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# Analysing the drivers for sustainable public procurement

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**Abstract**
Sustainable public procurement (SPP) is aimed at using government purchasing power to foster sustainable production and consumption and develop more sustainable business models. The implementation of SPP has been undertaken through several disciplinary approaches, including practical and research efforts based on organisational change management (OCM). Although there is a growing body of literature on OCM for SPP, research on this topic is still limited and mostly focused on a single-country context. This paper aims to fill this research gap by analysing the drivers for changes towards SPP from two different world regions. Semi-structured interviews were conducted with twelve Brazilian and ten Swedish SPP professionals. The interviews were analysed using Grounded Theory's constant comparative method. From the interviews, 46 drivers were collated, then ranked in order of importance, and categorised according to their level (external, connecting, and internal). From the interviews, twenty-two new drivers were identified. The findings show that drivers for SPP are context-specific and can be organised in a continuum of change approaches between praxis-driven and policy-driven. This study highlights the contextual influence on drivers for the SPP process. A holistic approach is needed for changes towards SPP, considering internal, connecting, and external drivers in the spectrum from praxis to policy.

**Keywords** Sustainability · Sustainable public procurement · Change management · Sustainability drivers

## 1 Introduction

Sustainable public procurement (SPP) is aimed at connecting governments to businesses through a sustainability-linked commercial relationship (Brammer & Walker 2011; Malacina et al. 2022), fostering sustainable consumption and production (Amann et al. 2014; UNEP 2022) and developing more sustainable business models (Witjes & Lozano 2016). In SPP, the traditional public procurement (PP) commercial relationship between a buyer (i.e. government) and its suppliers (i.e. companies) (McCue & Gianakis 2001) is upgraded to a sustainability-driven partnership (Lozano et al. 2022). This partnership uses the large government's purchasing power (reaching around 15% of countries' GDP, see UNEP 2022) to acquire more sustainable products and services (Behravesh et al. 2022; Sönnichsen & Clement 2020) and support innovative and sustainability-oriented suppliers (Edquist & Zabala-Iturriagagoitia 2021; Hafsa et al. 2021).

Several countries have been using their government's purchasing power to foster SPP initiatives (UNEP 2022). For example, the Belgian PP, representing 23.7% of this country's GDP (around US$ 70 billion in 2021, see UNEP 2023), has been improving the balance between economic, environmental, and social issues in its procurement activities (UNEP 2017). The USA's PP also has a large purchasing power (14.7% of the USA's GDP, around US$ 637 billion in 2021, see UNEP 2023) and has been fostering sustainability, such as promoting local businesses (UNDP

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2022) and businesses owned by women and ethnic minorities (Brammer & Walker 2011). The Brazilian PP, which is around 12.5% of this country's GDP (approximately US$ 200 billion in 2021, see Ribeiro & Inácio Júnior 2019), has been developing sustainable and inclusive practices (UNDP 2022; UNEP 2017). The Swedish PP, with a high purchasing power (18.3% of Sweden's GDP, around US$ 116 billion in 2021, see Upphandlingsmyndigheten & Konkurrensverket, 2020), is a global leader in developing innovative and sustainable solutions (UNDP 2020; World Bank 2021). Previous research suggests that countries have different SPP change approaches, for example, some are more related to practical efforts like Brazil (see Delmonico et al. 2018), whilst other more related to policy efforts like Sweden (c.f. Daugbjerg 2023; Sattari et al. 2022).

SPP initiatives usually have positive results (Cheng et al. 2018; GIZ 2021; UNEP 2021), such as reducing by 65% the carbon emissions of a Dutch hospital's cleaning service (Nordic Council of Ministers 2021) and reaching over 39% of organic food served by the Swedish public sector (Daugbjerg 2023). However, SPP initiatives tend to be quite complex (UNDP 2022; UNEP 2021; WHO 2022), especially due to the many issues that need to be addressed when implementing sustainability into PP (McCue & Gianakis 2001), such as the sustainability dimensions (economic, environmental, social, and time) (Lozano et al. 2022), sustainability specifications and criteria (Sparrevik et al. 2018), and stakeholder interactions (Witjes & Lozano 2016).

The implementation of SPP has been carried out through several disciplinary approaches (e.g. legal, managerial, and technical) (Lozano et al. 2022). The managerial approach for implementing SPP entails practical and research efforts based on organisational change management (OCM) (see Meehan & Bryde 2011; Testa et al. 2016). OCM has been contributing to understanding and implementing sustainability in different contexts, such as public organisations (Cheng et al. 2018; Domingues et al. 2017) and companies (Lozano et al. 2019; Stoughton & Ludema 2012). Several topics have been studied on OCM for sustainability in public organisations, such as circular economy (Govindan & Hasanagic 2018; Klein et al. 2022), sustainability reporting (Domingues et al. 2017; Lodhia et al. 2012), and SPP (Brammer & Walker 2011; Cheng et al. 2018).

Although there is a growing body of literature on OCM for SPP (Cheng et al. 2018; Sönnichsen & Clement 2020), most studies have focused on exploring drivers for and barriers to organisational change from a single context–for example, a single country (Berg et al. 2022; Testa et al. 2016), or a single organisation (Eikelboom et al. 2018; Mendonça et al. 2021). There has been limited to no research regarding drivers for change towards SPP in different contexts (Cheng et al. 2018; Sattari et al. 2022; Vejaratnam et al. 2020). Additionally, there has been limited research taking a holistic perspective on change processes towards SPP, i.e. considering organisations as whole systems interconnected in broader systems (Hjorth & Bagheri 2006; Jackson 2003; Ragsdell 2000).

This paper aims to analyse the drivers for SPP from different contexts taking a holistic perspective. The paper is structured in the following way: Sect. 2 will discuss organisational changes towards sustainability and OCM for SPP. Section 3 will describe the methods, including the research design and its limitations. Section 4 will be dedicated to showing the research findings. Section 5 will discuss the research findings and provide insights on OCM for SPP. Lastly, Sect. 6 will conclude this paper by summarizing the contributions of this research and proposing future research topics.

## 2 Organisational change management for SPP

Organisational changes are aimed at moving organisations from status quo to a more desirable state (Ragsdell 2000; Rosenbaum et al. 2018). A more desirable state, i.e. what an organisation wants to be in the future, is continuously evolving, and learning how to manage the change processes required to reach it requires change management theory (By 2005).

OCM provides a systemic understanding of change processes and their complexities (By 2005). Change processes can be planned or emergent (Van der Voet 2014), the former refer to a conscient and directed (more top-down) approach (By 2005); whilst the latter, to a non-linear and adaptative (more bottom-up) one (Bamford & Forrester 2003). Change processes are affected by complexities, such as internal and external stakeholders' influence (Freeman 1984) and resistance to change (Ford et al. 2008).

OCM has been contributing to different contexts (Stouten et al. 2018), such as public management (Kuipers et al. 2014; Van der Voet 2014), healthcare (Weiner et al. 2008), and sustainability in organisations (Domingues et al. 2017; Lozano et al. 2019; Stoughton & Ludema 2012).

OCM for sustainability requires planned and orchestrated changes (Lozano 2012), which can disrupt the status quos and contribute to continuously moving organisations towards more desirable states (Lozano 2007), considering sustainability as a dynamic state (Martin et al. 2005; Mebratu 1998). Most research in OCM for sustainability has focused on the implementation of sustainability in organisations, e.g. the drivers for and overcoming resistance to change (Lozano 2012; Stouten et al. 2018), the role of leadership in driving changes (Ferdig 2007; Thakhathi et al. 2019), the approaches of small and medium enterprises to change (Jaramillo et al. 2019; Wiesner et al.

2018), and sustainability reporting efforts (Domingues et al. 2017; Lodhia et al. 2012). There is still limited research applying an understanding of OCM for sustainability in the context of implementing sustainability into processes, such as SPP.

Comparative studies in OCM for SPP can contribute to understanding different contexts and efforts, considering that SPP change approaches can differ among countries (Brammer & Walker 2011; UNEP 2023; World Bank 2021). For example, an approach more related to national policies (recommended by UNEP 2021) has been adopted in countries such as China (Zhu et al. 2013) and Sweden (Daugbjerg 2023; Sattari et al. 2022), whereas a more practical approach has been adopted in countries such as Brazil (Delmonico et al. 2018) and Russia (Shadrina et al. 2022). However, there has been limited research comparing contexts.

The research on OCM for SPP has been providing insights into drivers for (Amann et al. 2014; Grandia et al. 2015), barriers to SPP (Delmonico et al. 2018; Shaikh & Channa 2022), and strategies to overcome such barriers (Berg et al. 2022; Leal Filho et al. 2019). However, most studies on this topic have focused on a single context, such as a single organisation (e.g. Eikelboom et al. 2018; Mendonça et al. 2021) or country (e.g. Berg et al. 2022; Delmonico et al. 2018; Oruezabala & Rico 2012; Shaikh & Channa 2022). There is still limited research on the influence of contexts on change processes towards SPP, although there is a call for studies discussing different contexts in SPP (Cheng et al. 2018; Vejaratnam et al. 2020). Additionally, there is a lack of studies offering a holistic approach to comprehending organisational changes towards SPP.

Planning changes for SPP requires an understanding of drivers that can positively influence change efforts (Allen 2021; Brammer & Walker 2011; Preuss 2009; van Berkel & Schotanus 2021), which can be associated with the identification of drivers for sustainability and their importance (Barreiro-Gen et al. 2022; Harris & Crane 2002; Lozano 2012). Drivers for sustainability have been researched mainly focusing on organisations, e.g. companies (Lozano 2012; Stoughton & Ludema 2012), where Lozano (2015) proposed 40 drivers for sustainability in the context of organisational sustainability and divided them into: a) internal (17 drivers); b) external (14 drivers); and, c) connecting (9 drivers). There is also limited research on the importance of drivers for sustainability with the exception of Lozano & von Haartman (2018), who provided a ranking and a classification of the drivers.

An increasing number of authors have been researching drivers for sustainability in public organisations, e.g. on seaports (Barreiro-Gen et al. 2022). Particularly for SPP, research on drivers has focused on building knowledge and disseminating good practices to boost public organisation's efforts (Sönnichsen & Clement 2020) and developing applicable knowledge to be considered while planning changes (Grandia et al. 2015; Testa et al. 2016).

Several drivers for SPP have been proposed, but have not yet been categorised in the literature. Figure 1 presents the main 24 drivers for SPP identified in the literature, grouped according to Lozano (2015) categorisation: 1) Internal: e.g. leadership (Brammer & Walker 2011; Leal Filho et al. 2019) and personnel's sustainability commitment (Eikelboom et al. 2018; Grandia et al. 2015); 2) Connecting: such as collaboration between stakeholders (Betiol et al. 2015; Oruezabala & Rico 2012) and political visibility (Leal Filho et al. 2019); and 3) External, e.g. clear and supportive regulations (Shadrina et al. 2022; Shaikh & Channa 2022) and external policies and guidelines (Allen 2021; Brammer & Walker 2011).

## 3 Methods

Semi-structured interviews were carried out with twelve Brazilian and ten Swedish SPP professionals to collect data regarding the drivers for SPP. Brazil and Sweden were chosen since: 1) they have official records of successful SPP initiatives; 2) there is high government purchasing power; and 3) access to the interviewees. The two countries were also chosen to compare changes towards SPP from different contexts.

Semi-structured interviews allow for exploration of the research questions with flexibility (as proposed by Saunders et al. 2019), using a predetermined list of questions that was complemented to clarify or delve into each topic (c.f. Corbin & Strauss 2015). The questions asked to the interviewees included topics such as: a) meaning of sustainability; b) relevance of SPP; c) their organisations' approach to SPP; and d) drivers for SPP in their organisations. The interviews were conducted from October 2022 to May 2023. The interviews ranged between 45 min and 2 h.

The selection criteria of interviewees were that they: 1) have been SPP professionals; 2) have had recent experience working in public organisations; and 3) have contributed to the implementation of SPP. The interviewees were positioned in different public organisations: 9 Brazilian and 6 Swedish ones. Table 1 shows the interviewees' professional profiles. The professional and academic networks of the authors were used to connect with potential interviewees. Conceptual saturation was the criteria for finishing data collection efforts (as discussed by Corbin & Strauss 2008; Saunders et al. 2019).

Most interviews were done digitally, 20 using Zoom, and two were done face-to-face. The interviews were carried out in English for the Swedish ones and Portuguese for the Brazilian ones. The interviewees were identified by a code after the transcriptions: the Brazilians with a BR followed by a number, and the Swedish with SE followed

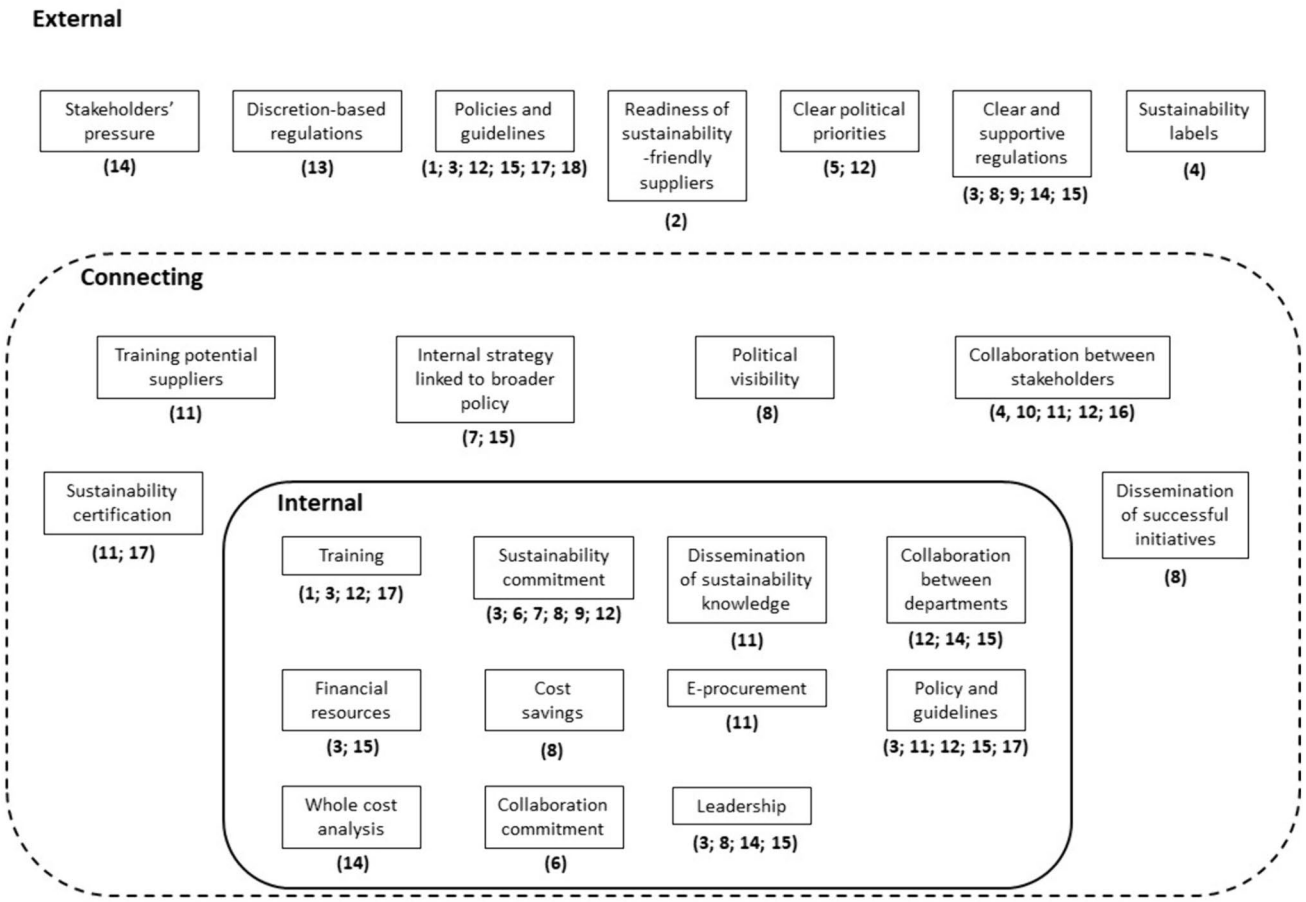


**Fig. 1** Drivers for sustainable public procurement according to the literature Sources: 1 (Allen 2021); 2 (Amann et al. 2014); 3 (Brammer & Walker 2011); 4 (Betiol et al. 2015); 5 (Daugbjerg 2023); 6 (Eikelboom et al. 2018); 7 (Grandia et al. 2015); 8 (Leal Filho et al. 2019); 9 (Meehan & Bryde 2011); 10 (Oruezabala & Rico 2012); 11 (Preuss 2009); 12 (Sattari et al. 2022); 13 (Shadrina et al. 2022); 14 (Shaikh & Channa 2022); 15 (Smith et al. 2016); 16 (Sparrevik et al. 2018); 17 (Testa et al. 2016); 18 (van Berkel & Schotanus 2021)

by a number to ensure anonymity. NVivo 1.0 (QSR 2020) was used as a supporting tool for categorizing the collected data.

The data were analysed using Grounded Theory's constant comparative analysis with the following stages (Corbin & Strauss 1998): 1) coding data by creating and identifying conceptual headings, constantly comparing them for similarities and differences, where for this study these were from the drivers for SPP identified in the literature review; 2) searching for relationships between the codes to build categories and subcategories, continuously comparing them with the data; 3) identifying and integrating central categories; and 4) developing a grounded theory from the categories and their relationships. In this research, the concepts and categories found in previous research (e.g. levels of drivers, drivers for SPP) contributed to identifying research gaps, enhancing comparisons, and increasing theoretical sensitivity (Mills et al. 2006; Tummers & Karsten 2012).

### 3.1 Limitations of the methods

The use of interviews as a data collection technique has limitations that threaten the reliability and validity of the research findings (Saunders et al. 2019). The interviewees' selection criteria may suggest a participation bias, especially experience as SPP practitioners. The engagement of the interviewer with sustainability and SPP may create observer bias. The use of a second language (English) for interviewing Swedish professionals may have led to cultural and language nuances. The number of interviews limits the external validity of the findings.

## 4 Findings

The interviewees mentioned 42 drivers for SPP, which were divided according to the categorisation by Lozano (2015) into internal (20), connecting (11), and external (11). This

**Table 1** Characteristics of interviewed sustainable public procurement professionals

| Code | Position | Organisation level | Organisation role | Years working with public procurement |
|---|---|---|---|---|
| BR1 | Audit officer | National | Audit agency | 24 |
| BR2 | Procurement manager | National | Public buyer | 16 |
| BR3 | Procurement officer | National | Public buyer | 9 |
| BR4 | Strategic advisor | National | Public buyer | 20 |
| BR5 | Chief Procurement Officer | National | Public buyer | 17 |
| BR6 | Audit manager | National | Public buyer | 7 |
| BR7 | Procurement manager | National | Public buyer | 12 |
| BR8 | Strategic advisor | National | Public buyer | 22 |
| BR9 | Chief Procurement Officer | Regional | Public buyer | 15 |
| BR10 | Procurement officer | National | Public buyer | 15 |
| BR11 | Strategic advisor | National | Public buyer | 11 |
| BR12 | Chief Procurement Officer | National | Public buyer | 16 |
| SE1 | Procurement officer | Local | Public buyer | 20 |
| SE2 | Sustainability officer | National | Public buyer | 7 |
| SE3 | Chief Sustainability Officer | National | Policy agency | 4 |
| SE4 | Chief Executive Officer | National | Policy agency | 10 |
| SE5 | Project manager | Regional | Public buyer | 14 |
| SE6 | Sustainability manager | Local | Public buyer | 5 |
| SE7 | Project manager | Regional | Public buyer | 11 |
| SE8 | Chief Procurement Officer | Local | Public buyer | 25 |
| SE9 | Chief Procurement Officer | Regional | Public buyer | 5 |
| SE10 | Sustainability manager | Regional | Public buyer | 7 |

section presents the interviewees's answers according to the following structure:

a) Internal drivers;
b) Connecting drivers;
c) External drivers;
d) Ranking of drivers for SPP; and
e) Contextual influence on drivers for SPP.

## 4.1 Internal drivers

Table 2 presents the 20 internal drivers mentioned by the interviewees. The most cited internal drivers were: sustainability commitment; champions; collaboration between departments; policy and guidelines; and sustainability-dedicated department. Sustainability commitment, highlighted by all Swedish professionals, was cited by SE7: "We want to do better for those who use these products and services. We don't have our own agenda, we really want to do this in a genuine way. We call ourselves SPP policy entrepreneurs".

Champions were mentioned by BR10: "We have a colleague in the Federal Police who also has an academic profile, he's PhD in Business Administration and worked in the Ministry of Economy for many years. In the Federal Police, he worked in the public procurement innovation area. He and his team have been travelling the whole world for understanding how the thermic, acoustic, and visual performance of police vehicles could be improved. They built state-of-the-art of police vehicle specifications, including a central quality check to optimize logistics and delivery. This rationalised the use of resources and had a sustainability impact". Collaboration between departments was highlighted by SE10: "When we look upon our plan for purchasing coming up the next year, the purchasing department has a collaboration with the sustainability department that is centrally placed in the region. We get help from them to pinpoint the different tenders where we shall prioritise ecological aspects, social aspects, etc. So we are a lot of people involved in that priority work. And when we find interesting tenders to put criteria into, we also meet with the purchasers to discuss. Is it possible? Is it the right way to prioritise? Because there can be issues that make it difficult to work with sustainability criteria and they might know that there is only one supplier that can offer what the healthcare needs, for example". Policy and guidelines was a driver cited by BR9: "The first step is publishing a Sustainable Logistics Plan (PLS), including action plans, sustainability requirements and criteria, etc. The PLS supports procurement officers' decisions, such as when stating that a sustainable product is the most advantageous choice for the organisation even if it's more expensive. Public organisations need to publish their PLS as real policies, not only because it's mandatory.

**Table 2** Internal drivers for SPP according to Brazilian and Swedish interviewees

| Level | Driver | Sources | Number of interviewees mentioning the driver |
|---|---|---|---|
| Internal | Champions | BR1, BR2, BR3, BR4, BR5, BR10, SE2, SE5, SE7 | 9 |
| | Collaboration between departments | BR10, SE1, SE5, SE7, SE8, SE9, SE10 | 7 |
| | Collaboration commitment | SE2, SE5 | 2 |
| | Cost savings | BR2, BR3, BR5, BR6 | 4 |
| | Dedicated staff | SE2, SE5, SE6, SE7 | 4 |
| | Dissemination of sustainability knowledge | BR11 | 1 |
| | Evidence-based decision making | BR7, SE5, SE9 | 3 |
| | Financial resources | BR2 | 1 |
| | Internal control | BR8, BR11, SE1 | 3 |
| | Leadership | BR3, BR4, BR5, BR9, SE1 | 5 |
| | Policy and guidelines | BR5, BR8, BR9, SE6, SE7, SE9 | 6 |
| | Positive inertia | BR5, SE4, SE7 | 3 |
| | Professional visibility | BR4, BR6, BR10 | 3 |
| | Standardized catalogues | BR9, BR10 | 2 |
| | Strategic sourcing | BR1, BR9, BR12 | 3 |
| | Sustainability commitment | BR4, BR7, BR11, BR12, SE1, SE2, SE3, SE4, SE5, SE6, SE7, SE8, SE9, SE10 | 14 |
| | Sustainability risk-analysis | SE2, SE4 | 2 |
| | Sustainability-dedicated department | BR5, SE1, SE2, SE7, SE9, SE10 | 6 |
| | Training | BR4, BR11 | 2 |
| | Whole cost analysis | BR2 | 1 |

The PLS is strategic and each procurement planning has to comply with it. Procurement officers need to work in a safe zone". Sustainability-dedicated department was mentioned by SE9: "We review our plan together with our sustainability department and they help us in judging which of our contracts has the biggest environmental impact, and then we try to focus on the ones that make the biggest change, or the easiest change. When we summarize 2022, we had a number of contracts that we actually added requirements that are a little bit more than normal, requirements that were really trying to move towards our overall environmental goal".

## 4.2 Connecting drivers

At the connecting level, 11 drivers for SPP (listed in Table 3) were mentioned by the interviewees. The most cited

**Table 3** Connecting drivers for SPP according to Brazilian and Swedish interviewees

| Level | Driver | Sources | Number of interviewees mentioning the driver |
|---|---|---|---|
| Connecting | Collaboration between stakeholders | BR2, BR3, BR4, BR5, BR7, BR10, BR11, BR12, SE1, SE2, SE3, SE4, SE6, SE7, SE9, SE10 | 16 |
| | Control agencies report | BR2, BR4, BR9 | 3 |
| | Dissemination of successful initiatives | BR9, BR10, BR12, SE4 | 4 |
| | Internal strategy linked to broader policy | SE1 | 1 |
| | Local arrangements preference | BR8 | 1 |
| | Networking across countries | BR4, SE10 | 2 |
| | Participative-building standard specifications | SE2, SE3, SE4, SE9, SE10 | 5 |
| | Political support | BR9, SE3, SE7, SE8, SE9, SE10 | 6 |
| | Political visibility | BR1, BR4, BR5, BR10, SE3, SE4 | 6 |
| | Training potential suppliers | BR9 | 1 |
| | User feedback | BR11 | 1 |

connecting drivers were: collaboration between stakeholders; political support; political visibility; and participative-building standard specifications. Collaboration between stakeholders was the most cited driver considering the three levels. This driver entails several collaboration partners according to the interviewees, including public buyers (e.g. joint or centralised procurement), public organisations, suppliers, and non-governmental organisations. BR9 highlighted collaboration between stakeholders as a driver: "Central purchasing bodies (CPB) have the expertise to lead discussions on SPP, including political power to articulate with stakeholders. Their higher purchasing power also makes the difference, for example, in market dialogues. A single procurement unit can struggle to fight against SPP barriers. A CPB can overcome some of them due to its higher professionalisation and political support."

Political support was mentioned by SE10: "Political initiatives both here in Sweden and our own region, but also more and more on an European Union level. Our politicians are active when it comes to sustainability. And before the Sustainable Development Goals (SDGs) and before we started to talk about sustainability, it was very much focused on environment. And it has been for a long time in Sweden". Political visibility, as cited by BR6, is contributing to raising the strategic level of PP in some organisations: "Some of our SPP initiatives addressing environmental aspects were awarded by a governmental prize on State's modernization. The dissemination of those prizes was well received and we got more support after that visibility. The managers' eyes were blazing with it". Participative-building standard specifications were highlighted by SE2: "The National Agency for Public Procurement has a three or four-year cycle where they revise their criteria in this database, including technical specifications. They do it for one area at a time: telecom, construction, etc. They have a reference group where they have people from the suppliers and industry organisations, us as public buyers, and civil society. If needed, trade unions, etc. We are in the same reference group and we developed these criteria together, and then they end up in this database of sustainability criteria".

### 4.3 External drivers

The interviewees mentioned 11 external drivers for SPP, presented in Table 4. The most cited external drivers were: mandatory regulations; dedicated national organisations; standard specifications; and media scandals. BR8 noted the following about mandatory regulations: "I can't see an 'animus' on procurement officers to include sustainability issues in PP. But then we have mandatory regulations. For example, the small and medium enterprises regulation and the hiring ex-offenders regulation. Thus, procurement officers are complying with these regulations, even without reflecting upon them. Although this is not the ideal path, at least now we have groups of procurement officers that are reflecting upon it and trying to build solutions that go beyond the regulations".

National organisations dedicated to fostering SPP was a driver noted by SE2 (who was working at one): "We have high ambitions, knowledge, and a position in which we know that we can have influence. We are in the middle of public buyers, suppliers, civil society, trade unions, industry organisations, government offices, and international organisations. The position that we have is unique. We work together with a lot of actors". Standard specifications were mentioned by BR4: "We follow the Attorney's General Office (AGU) guide in every procurement. We include sustainability technical specifications in products and we try to include them in services, such as sustainability criteria in cleaning services. This work has been done not only in my organisation

**Table 4** External drivers for SPP according to Brazilian and Swedish interviewees

| Level | Driver | Sources | Number of interviewees mentioning the driver |
|---|---|---|---|
| External | Clear and supportive regulations | BR4, SE6 | 2 |
| | Clear political priorities | SE2, SE3, SE9, SE10 | 4 |
| | Dedicated national organisations | SE2, SE3, SE4, SE9, SE10 | 5 |
| | Mandatory regulations | BR1, BR2, BR3, BR5, BR6, BR8, BR9, BR11, BR12 | 9 |
| | Media scandals | SE1, SE2, SE3, SE4, SE10 | 5 |
| | Policy and guidelines | SE2, SE3, SE10 | 3 |
| | Readiness of sustainability-friendly suppliers | BR6, BR9, SE7 | 3 |
| | Research | BR9 | 1 |
| | Standard specifications | BR1, BR4, BR10, BR11, SE8 | 5 |
| | Sustainability labels | BR1, BR4, BR10 | 3 |
| | Sustainability policies | BR9, SE3 | 2 |

but in other public organisations in which I worked before. The AGU guide, now in its 5th edition, is very helpful". Media scandals were mentioned by SE3: "The Swedwatch organization wrote a report in 2007 called White Robes and Sharp Scissors, criticizing the Swedish regions that they had no idea what was going on in their supply chains. And that they were not setting any demands in their public procurement criteria back then, with regard to safeguarding against child labour, forced labour, and so on. This created a lot of criticism in the media landscape in Sweden. What occurred straight after that was the three biggest regions went together to find some way to manage this in a practical way and to align with each other. And then the remaining regions also wanted to join this collaboration".

### 4.4 Ranking of drivers for SPP

The 42 drivers for SPP were ranked according to the number of interviewees who mentioned them (see Table 5). The drivers were divided into high-ranked (over 8 interviewees mentioned the driver), medium-ranked (from 8 to 5 interviewees), and low-ranked (from 4 to 1 interviewees).

There were 4 drivers for SPP listed as high-ranked, including the most mentioned one: collaboration between stakeholders. There are 10 medium-ranked drivers for SPP, including collaboration between departments, internal policy and guidelines, media scandals, and leadership. The medium-ranked drivers had a balance between internal (4), connecting (3), and external (3) drivers. There are 28 drivers for SPP listed as low-ranked, including clear political priorities, cost savings, control agencies report, clear and supportive regulations, and training. Half of the low-ranked drivers (14) were internal drivers, followed by connecting (7) and external (7) ones.

### 4.5 Contextual influence on drivers for SPP

Of the 42 drivers, 15 were mentioned solely by the Brazilian interviewees. Eight of these were internal drivers (cost savings, dissemination of sustainability knowledge, financial resources, professional visibility, standardised catalogues, strategic sourcing, training, and whole cost analysis); four were connecting drivers (control agencies report, local arrangements preference; training potential suppliers, and user feedback); and three were external drivers (mandatory regulations, research, and sustainability labels). The drivers mentioned solely by the Brazilian interviewees focus on efforts related to practitioners' initiatives (i.e. practical efforts).

Practical efforts in the Brazilian context were noted by BR3: "The initiative has come from the operational level. However, this bottom-up approach is limited to some excellence groups within the organisation, sometimes led by operational or tactic leaders committed to sustainability. The procurement planning teams are leading this work because the procurement laws require the inclusion of sustainability criteria. It's mandatory, there is no sustainability institutionalization or culture. But the sustainability work should be institutionalised and the whole organisation should think and act in a sustainable way". Practical efforts were also noted by BR5: "The main SPP stakeholder is the senior management. The procurement officers want SPP but the senior management says no. SPP is strategic and has to be understood as a public policy. Otherwise, we'll continue with ad hoc implementation, after the Herculean work of someone who fought hard to implement it". BR7 also noted them: "We are not asked to implement SPP. We are asked to deliver, not to do the best delivery. Senior management does not want SPP, that is not an effective government policy. The ones who are working with innovation and sustainability in PP are doing it on their own".

Of the 42 drivers, 9 were mentioned solely by the Swedish interviewees. Three were internal drivers (collaboration commitment, dedicated staff, and sustainability-risk analysis); two were connecting drivers (internal strategy linked to broader strategy and participative-building standard specifications); and four were external drivers (clear political priorities, dedicated national organisations, media scandals, and policies and guidelines). The drivers mentioned solely by the Swedish interviewees focus on to efforts related to national and structured policies (i.e. policy efforts).

Policy efforts were noted by SE10: "The main steering comes from our regional politicians. But we also have to take into account, of course, the SDGs. The SDGs have also been taken into account when it comes to the national procurement strategy. We also have to take that national strategy down to our own strategies in the region. That's our steering when it comes to sustainability in procurement". Policy efforts were also noted by SE9: "It's the politicians that wanted it. And I think it's been for a long time that we want to have those kinds of requirements in our contracts. So I cannot really say when it started, but I will say it's been on for a long time".

Of the 42 drivers, 18 were mentioned by the interviewees from both countries. Nine were internal drivers (champions, collaboration between departments, evidence-based decision making, internal control, leadership, policy and guidelines, positive inertia, sustainability commitment, and sustainability-dedicated department); five were connecting drivers (collaboration between stakeholders, dissemination of successful initiatives, networking across countries, political support, and political visibility); and four were external drivers (clear and supportive regulations, readiness of sustainability-friendly suppliers, standard specifications, and sustainability policies).

**Table 5** Ranking of drivers for SPP according to Brazilian and Swedish interviewees

| Ranking | Driver | Level | Number of interviewees mentioning the driver |
|---|---|---|---|
| 1 | Collaboration between stakeholders | Connecting | 16 |
| 2 | Sustainability commitment | Internal | 14 |
| 3 | Mandatory regulations | External | 9 |
| 3 | Champions | Internal | 9 |
| 5 | Collaboration between departments | Internal | 7 |
| 6 | Political support | Connecting | 6 |
| 6 | Political visibility | Connecting | 6 |
| 6 | Policy and guidelines | Internal | 6 |
| 6 | Sustainability-dedicated department | Internal | 6 |
| 10 | Dedicated national organisations | External | 5 |
| 10 | Media scandals | External | 5 |
| 10 | Standard specifications | External | 5 |
| 10 | Participative-building standard specifications | Connecting | 5 |
| 10 | Leadership | Internal | 5 |
| 15 | Clear political priorities | External | 4 |
| 15 | Dissemination of successful initiatives | Connecting | 4 |
| 15 | Cost savings | Internal | 4 |
| 15 | Dedicated staff | Internal | 4 |
| 19 | Policies and guidelines | External | 3 |
| 19 | Readiness of sustainability-friendly suppliers | External | 3 |
| 19 | Sustainability labels | External | 3 |
| 19 | Control agencies report | Connecting | 3 |
| 19 | Evidence-based decision making | Internal | 3 |
| 19 | Internal control | Internal | 3 |
| 19 | Positive inertia | Internal | 3 |
| 19 | Professional visibility | Internal | 3 |
| 19 | Strategic sourcing | Internal | 3 |
| 28 | Clear and supportive regulations | External | 2 |
| 28 | Sustainability policies | External | 2 |
| 28 | Networking across countries | Connecting | 2 |
| 28 | Collaboration commitment | Internal | 2 |
| 28 | Standardized catalogues | Internal | 2 |
| 28 | Sustainability-risk analysis | Internal | 2 |
| 28 | Training | Internal | 2 |
| 35 | Research | External | 1 |
| 35 | Internal strategy linked to broader policy | Connecting | 1 |
| 35 | Local arrangements preference | Connecting | 1 |
| 35 | Training potential suppliers | Connecting | 1 |
| 35 | User feedback | Connecting | 1 |
| 35 | Dissemination of sustainability knowledge | Internal | 1 |
| 35 | Financial resources | Internal | 1 |
| 35 | Whole cost analysis | Internal | 1 |

## 5 Discussion

The findings provide more details into drivers for SPP expanding the compilation of drivers and providing a categorisation of internal, connecting, and external groups (based on Lozano's (2015) categorisation). This study collates 46 drivers for SPP (21 internal, 12 connecting, and 13 external), including 24 drivers (11 internal, 6 connecting, and 7 external) identified in the literature review (presented in Fig. 1) and 22 new drivers (10 internal, 6 connecting, and 6 external) mentioned by the interviewees.

Of the 24 drivers identified in the literature review, 20 were mentioned by the interviewees, including financial resources (see Brammer & Walker 2011; Smith et al. 2016), political visibility (c.f. Leal Filho et al. 2019), and readiness of sustainability-friendly suppliers (as indicated by Amann et al. 2014). Four drivers identified in the literature but not mentioned by the interviewees were 1) discretion-based regulations (see Shadrina et al. 2022), 2) e-procurement (c.f. Preuss 2009), 3) stakeholders' pressure (c.f. Shaikh & Channa 2022), and 4) sustainability certification (see Preuss 2009; Testa et al. 2016). The 24 drivers from the literature review were complemented by 22 new ones mentioned by the interviewees.

The drivers for SPP mentioned by the interviewees were ranked according to the number of interviewees who mentioned them, divided into high-ranked, medium-ranked, and low-ranked, which complements the literature by providing a perspective on drivers importance. The ranking of drivers for SPP proposes an understanding of which drivers are more important according to the interviewees, providing a path for prioritising research initiatives in exploring each driver.

The findings show that, whilst some of the drivers are common in both countries, other drivers for SPP are context-specific. This allowed to position the drivers in a continuum from those related with practical efforts, i.e. praxis-driven, as identified by the 15 drivers in the Brazilian context (in line with Delmonico et al. 2018) to those related policy efforts, i.e. policy-driven, as identified by the 9 drivers in the Swedish context (in line with Daugbjerg 2023; Sattari et al. 2022), with the 22 common drivers in the middle. Figure 2 shows the 46 drivers for SPP divided by internal, connecting, and external and set up in the continuum from praxis-driven to policy-driven, with 24 drivers related to these approaches and 22 listed as common drivers. The common drivers include the 4 drivers indicated in the SPP literature but not

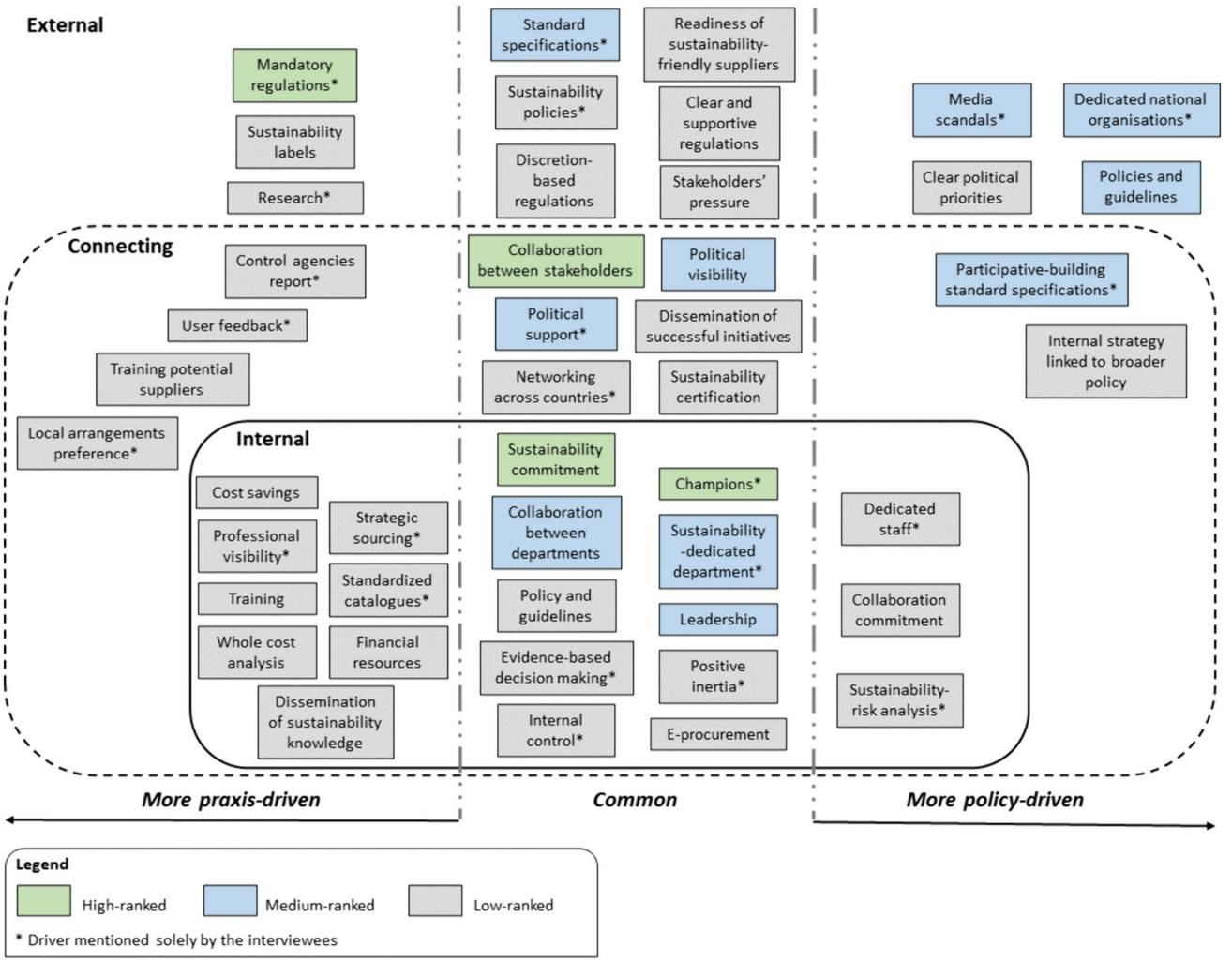


**Fig. 2** Drivers for sustainable public procurement in a continuum from praxis-driven to policy-driven

mentioned by the interviewees. The drivers were organised into high-ranked, medium-ranked, and low-ranked.

The analysis of drivers for sustainability within a process, such as SPP, considering different contexts, can expand the understanding of drivers for sustainability by showing that they can be expanded from an organisation context to a process one, be context-specific, and organised in a continuum. This study provides depth on this topic and shows a contextual influence on drivers for sustainability, complementing the previous efforts on categorising (see Lozano 2015) and ranking (c.f. Lozano & von Haartman 2018) drivers through focusing on understanding changes on a process level.

## 6 Conclusions

SPP has been connecting governments to businesses through a sustainability-linked partnership, in which the government purchasing power is used to foster sustainable production and consumption and develop more sustainable business models. SPP initiatives usually have positive results but tend to be quite complex, especially due to a number of elements added while implementing sustainability into PP. The implementation of SPP requires organisational changes that transform the *status quo* (i.e. traditional PP) to more desirable state (i.e. implementing SPP). However, research on OCM for SPP is still limited, and has mostly focused on a single country or organisation context. There is also limited research on how different contexts influence drivers for change towards SPP.

This paper analysed the drivers for SPP in two different countries taking a holistic perspective, considering organisations (e.g. buyers) as whole systems interconnected in broader systems (e.g. the SPP process). Twenty-two semi-structured interviews were conducted with Brazilian (12) and Swedish (10) SPP professionals to collect data for analysing the drivers for SPP.

This research found 46 drivers for SPP, out of which 22 were new ones obtained from the empirical data. The drivers were then categorised by their level (internal, connecting, or external) and ranked according to the number of interviewees who mentioned them. This paper shows that drivers for SPP can be context-specific and organised in a continuum from praxis-driven to policy-driven, with common drivers in the middle of the continuum. The drivers continuum can help to better understand the drivers that can contribute to changes towards SPP and the specificity of particular contexts.

This paper complements the efforts on understanding drivers for sustainability by analysing a process (i.e. SPP), instead of an organisation, in different contexts and presenting the importance of contexts on drivers. Moving towards sustainability in processes is affected by the contexts, which must be considered when planning changes.

This paper has the following managerial implications. For example, organisations planning changes towards SPP need to consider the whole set of drivers collated by this research–manoeuvring internal, connecting, and external influences. The ranking of drivers for SPP could be used for prioritising efforts. Organisations should make efforts to understand their contexts of changes towards SPP and focus on developing a holistic change approach considering the drivers from praxis-driven and policy-driven contexts. A holistic approach, taking into account internal, connecting, and external influences considering the praxis to the policy spectrum is needed to enact more efficient and effective changes towards SPP.

Further research should explore the new drivers identified by this paper to understand their individual contributions to implementing SPP. The importance of the 46 drivers for SPP could be analysed by a quantitative study, assessing the validity of the whole set of drivers in different contexts and updating the ranking presented by this research. Barriers to change towards SPP could also be identified and organised considering different contexts, including strategies to overcome such barriers. More research is needed to understand the praxis-driven and policy-driven change approaches in the SPP context. More comparative studies in SPP could help to develop knowledge on what are the systemic elements that compose the different SPP change approaches. The contextual influence on drivers for sustainability could be analysed in other processes.

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## Declarations

**Conflict of interest** The authors have no competing interests to declare that are relevant to the content of this article.

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