expertise were identified as important in translating high-level policies into operational practices.

From the private and intermediary perspective, industry associations, business support organisations, and training institutions were seen as critical actors for scaling implementation, given their capillarity and ability to disseminate knowledge and build capacity among suppliers. The Brazilian National Service for Industrial Training (Serviço Nacional de Aprendizagem Industrial, SENAI) and Brazilian Macro and Small Business Support Service (Serviço Brasileiro de Apoio às Micro e Pequenas Empresas, SEBRAE) were explicitly mentioned as collaborators in developing supplier capacity to compete within public procurement markets.

Interviewees also pointed to the increasing role of the private sector in advancing sustainability practices, often driven by international standards and value chain pressures. Overall, the findings suggest that effective implementation of SPP in Brazil depends on coordinated action across multiple stakeholders, with the government playing a leading role in setting direction and mobilising the ecosystem.



5. CHALLENGES TO SUSTAINABLE PUBLIC PROCUREMENT

Sustainable public procurement implementation is widely recognised as a challenging process (OECD, 2019). In Brazil, these challenges are further amplified by the country's federative structure, the heterogeneity of local capacities, and the evolving nature of sustainability-related policies. Also, it's important to adapt international sustainability frameworks and standards to local environmental, institutional and market conditions (de Moura, 2013).

Interview findings highlight governance and coordination as central challenges to implementing sustainable public procurement in Brazil. Respondents pointed to the fragmentation of public procurement across different levels of government, combined with the absence of effective coor-

dination mechanisms, as key barriers to scaling sustainable practices. The country's size and regional diversity further complicate implementation, as policies, incentives, and institutional capacities vary significantly across municipalities. This limits the ability to standardise approaches and creates uncertainty for both public buyers and suppliers operating across different jurisdictions, which can hinder the implementation of certification systems such as the CO₂PL. Legal and technical challenges were also consistently emphasised. Interviewees noted that unclear regulatory frameworks and legal uncertainty often hinder supplier efforts and place the burden of interpretation on individual public officials, leading to risk-averse behaviour and limiting the adoption of more innovative or sustainability-oriented

procurement approaches. This is particularly evident in areas such as carbon-related criteria, where challenges around the availability and reliability of data, lack of standardised methodologies for measuring emissions, and difficulties in verifying results across different suppliers hinder implementation. In addition, the absence of data and comparable metrics makes it difficult to define requirements that are both robust and feasible, further increasing uncertainty for both buyers and suppliers. Weak contract enforcement and limited monitoring also reduce the effectiveness of sustainability requirements once contracts are awarded, whilst policy discontinuity — often linked to political cycles — also contributes to an environment of uncertainty, reducing incentives for long-term investments in sustainability.

Market-related constraints further compound these challenges. The coexistence of multiple certification schemes, with varying scopes and levels of credibility (few effectively implemented through or linked to public procurement), contributes to the uncertainty already faced by public buyers and suppliers, making it harder to define consistent criteria and build confidence in the use of sustainability instruments. At the same time, micro, small and medium-sized enterprises face structural barriers, including limited access to information, and lack of technical support, which restrict their ability to participate in sustainable procurement. Financial constraints can also be highlighted as a barrier faced by such small enterprises.

Ensuring the credibility and robustness of a pioneer certification system in Brazil was also highlighted as a critical challenge. The legitimacy of the CO₂PL in Brazil will depend on the establishment of transparent governance structures, independent third-party verification, and effective post-certification monitoring mechanisms. The involvement of control agencies in the implementation and oversight of the system may contribute to increased legal certainty and acceptance. The introduction of certification-based criteria also needs to be inclusive in terms of design and adequate support mechanisms to foster micro and small enterprises, avoiding market exclusion or concentration.

Interview findings indicate that the implementation of the CO₂PL in Brazil may require adaptation to the country's general context. Regional disparities, varying levels of capacity across jurisdictions, and the complexity of the federative system may pose challenges for standardisation and consistent application. In this context, the “tropicalisation” (i.e., analysing requirements and adapting them if needed) of the instrument emerges as a key requirement, ensuring that its design reflects local regulatory frameworks, market conditions, and integrity risks. Experiences with the adaptation of international certification systems in Brazil suggest that such localisation processes are both feasible and necessary to ensure relevance and uptake.



6. RECOMMENDATIONS

To overcome these challenges, the findings of this study highlight that advancing SPP in Brazil requires a combination of regulatory clarity, institutional coordination, and market development, which can be developed for unleashing a potential implementation of instruments such as the CO₂PL. Advances in this field depend on a set of mutually reinforcing actions that address governance, legal certainty, technical capacity, and supplier engagement. The following recommendations (summarised in Table 2) are proposed etc as priority areas for action:

Strengthen governance and collaboration mechanisms:

A clear and coordinated governance structure is essential to scale SPP practices in Brazil. This includes strengthening the role of central government bodies in defining strategic

priorities, aligning regulatory frameworks, and providing guidance to subnational entities. Improved coordination across ministries, control agencies, and policy agencies can help reduce fragmentation and ensure consistency in implementation. In parallel, fostering a broader ecosystem approach by bringing together public organisations, industry associations, and intermediary organisations (i.e. facilitators) can support the dissemination of practices and enable more effective implementation across different sectors and regions. A multistakeholder committee supported by CICS can be designed on the tactical level for promoting the implementation of certifications in SPP (e.g. assessing certification schemes and defining their use maturity, such as exploratory and mandatory), providing a collaboration arena aimed at connecting governments, market actors, and civil society.

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Enhance legal certainty and regulatory clarity, reducing perceived risks for public managers:

Legal uncertainty remains a major barrier to the adoption of sustainability criteria in procurement. Strengthening the legal and regulatory framework (building on existing instruments such as Law 14.133, AGU guidelines, and technical standards) can provide greater clarity on how sustainability criteria can be incorporated into procurement processes, such as directly supporting the implementation of certification systems such as the CO₂PL. In addition, the involvement of control agencies in the design and validation of new instruments can help reduce perceived risks and increase acceptance among public officials. Clear rules regarding verification, monitoring, and enforcement are also critical to ensure that sustainability requirements are both credible and implementable, providing a safe environment for decision-making towards low-carbon procurement. A regulatory framework (e.g. Decree) can be developed to foster certifications in SPP initiatives, including the design of a committee responsible for promoting the use of certifications and disseminating best practices.

Use incentives and demand to drive market transformation:

Incentives over penalties can drive sustainability market behaviour. Mechanisms such as margins of preference and award and tie-breaking criteria can be used to reward companies that demonstrate sustainability performance, whilst maintaining competition. Also, it is equally important to create predictable demand. Clear and stable requirements, combined with long-term procurement programmes, can provide the certainty needed for companies to invest in new capabilities and adapt to sustainability criteria. Points system and performance contracts can be jointly used to support decarbonisation procurement. Performance-based contracting stands out as strong mechanism that can foster the CO₂PL implementation by promoting competition and providing financial incentives for uncertified suppliers, that be selected and incentivised to achieve certification during contract execution.

Promote standardisation linked to the use of certification systems:

The standardisation of technical specifications and sustainability criteria is a key enabler for both buyers and suppliers. Developing clear and consistent requirements, potentially supported by catalogues or frameworks, can facilitate market adaptation while also reducing risks and uncertainty for public managers. Certification systems such as the CO₂PL can play an important role in this context, by providing a credible and standardised way to demonstrate compliance, reducing monitoring costs and strengthening transparency — also helping different stakeholders navigate a landscape marked by multiple schemes with varying scopes and levels of credibility. At the same time, criteria can be defined in a technical and certification-neutral manner, ensuring fair competition and permitting the participation of suppliers that comply through equivalent standards or alternative certification schemes. Furthermore, ensuring the credibility, independence, and robustness of such systems is critical, particularly in the Brazilian context, where concerns around integrity and trust can affect adoption. Promoting pilot implementation with organisations with greater technical capacity and regulatory flexibility, such as central purchasing bodies and SOEs, can contribute to disseminating the CO₂PL as a credible instrument for low-carbon procurement.

Support supplier capacity, particularly for SMEs:

A significant share of Brazilian suppliers (mostly SMEs) face structural barriers to participating in sustainable procurement. Centralised support structures, potentially involving partnerships with organisations such as SENAI, SEBRAE, and other agencies, can play a key role in building supplier capacity and ensuring more inclusive participation, avoiding risks of market concentration. Targeted support mechanisms, such as technical assistance, training programmes, and simplified access channels (e.g. digital marketplaces and accreditation systems) can help reduce these barriers.

Foster market engagement and collaborative development of solutions: Early and continuous engagement with the market is essential to ensure that sustainability criteria are both ambitious and feasible. Mechanisms such as market dialogues, competitive dialogue procedures, and innovation procurement tools (e.g. technological procurement) can help align expectations, stimulate innovation, and reduce the risk of unsuccessful tenders. Collaborative approaches also contribute to building trust between public buyers and suppliers, which is particularly important in contexts where new requirements—such as carbon-related criteria—are being introduced. Establishing robust governance arrangements, third-party verification, monitoring mechanisms, and the involvement of control agencies will be critical to ensure credibility. Stakeholder dialogues (e.g. safe environments for developing shared understandings) can be promoted to align government (including control agencies) and market discourses on fostering the implementation of the CO₂PL.

Assess the need for adaptation in the implementation of certification systems: An in-depth assessment of the need for adaptation to the local context may be required to implement certification systems in Brazil, such as the CO₂PL. This may induce initiatives aimed at simplifying processes, considering regional differences (e.g. energy supply systems) and potential risks related to market exclusion (e.g. administrative burden and costs to achieve certification requirements and carbon inventories). A working group comprising representatives from governments, industry, and civil society can be established to analyse the CO₂PL requirements and identify strategies for simplifying processes if needed.

Table 2. Challenges and recommendations to the CO₂ Performance Ladder in Brazil

Challenges	Recommendations
Fragmented governance and lack of coordination across government levels	Strengthen central coordination mechanisms and define a coherent national strategy, fostering collaboration across ministries, agencies, and subnational entities. Support decentralised capacity-building and technical assistance. Implement a multistakeholder committee supported by CICS for connecting governments, market actors, and civil society
Legal uncertainty and risk-averse behaviour among public managers	Enhance legal certainty and regulatory clarity, including clearer guidelines, alignment with control bodies and standardised procedures. Develop a regulatory framework (e.g. Decree) to foster certifications
Weak contract enforcement and limited sustainability monitoring practices	Strengthen monitoring systems and ensure effective enforcement throughout contract execution by promoting standardisation linked to the use of certification systems, developing pilot implementation with organisations with greater technical capacity and regulatory flexibility to disseminate the CO ₂ PL as a credible instrument for low-carbon procurement.
Micro, small and medium-sized enterprises face structural barriers, including limited access to information and lack of technical support	Develop support mechanisms and structures aimed at providing technical assistance, training programmes, and simplified access channels
Financial constraints hindering supplier participation, particularly for micro, small, and medium-sized enterprises	Use incentives and demand to drive market transformation (e.g. points system), including performance-based contracting that can select and incentivise uncertified suppliers that can achieve certification during contract execution
Regional disparities, varying levels of capacity across jurisdictions, and the complexity of the federative system may pose challenges to the CO ₂ PL implementation	Establish a working group comprising representatives from governments, industry, and civil society to analyse the CO ₂ PL requirements considering local contexts and identify strategies for simplifying processes if needed.



7. CONCLUSIONS

This study assessed the feasibility of introducing the CO₂PL in Brazil, considering the country's institutional, legal, and market context. The findings suggest that Brazil has the momentum for implementing the CO₂PL, based on a growing foundation for sustainable public procurement and opportunities to drive decarbonisation through a recognised system that supports more sustainable business practices. Significant challenges remain in implementing sustainable public procurement in Brazil, particularly in relation to governance, legal certainty, and market readiness, that can be addressed for supporting the CO₂PL implementation in the country. A key consideration for implementation is the need to adapt (or "tropicalise") the instrument to the Brazilian context. Differences in regulatory frameworks, regional capacities, and market structures may require calibration to

ensure both effectiveness and accessibility.

International experiences demonstrate the potential of the CO₂PL as a demand-driven instrument; however, its success in Brazil will depend on its ability to align with existing policies, address integrity risks, and avoid unintended market exclusion. The country has already demonstrated, through programmes such as the PNAE, that complex procurement instruments can be successfully implemented when governance structures and institutional coordination are in place. The effectiveness of the CO₂PL in Brazil will also depend on how technical challenges are addressed, particularly regarding the measurement, verification, and comparability of carbon-related criteria. Ensuring credible certification processes, robust monitoring mechanisms, and clear rules for compliance will be essential to build trust among public

buyers, suppliers, and control bodies.

Overall, the CO₂PL presents a promising opportunity to strengthen the integration of climate objectives into public procurement in Brazil. A particular strength of the instrument lies in its clear and focused scope, as the CO₂PL addresses a specific and measurable dimension — carbon emissions management — making it easier to implement, verify, and communicate to both public buyers and suppliers. This focus also makes it well suited to complement, rather than compete with, existing certification schemes

and sustainability standards in Brazil, contributing to a broader and more coherent ecosystem of environmental certifications. Its implementation should be approached incrementally, supported by pilot initiatives, stakeholder engagement, and continuous learning, in order to ensure that the instrument delivers measurable and scalable impacts. The CO₂PL has the potential to be a focused and credible building block for advancing low-carbon public procurement in Brazil.

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Annexe 1. Interviewees' Profiles

Ten individuals were interviewed between August and October 2025 for this research, representing public institutions, regulatory bodies, industry associations, certification organisations, and domain experts from related fields. The interviewees were selected for their expertise in areas relevant to the feasibility of implementing the CO₂ Performance Ladder in Brazil, including public procurement, environmental certification, industrial policy, and climate governance. Interviewees are identified by their category and area of expertise, without disclosure of personal names or organisational affiliation.

Interviewee 1

Category: Procurement expert

Area of expertise: Public procurement oversight and compliance, bidding processes and public contracts.

Interviewee 2

Category: Procurement expert

Area of expertise: Public procurement planning and supply chain management in the public health sector, applied technology for government purchasing.

Interviewee 3

Category: Procurement expert

Area of expertise: Public procurement and infrastructure contracting, capacity building for procurement officers, background in senior federal government leadership.

Interviewee 4

Category: Industry and civil society

Area of expertise: Green industrial policy, industrial decarbonization, and technology roadmaps for emissions-intensive sectors.

Interviewee 5

Category: Industry and civil society

Area of expertise: Sustainable construction, green building certification and standards, leading operations within a major industry sustainability association.

Interviewee 6

Category: Industry and civil society

Area of expertise: Environmental certification, ecolabels, GHG inventory, ESG and sustainability standards management within a national body.

Interviewee 7

Category: Control agency

Area of expertise: Public administration oversight and governance, with senior leadership experience at a federal audit institution.

Interviewee 8

Category: Industry and civil society

Area of expertise: Industrial policy, regulatory frameworks, sustainability in industry, policy development within an industry confederation.

Interviewee 9

Category: Industry and civil society

Area of expertise: Public procurement policy, access to credit, support for micro and small enterprises, national coordination of public procurement programmes.

Interviewee 10

Category: Industry and civil society

Area of expertise: Climate resilience policy, sustainable entrepreneurship, territorial development.

Annexe 2. Interview Guide

Identification	a) Name
	b) Organisation
	c) Position in the organisation
	d) How long have you been working with issues related to sustainability or public procurement?
Sustainability and Public Procurement	1) What are the main public policies that support the implementation of sustainable public procurement in Brazil?
	2) What legal mechanisms and best practices can be used to incorporate sustainability into public procurement processes?
	3) How do you perceive the level of preparedness and engagement of the Brazilian supplier market in relation to the sustainability requirements or criteria in public procurement?
	4) Who are the key actors capable of mobilising efforts to implement sustainable public procurement in Brazil?
	5) What are the most significant challenges in implementing sustainable public procurement in Brazil?
	6) How can we overcome these challenges?

CO₂ Performance Ladder	7) When did you first encounter the CO ₂ Performance Ladder? (If necessary, briefly explain how CO ₂ PL works)
	8) What would be the benefits of implementing the CO ₂ Performance Ladder in sustainable public procurement in Brazil?
	9) What would be the legal mechanisms and best practices to enable this implementation?
	10) What would be the main challenges in this implementation?
	11) If you could nominate an organisation to implement the CO ₂ a Ladder, which one would it be and why?



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