Journal of Environmental Management 192 (2017) 292–301

Contents lists available at ScienceDirect

Journal of Environmental Management

journal homepage: www.elsevier.com/locate/jenvman

Research article

Sustainability reporting in public sector organisations: Exploring the relation between the reporting process and organisational change management for sustainability

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ARTICLE INFO

Article history:
Received 27 October 2016
Received in revised form
25 January 2017
Accepted 28 January 2017
Available online 7 February 2017

Keywords:
Sustainability reporting
Global Reporting Initiative
Public sector organisations
Organisational change management for sustainability

ABSTRACT

Sustainability Reporting has become a key element in different organisations. Although there have been a number of academic publications discussing the adoption of sustainability reports in the public sector, their numbers have been quite low when compared to those focussing on corporate reports. Additionally, there has been little research on the link between sustainability reporting in Public Sector Organisations (PSOs) and Organisational Change Management for Sustainability (OCMS). This paper focuses on the contribution of sustainability reporting to OCMS. A survey was sent to all PSOs that have published at least one sustainability report based on the GRI guidelines. The study provides a critical analysis of the relation between sustainability reporting and OCMS in PSOs, including the drivers for reporting, the impacts on organisation change management, and the role of stakeholders in the process. Despite still lagging in sustainability reporting journey, PSOs are starting to use sustainability reporting as a communication tool, and this could drive organisational changes for sustainability.

1. Introduction

The public sector represents an important part of international economic activities (Ball and Grubnic, 2007; Walker and Brammer, 2012). Public sector organisations (PSOs) are defined by the OECD (2015) as any organisation under government control that develops public goods or services, according to the Classification of the Functions of Government (COFOG). They are major employers, providers of services and consumers of resources (GRI, 2005) associated to significant aspects and impacts in the sustainability of the organisation. The public sector influences all other sectors given their size and related activities (Ball and Grubnic, 2007). The public sector is comprised of central and local government departments, agencies, trading funds and public corporations, and such organisations are usually associated with bureaucratic and hierarchical structures (Carter et al., 1992). The political nature behind the PSOs is the distinctive feature behind this sector (Lane, 2005).

There has been growing research on environmental and sustainability reporting initiatives in PSOs, for example on: the adoption of social and environmental reports by Italian local authorities (Marcuccio and Steccolini, 2005); voluntary Sustainability Reporting (SR) practices in PSOs that use the Global Reporting Initiative (GRI) Sustainability Reporting Guidelines (Guthrie and Farneti, 2008); motivations for SR in PSOs (Farneti and Guthrie, 2009); the applicability of GRI guidelines to public and third sector organisations (Dumay et al., 2010); environmental disclosure practices within annual reports from PSOs (Lynch, 2010); the current and future state of local SR in Australia (Williams et al., 2011); environmental reporting practices in PSOs (Lodhia et al., 2012); current performance measurement practices within government departments in Australia (Adams et al., 2014); and disclosure practices of sustainability information by European local governments of Anglo-Saxon and Nordic countries (Navarro Galera et al., 2014).

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http://dx.doi.org/10.1016/j.jenvman.2017.01.074
0301-4797/

List of acronyms

COFOG	Classification of the Functions of Government
GRI	Global Reporting Initiative
GRISS	Global Reporting Initiative Sector Supplement
OCM	Organisational Change Management
OCMS	Organisational Change Management for Sustainability
PA	Public Agencies
PSOs	Public Sector Organisations
SR	Sustainability Reporting
SP	Sustainability Performance

In spite of their advances, PSOs are still lagging behind in SR (Dumay et al., 2010; Guthrie and Farneti, 2008; Lodhia et al., 2012), when compared to, for example, companies and higher education institutions. According to Flynn (2012), public sector reports usually cover financial aspects and the compliance with standards, including the efficient use of financial resources and the compliance to internal stakeholders' requirements; and the measurement and reporting of efficiency is a crucial part of public accountability.

SR has become key in supporting the assessment and communication of sustainability management practices and activities of organisations (Herzig and Schaltegger, 2011; Lozano and Huisingh, 2011). SR has been gradually adopted by organisations, such as business and academia since the end of 1990s (Hahn and Kühnen, 2013), mainly by multinational corporations in Europe (Kolk, 2008; Lozano, 2013a), where the GRI guidelines are considered the best option available to support SR (Hussey et al., 2001; Morhardt et al., 2002).

Worldwide, organisations report their sustainability activities through SR mainly to: i) assess the current state of an organisation's progress towards sustainability; and ii) to communicate to stakeholders the efforts and progress made in the different sustainability dimensions (Dalal-Clayton and Bass, 2002; GRI, 2011). Other reasons for SR that have been reported in the literature are (see for instance Adams and McNicholas, 2007; Daub, 2007): i) the assessment of Sustainability Performance (SP); ii) benchmarking against other organisations; iii) facilitating transparency and external auditing; iv) becoming a leader in society; v) marketing sustainability efforts; and vi) fostering change in the organisation.

According to Burritt and Schaltegger (2010), SR is a tool to help managers deal with sustainability decisions, which can take two perspectives: i) the "inside-out" perspective, driven by the company and its business strategy; and ii) the "outside-in", driven by reporting and communication requests made by stakeholders.[1] These perspectives were updated to 'only external', 'mainly external', 'both internal and external', 'mainly internal', and 'only internal' perspectives (see Ceulemans et al., 2015; Lozano et al., 2016).

Different factors motivate organisations to start publishing sustainability reports, such as their size and perceived corporate impact (economic, environmental, social) (Alonso-Almeida et al., 2014; Frynas, 2010). In particular, leadership has been identified as one of the internal drivers for corporate sustainability (Lozano, 2015, 2013b). For the organisations that have been publishing sustainability reports, usually only one department is designated for the developing process (Schaltegger and Wagner, 2006) and a key individual is the main responsible for pioneering the process (Farneti and Guthrie, 2009).

SR can help support the communication of sustainability initiatives throughout the company and can help to overcome resistance to organisational change (Hedberg and von Malmborg, 2003), in spite of its inherent challenges such as gaining knowledge, experience, and understanding of sustainability (Adams and McNicholas, 2007), and providing the extra resources needed to gather data and engage stakeholders (Lozano, 2006).

SR is one of the main drivers of change towards corporate sustainability (Lozano, 2015). Developing a sustainability report has the ability to influence change in state-owned organisations, for example by leading to the integration of sustainability issues into strategic planning (Adams and McNicholas, 2007). Lozano et al. (2016) found that in corporations SR can be a starting point for planning organisational change. These authors identified SR as one of the drivers of Organisational Change Management for Sustainability (OCMS), and organisational change processes can improve SR practices and processes. OCMS aims to help an organisation move from a certain status quo to a more sustainability-oriented state in a continuously iterative process (Lozano, 2013b, 2012). Ceulemans et al. (2015) identified factors that delay the organisational change potential of SR in higher education, such as the absence of external stakeholder engagement processes and the lack of institutionalisation of SR in the university system.

In the case of PSOs, the existing literature is focused on Organisational Change Management (OCM), not covering OCMS. For instance, Azzone and Palermo (2011) developed a qualitative analysis of change in order to understand which factors influence the enactment process of managers' performance appraisal and reward systems in a PSO of the central public administration. Chen et al. (2006) proposed a customer-oriented model for organisational change in the public services and suggested that public organisations often face political and long-term resistance of executives in OCM; and van der Voet (2014), who studied to what extent transformational leadership and different change management approaches contribute to willingness to change in PSOs, and to what extent the bureaucratic structure of PSOs affects these relationships.

In spite of advances in research on SR and OCMS, including the recognition of SR as an important catalyst for change towards sustainability (see Adams and McNicholas, 2007; Doppelt, 2003), there is still a lack of research linking the SR process with OCMS in PSOs. The main aim of this research is to explore the link between sustainability reporting in PSOs worldwide and OCMS.

This paper is structured as follows: Section 2 presents the methods used in this research; in Section 3 the results and findings from the survey are presented; Section 4 offers the discussion; and in Section 5 the conclusions of the study are presented.

2. Methods

A survey was developed for collecting data, using open-ended and close-ended questions. Close-ended questions were based on a Likert scale (Likert, 1932) from 1 to 5, allowing the respondents to indicate how strongly they agree or disagree with a specific aspect (Saunders et al., 2012). The Likert scale from 1 to 5 represented the following 5 categories: "strongly disagree"; "disagree"; "neither agree nor disagree"; "agree"; and "strongly agree". The survey was completed using the online survey system (software) Qualtrics (2014). It was developed and managed (design, administration and analysis) by the research team. The data was collected between September and December 2014.

[1] According to the Stakeholder Theory developed by Freeman (1984), business creates value for its stakeholders (internal, such as employees and managers; and external, like users, the general public and suppliers). According to the same author, these groups are important for business, and collaboration is a key factor.

Due to the international recognition and reputation of the GRI and its SR guidelines (see Farneti and Guthrie, 2009; GRI, 2011), the GRI Disclosure Database was used to select the PSOs for this study. In 2014, 114 PSOs had published at least one sustainability report at the time the research was conducted (GRI, 2014). These organisations were included in GRI's "Public Agency" sector with sustainability reports from 2001 to 2014 (no reports before 2001 were found). All organisations categorised in this sector as state-owned companies, non-profit organisations, cooperatives and private companies, were not included in this study since they have different missions and activities when compared to public institutions such as local authorities, central public administration, regional and federal governments, or governmental departments. The selected 114 organisations from the database were contacted by email and a follow up reminder was sent to non-respondents via email and telephone.

Between 2001 and 2014, a total of 44% of the public-sector sustainability reports were published in Europe (52 organisations with 91 reports), followed by Asia (27 organisations published 45 reports), Oceania (14 organisations published 35 reports), North America (13 organisations published 26 reports), Latin America (7 organisations published 10 reports), and Africa (1 organisation published 2 reports). More than 50% of the statistical population (64 out of 114) only published one sustainability report. Most of the sustainability reports (66%) included in the statistical population were published between 2010 and 2014.

From the 114 organisations, 23 started the survey but only 15 completed it, leading to a response rate of 13%. According to Bhattacherjee (2012), the response rates from mail surveys tend to be low, typically between 15 and 20%.

2.1. Data analysis method

The findings from the open-ended questions were analysed using the constant comparative analysis method of Grounded Theory (see Glaser and Strauss, 1999; Strauss and Corbin, 1998). The first stage of the process is "open coding", in which initial labels are attached to the data. Firstly, categories were identified in the data using the concepts behind the survey questions as the starting categories (e.g. changes achieved with SR). Other categories were also integrated as a result of the data analysis process, such as the use of SR as a learning tool. Secondly, codes were selected, based on Urquhart (2013), focused on the analysis of the core categories that were expected to contribute to theoretical insights on SR in PSOs (e.g. the motivations for publishing a sustainability report, or the status quo and barriers to change in the SR process). Categories and their properties were integrated to categorise larger units of the data. Thirdly, a theoretical coding process took place (as proposed by Ezzy, 2002; Glaser, 1978).

The results from the close-ended questions were analysed through descriptive exploratory data analysis.

2.2. Limitations of the method

The main limitation of this study was the low responses (fifteen); nonetheless, this is within the typical range for this type of organisations, as highlighted by Garcia-Sanchez and Prado-Lorenzo (2008). Given the limited number of responses, it was not possible to analyse the results with descriptive statistics. Another potential limitation arises from the use of open-ended questions, where the questions might not have provided lengthy responses (as discussed by Saunders et al., 2012); however this was not the case in this study, where the respondents, in general, provided in-depth responses to the survey questions.

The lack of responses may be due to the four reasons proposed by Aaker et al. (2012): i) refusal to respond; ii) lack of the ability to respond; iii) lack of availability; and iv) inaccessibility. Another potential reason for the lack of response could be the distance between the survey developer and the respondent (as discussed by Stangor, 2014).

3. Results and findings

Most respondents were from Europe (6 out of 15), followed by North America (5 out of 15), Asia (2 out of 15) and Latin America and Oceania (1 each).

According to the Classification of the Functions of Government (COFOG) (United Nations Statistics Division, 2015), 7 out of 15 of the respondents are organisations related to "general public services" (e.g. executive and legislative organs, financial and fiscal affairs, external affairs, foreign economic aid) and 2 are related to "economic affairs" (e.g. general economic, commercial and labour affairs; fuel and energy; transport; communication). The other respondents are related to different public service functions.

Most of the organisations had more than 1000 employees: 7 out of 15 had between 1000 and 5000 employees, and 6 out of 15 had more than 5000 employees. The remaining two organisations had between 1 and 49 employees and the other between 50 and 249 employees.

All respondents published at least one sustainability report at the time of the survey and they were still publishing sustainability reports.

The survey respondents were directly involved in the preparation of the report. Most of them (8 out of 15) were involved with SR in the organisation for more than 5 years; 5 out of 15 were involved for 4 years and 2 out of 15 for 2 years. Their role in sustainability reporting in the organisation was mainly related to the collection of the data and preparation of the report (11 replies each); followed by the supervision of the preparation of the report (6 answers); and they were responsible for the decision to prepare the report (4 answers). Multiple answers were possible for this survey question.

The majority of the respondents (8 out of 15) indicated that only one department was the responsible for developing the sustainability report, mainly the social responsibility/sustainability department. For this question, multiple answers were possible. Thus, 7 respondents selected more than one co-responsible department (see Fig. 1). The option "Other" was often chosen, referring to departments such as environment and innovation, planning and performance, strategy/executive office, integrated management department.

3.1. Motivations for publishing a sustainability report

Fig. 2 shows the type of motivations resulting into the publication of the fist and subsequent(s) sustainability reports. Internal motivations were the main reasons for PSOs to publish their first and subsequent report(s) (see Fig. 2, "mainly internal motivations" and "only internal motivations"). This was followed by a combination of external pressures and internal motivations. None of the respondents stated that only external pressures were responsible for the decision for preparing the sustainability report.

A total of 11 out of 15 respondents had published more than one sustainability report, of which 7 out of 11 agreed or strongly agreed that major changes between the first and subsequent report(s) took place. Some examples given by the respondents were i) continuous improvement of their performance since with the sustainability reports they were able to track several sustainability aspects; ii) greater inclusion of sustainability aspects in the organisation and consequently in the report; iii) improvement of the external reputation of the organisation and its activities; and iv)

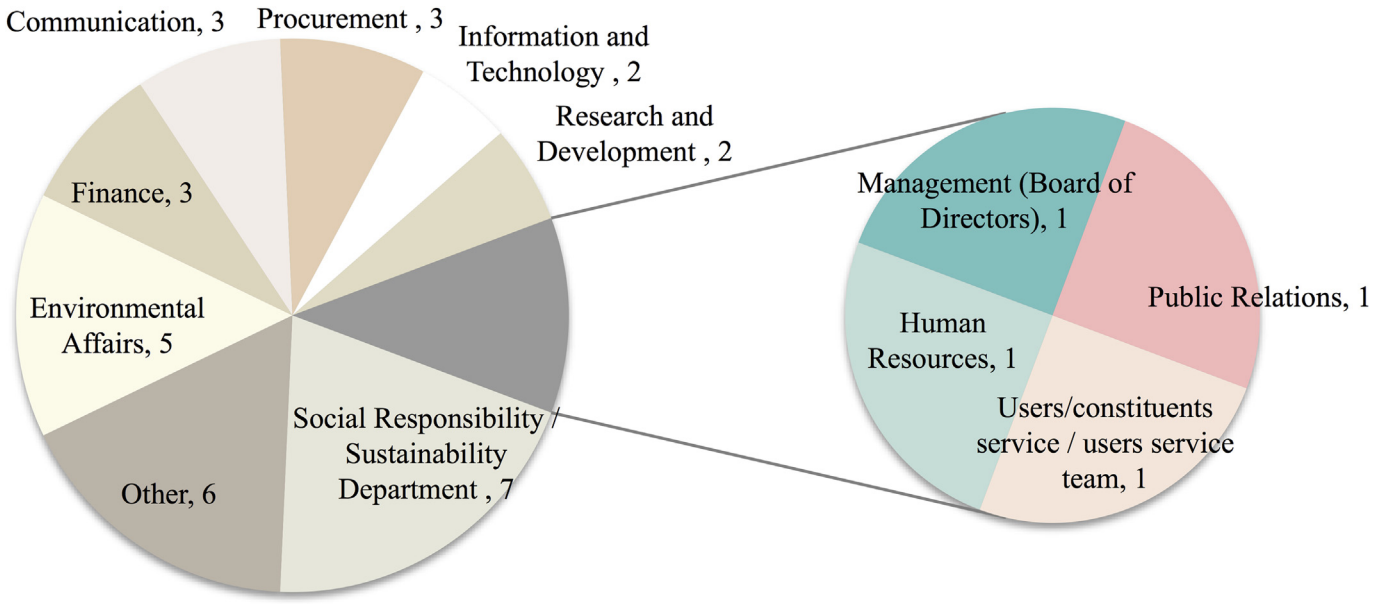

Fig. 1. Department responsible for developing the Sustainability Report(s) in PSOs (number of replies).

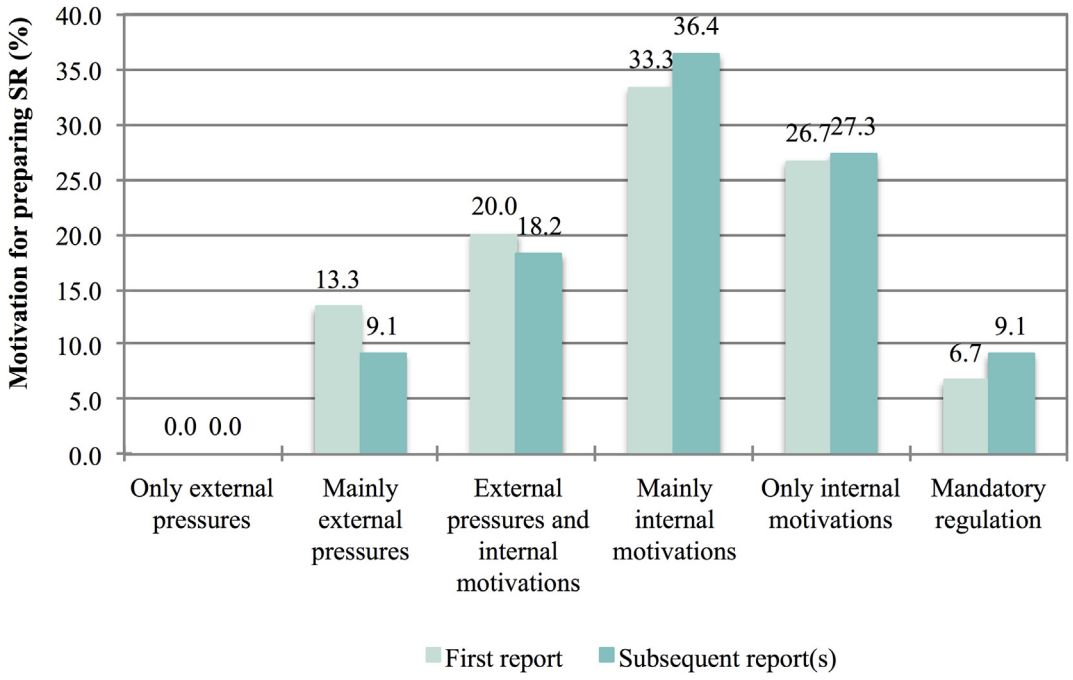

Fig. 2. Motivations for preparing sustainability reports by PSOs.

improvement of the sustainability disclosures towards stakeholders.

The respondents considered that their organisation's activities had high or very high sustainability impacts, where: 11 out of 15 organisations identified high or very high environmental impacts (specifically organisations related to general public services, environmental protection, social protection and public order & safety); 14 out of 15 indicated high or very high social impacts (specifically organisations related to general public services, environmental protection, social protection, public order & safety, and economic affairs); and 12 out of 15 indicated high or very high economic impacts (specifically organisations related to general public services, environmental protection, public order & safety and economic affairs).

Fig. 3 presents the average mean value of the results from the survey based on a Likert scale (see Section 2 for more details) of the intended and achieved objectives of SR. The average mean value is only used for graphical proposes. The survey respondents stated that the main intended objectives of SR were to “increase the transparency of the organisation's SP” and “assess the organisation's sustainability efforts”. The least important elements were to “improve the organisation's ranking position” and “meet criteria of the GRI Sector Supplement (GRISS) for Public Agencies (PA)”.

The highest scores for the achieved objectives were related to

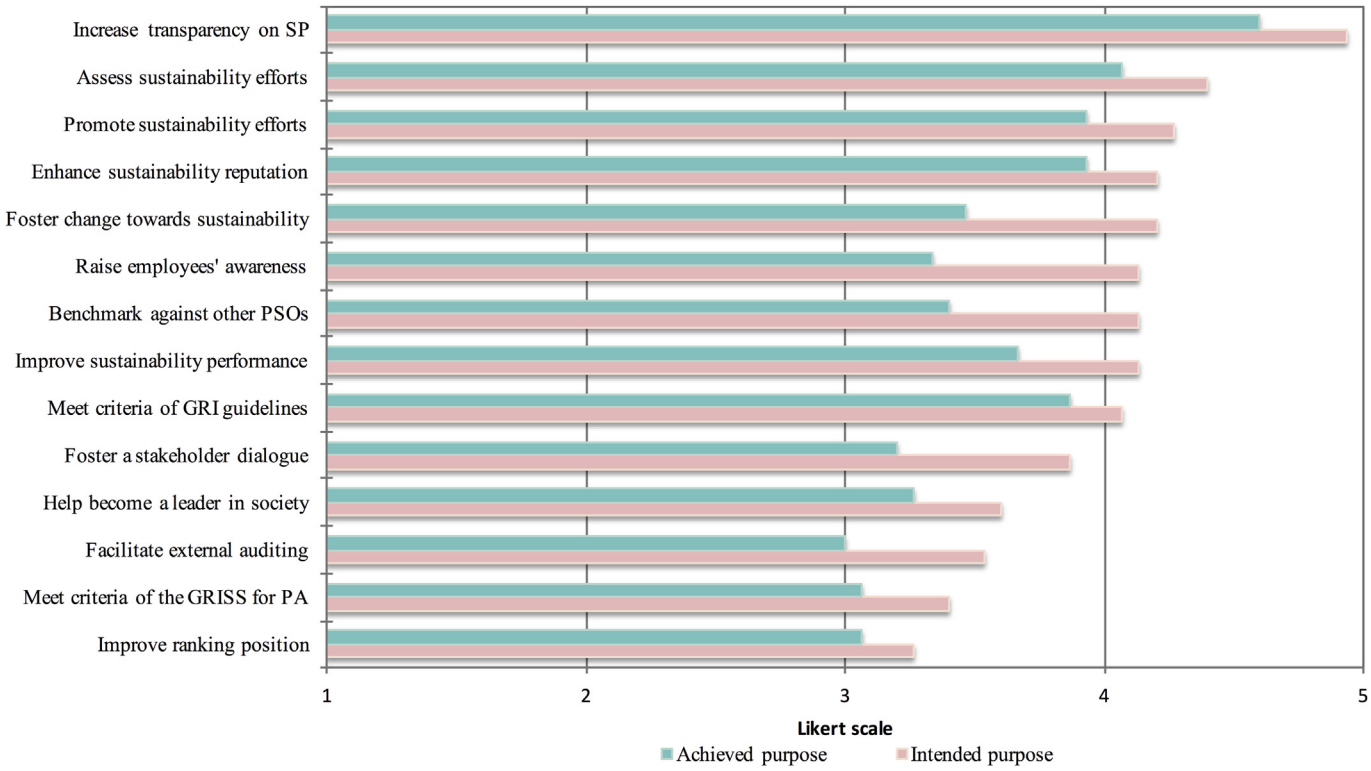

Fig. 3. Survey results comparing intended and achieved objectives of SR in PSOs.

"increase the transparency of the organisation's SP" and "assess the organisation's sustainability efforts". The lowest scores were attributed to "facilitate external auditing of your organisation's sustainability efforts", "improve the organisation's ranking position" and "meet criteria of the GRISS for PA". The overall achieved objectives had lower scores than the intended objectives.

The respondents highlighted multiple benefits given to their organisation from SR: i) the opportunity to collect data and information on sustainability aspects, creating a baseline, e.g. *"establishing a baseline is the first essential step toward motivating and then achieving progress towards sustainability"*; ii) tracking performance on sustainability aspects and its continuous improvement (monitoring process), e.g. "*we identified areas for improvement in our metric systems and areas where we lack metrics*"; iii) promotion and awareness of sustainability efforts of the organisation to internal and external stakeholders/increase transparency to internal and external stakeholders, e.g. *"we published details of our successful sustainability initiatives so that anyone in the world can learn how to achieve their own similar success"*; iv) improve the dialogue with stakeholders, e.g. *"increased agency transparency; this promotes accountability to all stakeholders. It's an opportunity to demonstrate transparency and engage with citizens and other stakeholders in discussions about organisation's goals and priorities"*; and v) information from different sustainability aspects is collected in the same report, e.g. *"we organised information that was scattered"*.

3.2. Status quo of the sustainability reporting process

The findings show that PSOs collate the data for their sustainability reports from published reports and other publications, web pages, and other databases. Some data were collected specifically for the sustainability report, and other was available in pre-collected formats (secondary sources – data that already existed in the organisation for purposes other than SR).

Overall, the collected data were retrieved from multiple departments and gathered by a team that was responsible for its collection in each department. Internal and external consultants and managers performed manual data collection. In some cases, a template was developed for each indicator and sent to the person responsible for data gathering in the different organisational departments related to the specific information required. Also, in some cases, suppliers provided certain data for the sustainability reports.

Most of the respondents claimed that report editors were directing the collection of data from experts of the different departments or services. These individuals were also responsible for evaluating the changes between reports for each indicator, and for the achieved objectives. Solely 2 out of 15 respondents stated that *"some of the data is tracked on an on-going basis"* (e.g. operational activities such as energy and water management), while others stressed that data is *"only collected and aggregated annually"*.

Twelve respondents agreed or strongly agreed that the report assesses and communicates the sustainability efforts taking place in the institutional framework (including policies and strategies). In general, the respondents agreed or strongly agreed that the elements of the organisational system covered in the survey were addressed in the sustainability report (Fig. 4). Nevertheless, seven respondents disagreed or strongly disagreed that information on the organisational systems (including culture, leadership style, problem-solving, innovation) were covered in the sustainability reports. None of the respondents strongly disagreed with any of the options.

Fig. 5 shows that employees were perceived as being the most involved in the SR process, followed by public sector leaders and managers. The general public and potential employees were perceived mostly not involved in the SR process. Ten out of fifteen of the respondents agreed or strongly agreed that the organisation's stakeholders were sensitive towards negative impacts of unsustainable operations and processes.

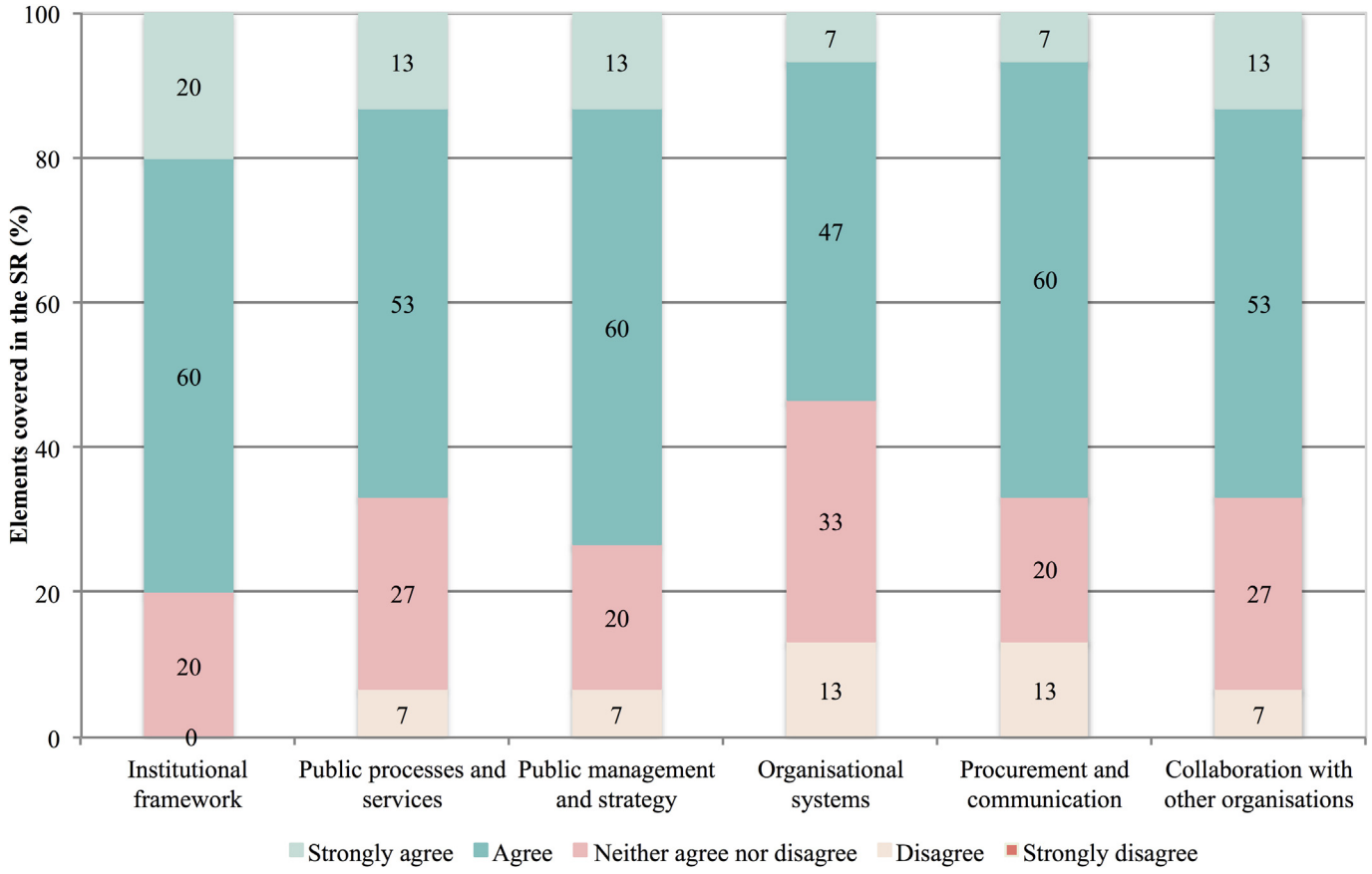

Fig. 4. Survey results for the elements of the organisational system covered in sustainability reports by PSOs.

3.3. Barriers to change identified in the sustainability report process

The main barriers to change identified in the survey concerned the data collection process and the support of senior managers and leaders for the SR process. Some respondents mentioned that multiple sources of information (departments and other institutions) were needed, e.g. *"gathering consistent data year over year has been the biggest challenge for our sustainability report"*. The lack of suitable support for this process was one of the barriers identified by the respondents, focusing, for example, on the need for *"strong leadership that understands the value of SR"*, *"acquiring management support/authorisation"*, or *"senior management commitment – need a cohesive voice from the top"*.

Other barriers were identified, such as: i) the lack of training for employees and limited resources; ii) the communication and integration of stakeholders inputs, e.g. *"apply the opinions and interest of our main stakeholders on organisation's strategies"*, and *"communicate appropriately our achievements in sustainability"*; and iii) the difficulty to choose indicators from the GRI guidelines, *"It's hard to adapt our reporting to the GRI indicators, because the indicators are primarily aimed to fit finance driven companies and not governmental organisations"*. The GRI was also criticised regarding SP, e.g. *"GRI does not teach sustainability; it assumes pre-knowledge or worse, that sustainability means different things to different organisations"*.

3.4. Strategies to overcome the barriers identified in the sustainability reporting process

The respondents identified some strategies to overcome the barriers to achieving changes in the SR process. *"A new sustainability agenda and reporting system"* specific for data collection, including *"more effort at obtaining data at the outset of projects and making it a requirement during the procurement process so consultants and contractors are aware of their data collection requirements when they are retained"*. A more solid and consistent leadership was mentioned as a requirement, some examples from the survey were: *"we are developing a sustainability leadership program"*; *"reminding our leadership staff of our reporting needs and ensuring our metrics are taken into account when decisions are made"*. Three out of fifteen respondents considered that sustainability training would be a requirement in the organisation, e.g. *"specialised staff to draft a sustainability report and its dissemination, and have a annual budget item for publication"*. One respondent stated the organisation would increase the dialogue with their stakeholders, *"by addressing the communication with specific publics"*. It was also highlighted that GRI indicators need to be chosen to fit into the organisation's mission and activities, e.g. *"trying to interpret the indicators to fit our organisation"*. In addition, 3 out of 15 respondents highlighted the importance of teamwork to achieve changes: *"team effort and sheer determination"*; *"internal and external help from entities and specialists and similar entities with experience"*; and *"working together with many colleagues and building a network"*.

3.5. Changes achieved by the sustainability reporting process

The majority of the respondents (8 out of 15) considered that SR facilitated major changes in some parts of the organisations (Fig. 6). None of the respondents considered that major changes in the organisation as a whole were achieved (not represented in the

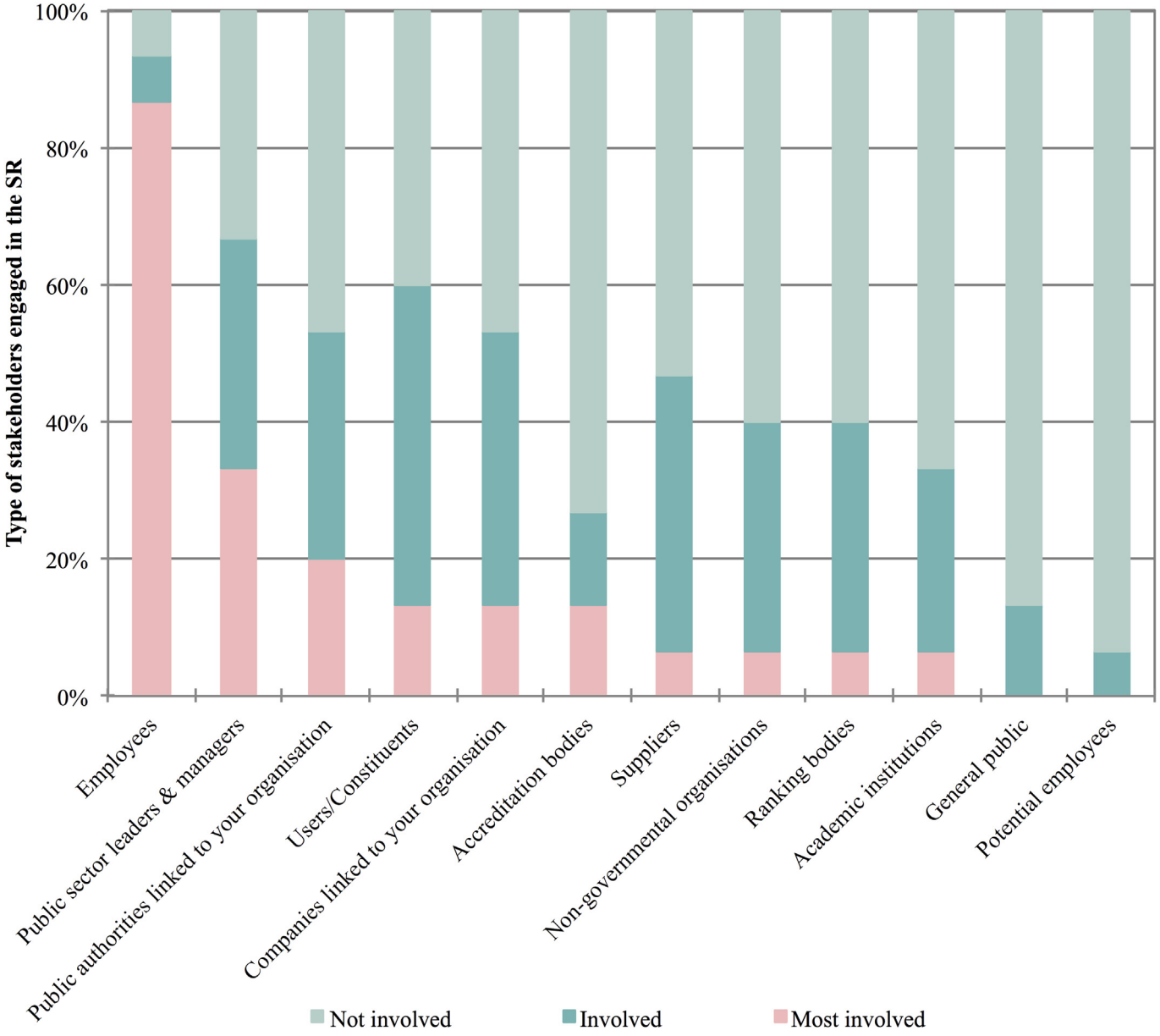

Fig. 5. Percentage of the engagement of each group of stakeholders in SR for PSOs.

chart). This suggests that the SR process did not change the organisation as a whole, but there were changes in some of its parts. Only one respondent considered that the SR process did not facilitate any change in the organisation. This organisation stated that *"the intent was never to facilitate change in the organisation, rather to show the efforts towards sustainability that are already in practice"*. This respondent was also of the opinion that the report has no potential to drive changes in the organisation.

Among the ones that considered that SR facilitated organisational changes, 4 out of 14 (see Fig. 7) were of the opinion that the SR process had a major influence on the organisational culture, e.g. *"GRI reporting makes sustainability operational"* and *"improved understanding and interest in sustainability"*; and 2 out of 14 considered that the sustainability report had a major influence on the employees to act more sustainably, e.g. more awareness on sustainability aspects: *"our sustainability report details our sustainability goals and acts as an educational tool in addition to a performance report"*; *"employees organise events introducing sustainable practices"*; *"printing habits were modified for the best"*; and *"a lot of employees have presented proposals to improve processes of the organisation"*.

The changes were related to the barriers identified and the strategies to overcome those barriers. One respondent stated that senior managers recognised the importance of reporting as a *"sustainability-based strategic planning vehicle"*. Six respondents identified a better understanding, awareness, and discussion about sustainable development especially among employees, one of the respondents hoped that SR could show *"the importance of their own work"*. Only one respondent also highlighted that SR would help to allow stakeholders *"to understand in a clear way the sustainability impacts of our organisation"*. Finally, two respondents mentioned that SR improved SP and two others discussed the better connection and integration of the different departments of the organisation.

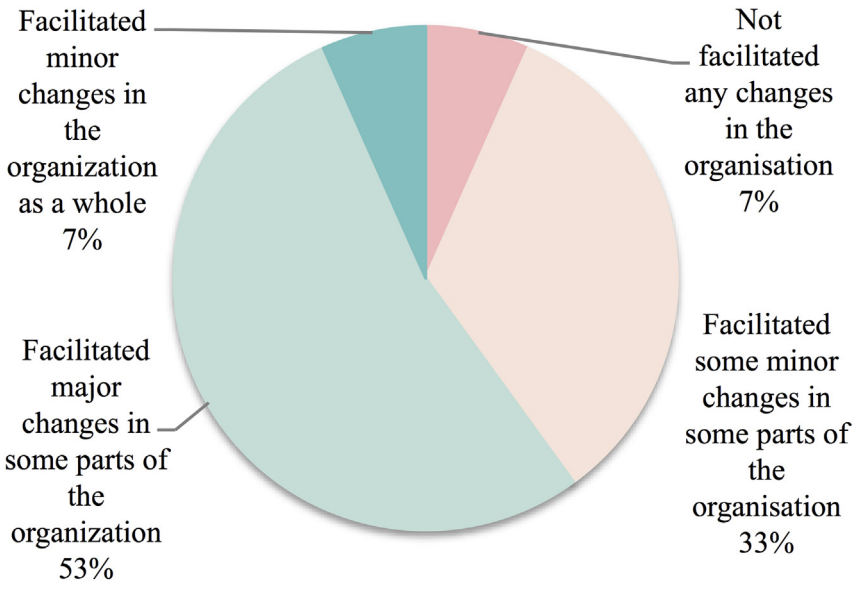

Fig. 6. Type of changes achieved in PSOs through SR.

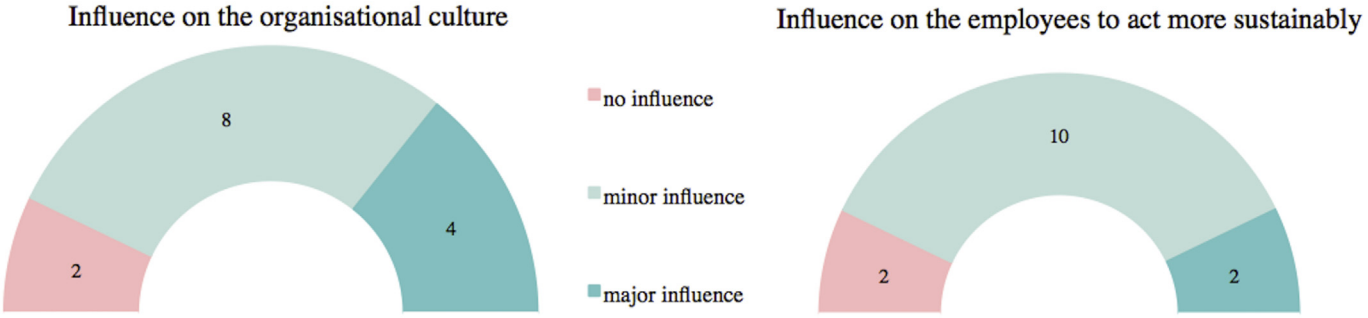

Fig. 7. Type of influence of SR on the organisational culture and employees towards sustainable development in PSOs.

4. Discussion

SR in PSOs is still in an early stage, as highlighted by Guthrie and Farneti (2008), Dumay et al. (2010) and Lodhia et al. (2012). In 2014, only 114 PSOs worldwide had published at least one sustainability report adhering to the GRI Sustainability Reporting Guidelines (GRI, 2014). Nevertheless, SR in PSOs increased significantly in the last years. Most of the organisations covered in this survey had published reports after 2010.

The survey results highlighted that the social responsibility/sustainability department was more often the main responsible for developing sustainability reports. According to Schaltegger and Wagner (2006), the development of sustainability reports by one designated department may result in a compartmentalised process. Nevertheless, other responses to the survey demonstrated that different departments were also involved or in charge. These results support the idea that there may not be a relationship between the department that has more "legitimacy" to publish than others, as discussed by Lodhia et al. (2012).

The results also showed that mainly internal motivations were responsible for publishing the reports. These results were similar to the ones found by Farneti and Guthrie (2009), where generally one key individual within the organisation was responsible for pioneering the SR process. According to the same authors, internal stakeholders are also the main audience of sustainability reports. This research shows that external stakeholders are not being included in the sustainability report in the PSO context. The surveyed data is also in line with the results found by Farneti and Guthrie (2009), confirming that employees and public sector leaders and managers are the most involved in the process. Organisational leadership has been identified as one of the main internal drivers for corporate sustainability (see Lozano, 2015, 2013b). The results suggest that SR in PSOs is mainly derived by an "inside-out" approach (see Burritt and Schaltegger, 2010).

The survey respondents indicated that they reported mainly to increase the transparency of the organisation's SP. In addition, the reports aimed to assess the organisation's sustainability efforts, as discussed by Dumay et al. (2010). The respondents also specified that they did not intend to meet criteria from the GRI or the criteria outlined in the GRISS for Public Agencies. It was not a goal of these organisations to follow the GRISS for Public Agencies. These results are similar with the results from Guthrie and Farneti (2008), who analysed SR practices in seven Australian PSOs that used GRI guidelines, and found that the use of GRI guidelines is fragmentary in PSOs. These organisations cherry-picked indicators from the GRI guidelines. The results of the survey showed that the selection of indicators from the GRI guidelines was one of the barriers in the process. Nevertheless, the main barriers were the data collection and the lack of suitable support from managers and leaders.

Data collection is often the main problem associated with the process of assessing SP. Some data is collected specifically for the sustainability report but multiple (internal and external) sources of

information are needed, which makes it a complex and fragmentary task; however, the collection of data and information on sustainability aspects is one of the aims of the SR process identified in this study. Some examples of information needed are: the assessment of specific supplier characteristics related to green procurement; the purchasing of products with voluntary environmental or social labels and/or certification programmes; the type of training of employees; the identified stakeholders and their type of involvement; the specific amount of recycled material; and gross expenditures. Depending on the size and complexity of the organisation, the data is often managed by different departments or even different subcontractors, which requires an efficient joint work. Consequently, an information system to update the indicators could be used prior to preparing the information needed in order to more easily update the database of information on sustainability aspects, as suggested by Ramos et al. (2014).

The findings show that a lack of suitable support from managers and leaders could jeopardise the sustainability reporting process, as discussed by Chen et al. (2006). Consistent leadership is instrumental to ensure organisational changes for sustainability, as discussed by Lozano (2012, 2013a,b); however, transformational leadership is crucial in emergent processes of change but only in a non-bureaucratic context (see van der Voet, 2014), which is not the case of most PSOs (as suggested by Carter et al., 1992).

The survey responses identified training as a priority to support sustainability reporting processes. The term sustainability may have different meanings for the respondents, as identified by Guthrie and Farneti (2008). Thus, training could be integrated into the organisation in order to increase awareness and knowledge on the sustainability reporting process and its relevance for the organisation and external relations, through education and awareness raising campaigns, communication, linking sustainability to the organisation's institutional framework, making sustainability management part of performance management, and collaboration with other organisations (see Lozano, 2012, 2013b).

The survey results showed that SR has an influence on the organisational culture, which in some cases resulted in an increase of proactive changes by internal stakeholders. As suggested by Lozano (2015), when organisations plan their changes, they engage with 'soft' issues and are proactive towards a more sustainable-orientated state. Therefore, SR appears to be one of the drivers for OCMS in PSOs, in similar way to monitoring SP of the organisation and communicating the sustainability status quo to stakeholders (as discussed by Hedberg and von Malmborg, 2003). This is particularly important in PSOs because these should be seen as role models due to their closeness to different types of government and many times being themselves a central organism that creates legislation and influences other sectors.

5. Conclusions

Although some PSOs have started to engage with sustainability, e.g. through monitoring sustainability aspects and publishing reports; SR is still a voluntary process and many PSOs have not published these reports. This paper provides insights into the relationship between SR and OCMS in PSOs.

The results showed that the SR process is mainly driven by internal motivations, where employees are often the most involved in the process. The process increased the availability of data on SP, increasing the available information on the SP status quo of the organisation.

If organisations report periodically, it is possible to monitor the SP, to identify barriers, and to plan strategies to overcome the barriers more effectively. SR also increases the transparency of the organisation towards internal and external stakeholders, as identified in the survey results. This process needs to be integrated in organisational change planning to create a suitable database to evaluate and improve organisational performance towards more sustainability-orientated PSOs.

SR is still a voluntary process, but it has proven to be a valuable tool to improve and change organisational performance towards sustainability. This study identifies SR as a potential driver of OCMS in PSOs, in accordance with literature in other types of organisations. The barriers to change identified in the SR process, such as the data collection process and the lack of suitable support from managers and leaders, should be addressed to foster proactive organisational change. Internal aspects are the key factor towards SR in PSOs. Their motivation is to change activities to a more sustainable level, to increase transparency on SP, and to assess and promote sustainability efforts.

Despite the fact that PSOs are still lagging behind in the SR journey when compared to other organisations, they have started to use SR as communication tool, which can lead to organisational changes. SR appears to be one of the drivers for OCMS in PSOs, since it has the possibility to affect the organisational culture. PSOs can learn from the experiences of corporations and higher education institutions on SR, OCMS, and their inter-relations to move forward in better contributing to sustainable societies.

Further research on this topic could focus on the inter-linkages between SR and OCMS. It is necessary to pursue a holistic study to understand the links between the processes and promote sustainability efforts across the entire organisation. Also, it would be important to study how external stakeholders could be more involved in the sustainability reporting process. They could have an important role as active participants in different phases of the process by providing inputs for the design, data gathering, performance evaluation, and review of sustainability reports.

Acknowledgements

The authors would like to thank the public sector organisations engaged with sustainability reporting who participated in the survey. Ana Rita Domingues and Tomás B. Ramos gratefully acknowledge support by the Portuguese Foundation for Science and Technology (FCT), through the project PTDC/AAC-AMB/119508/2010. CENSE is financed through the Project UID/AMB/04085/2013 from FCT. Kim Ceulemans' Postdoctoral Fellowship at the Centre for Social and Sustainable Innovation (CSSI), University of Victoria, Gustavson School of Business, was funded by a donation from Goldcorp Inc. The funding sources played no part in the design, analysis, interpretation, or writing-up of the article or in the decision to publish.

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