

Sustainability Reporting for Robust Governance and Accountability in Times of Crises. A Delphi Study on Local Owned Enterprise Preparers' View.

Torres, Lourdes (ltorres@unizar.es); Ripoll, Lara (lripoll@unizar.es); Pina, Vicente (vpina@unizar.es); Bachiller, Patricia) (pbachiller@unizar.es)

University of Zaragoza, Spain

Introduction

Robustness in public governance has emerged as a relevant topic for public administration research and political science in a series of recent publications. Robust governance argues that, in dynamic scenarios under quickly change and in crisis situations, governments should combine the stability and reliability of bureaucratic structures with the flexibility needed to provide public value in the face of variable, inconsistent, unexpected or unpredictable events and demands.

According to Robust Governance paradigm (Ansell, Sorensen and Torfind, 2022) large bureaucratic governmental systems cannot adapt themselves to changing circumstances in a timely manner, because planning is central to bureaucracies and that requires time. They need to approve budgets and activities for the present and coming years and relies on the forecasting of demographic developments, changing needs and economic activities. New Public Governance grounded in collaborative governance supported by flexible networks of public to public and public to private stakeholders, allowing them a timely respond to changing circumstances. However, the transaction costs are high in governance networks because networks are unstable and the actors' interdependence can increase the risk of failure. Robust governance approach proposes to combine the value of both, public bureaucracy and network governance (stability and change), in hybrid forms of governance, in order to provide reliable and effective delivery of public value to citizens. The Robust EU project (<http://robust-crisis-governance.eu>) states that robustness is conditioned on three independent variables: interactivity between layers of public administrations (EU, Central and Sub-central governments), hybridity, and negotiation between different public and private actor and sectors of society.

Coordination of different public administration layers and hybridity and negotiation between stakeholders requires the use of relevant and reliable non-financial information provided in a timely manner, which could be disclosed by sustainability reports. This non-financial information may enable the development of effective collaboration networks to create public value in changing circumstances. For Alonso-Almeida et al. (2013), there are three reasons why entities adopt sustainability frameworks: to build relationships with stakeholders, to avoid stakeholder pressure for not reporting about sustainability and to show that firms are doing the right things to attract investors. The objective of this paper is to study whether sustainability disclosures are useful to build relationships with stakeholders in order to meet the information needs of robust governance for the identification and shaping of networks, or, by contrast, sustainability disclosures are green-washing policy to justify that the entity is doing the right to create public value and for accountability purposes.

One powerful tool for robust governance is non-financial information, which complement the financial information provided by traditional financial statements. Progress in this area is very significant at the level of large and medium-sized companies, both in the private and public

sector, and less in the rest of the public administrations. We examine the websites of the Spanish Local Owned Enterprises (LOEs) which published non-financial reports (NFR) for 2018 and 2019, and we apply the Delphi method to synthesise the opinions of the experts (preparers) who have headed these reports. The expert opinions add an innovative approach to the literature about NFR, especially regarding public sector owned corporations.

Our study also highlights lessons to be learnt by local governments which would be willing to extend NFR to the municipality as a whole or required to disclose a comprehensive NFR in the future. The article is organised as follows: after the introduction, non-financial and sustainability reporting in local owned enterprises, as hybrid entities, is described. Then, the methodology and the analysis of results are explained. Finally, the discussion and the main conclusions are drawn.

Non-financial and sustainability reporting in local owned enterprises.

Since the issuance of the European Directive 2014/95/EU on non-financial disclosure and diversity, which requires large European companies to publish reports about their policies on environmental protection, social responsibility and treatment of employees, respect for human rights, anti-corruption and anti-bribery, and diversity on company boards, there has been a great deal of attention on the standardization of non-financial information for rectifying the shortcomings of existing sustainability reporting in terms of comparability and the kind of information disclosed. For Abela (2022), if we go back to the mid-20th century, financial reporting FASB standards were developed inductively based on observation of practice (Zeff, 1999) and the result was the creation of a "market of excuses", where subjectivity and opinion divided one accounting rule from the next (Watts and Zimmerman, 1979).

To overcome these shortcomings, there have recently been two major initiatives: those of the European Financial Reporting Advisory Group (EFRAG) and the proposal of the International Sustainability Standard Board (ISSB, IFRS Foundation), that has consolidated the Sustainability Accounting Standards Board (SASB), the IFRS Climate Disclosure Standard Board (CDSB) and the International Integrated Reporting Council (IIRC). The Global Reporting Initiative (GRI) has joined that initiative through an agreement (GRI, 2022). The ISSB focuses on the investors needs and the EFRAG approach on investors and other stakeholders needs, to assess the value to society, along with the value to business (double materiality). Securities regulators, through the International Organization of Securities Commissions (IOSCO), have strongly endorsed the ISSB. These initiatives aim to improve the usefulness of non-financial information by enhancing the comparability of disclosures and providing material information necessary for decision-making. However, if the idea is to provide decision-useful sustainability information, how does this become a reporting objective? The answer depends on who is making the decisions and for what purpose (Abela, 2022).

For Abhayawansa (2022), materiality definitions found in sustainability reporting standards, frameworks or guidelines can be categorized into three groups: financial materiality, social and environmental materiality (or impact materiality), and double materiality. The concept of double materiality, first proposed by the European Commission (2021), encompasses both the investors and other stakeholders' perspectives and needs for decision-making and accountability purposes, as the EFRAG approach. In the framework of robust governance paradigm, double materiality should include such information for governments to promote, select, organize and coordinate networks that support robust public policies and ensure that those entities participating in these collaborative networks meet the requirements of sustainable practices and policies, to deal with crises and turbulence. However, this does not seem to be on

the agenda of EFRAG's proposal, at least not fully, issues related to relational, intellectual and human resource capital are not well developed. The social group tends to focus on issues of equity, inclusion, human rights which, although of great importance, do not provide information on the dimension of intangible assets of the entities, such as the intellectual and relational capital involved in the creation of social and public value, which, together with tangible assets, if properly coordinated by governments, can facilitate the creation of collaborative networks that enable a faster and more effective response to the crises and turbulences that periodically occur.

The importance of reporting financial information in conjunction with non-financial information was born in a *context* where only around 20% of a company's market value could be accounted for through its financial and physical assets, while *in the past* it was 83% (Adams, 2015; IIRC, 2011). The remaining part are intangible assets that are not reported in the financial statements (IIRC, 2011). Companies increasingly rely on intangible assets -also referred by Arvidsson (2011) as intellectual assets- in their economic, social and public value-creation process. For this author, most of intellectual assets omitted in the financial reports are included in the following categories of non-financial information: human (Royal and O'Donnell, 2008), relational (April et al., 2003), organizational (Lev and Radhakrishnan, 2003), corporate social responsibility (Arvidsson, 2010) and environmental (Gray et al., 2001).

Intellectual capital is the stock of comprehensive knowledge (Augier and Teece, 2005). Social capital is the stock of people's relationships that reciprocally bond with obligations based on norms (Bourdieu, 1986, p. 248). Environmental capital is the stock of renewable and non-renewable resources (Throsby, 1999). For Abeysekera (2022), the intellectual capital reporting section should disclose information about internal capital, external capital and human capital. Guthrie and Petty (2000) identified nine internal capital items: patents, copyrights, trademarks, management philosophy, corporate culture, management processes, information systems, networking systems and financial relations. They also identified nine external capital items: brands, customers, customer loyalty, company names, distribution channels, business collaborations, licensing agreements, favourable contracts and franchising agreements. And there were six human capital items: knowhow, education, vocational qualification, work-related knowledge, work-related competencies and entrepreneurial spirit (innovativeness, proactive and reactive abilities and changeability).

Regulatory approach

After the 2014/95 EU Directive, the Spanish Law 11/2018 introduces NFR on a mandatory basis for companies (included LOEs) which elaborate consolidated accounts when: a) the average number of employees is over 500 (since 1 January 2021, more than 250) or b) they are either considered public interest entities or meet at least two of the following conditions for two consecutive years: the total of the consolidated assets exceed 20 million euros, the net amount of the consolidated annual turnover exceeds 40 million euros and the average number of employees during the year exceed 250.

Before the application of the Law 11/2018, the disclosure of sustainability information was provided on a voluntarily basis in Spain and barely comparable because of the diversity of non-financial reporting proposals carried out for a variety of multilateral institutions, such as the OECD, UN, GRI, IIRC, SASB, and CDSB. To increase uniformity and comparability -over the time and with the information provided by other companies-, and make the disclosure of sustainability information easier, the Spanish Association of Accounting and Business Administration (AECA) developed an integrated reporting model for companies, required by the Law 11/2018. The main contribution of the AECA model is the definition of comparable

non-specific-industry metrics and key performance indicators on the mandatory items included in the Law.

Neither the Spanish Law nor the European Union (EU) Directives provide detailed indicators to be calculated and included in the NFR. The main contributions of AECA in this field are two: 1) the proposal of a single model integrating the above mentioned 2014/95 EU Directive and the Spanish Law 11/2018 with the most general accepted proposals about sustainability (see Appendix), and 2) the proposal of metrics and key performance indicators about financial, environmental, social and corporate governance information, that make it easier the comparability of the information disclosed (<https://is@aece.es>). The AECA model has been approved by the Spanish National Security and Exchange Commission and the Spanish Accounting and Auditing Institute for the disclosure of mandatory NFR for quoted and non-quoted Spanish companies.

Scholar approach

LOEs are hybrid entities that work under commercial law -as private-sector corporations-, whose share capital is 51-100% publicly owned. Their annual action programs, investments and financial sources are included in the consolidated budget of the local government. Following Ponte *et al.* (2017), hybrid organisations operate on the borderline between the public and private sectors. They are expected to achieve efficiency and, at the same time, serve social or policy objectives by being accountable to citizens (Calabrò *et al.*, 2013).

Municipalities create these entities in order to provide a large portion of their services through autonomous corporations (Grossi and Reichard, 2008). The activity of these corporations is an integral part of the local government action. At present, LOEs are the only entities of the local governments under the requirements of the Law 11/2018. This establishes a good prelude for applying NFR requirements to the parent local administration because it has been usual to introduce accounting standards first in public sector companies and, then, in public administrations, as in the case of the International Public Sector Accounting Standards (IPSAS).

It is in these lights that this paper aims to analyze to what extent sustainability reporting meet robust governance information needs, regarding intellectual and social capital, and environmental protection. For this purpose, Spanish LOEs are taken as a benchmark. As LOEs are local government-owned companies, the non-financial information they publish could be considered an indicator of the political will and commitment of governments to sustainability policies.

There is an extensive literature about the disclosure of sustainability reporting, usually referring to private sector, before and after the enactment of the first EU Directive. For example, Figge *et al.* (2002) state that the integration of environmental and social aspects into general business management is the guarantor of covering the corporate sustainability management in all three dimensions (economic, environmental and social) of sustainability. Other authors miss the development of sustainability reporting standards because it is not sufficiently comparable and because corporations do not report all non-financial information that users think is essential (La Torre *et al.*, 2020). Particularly, the study of NFR in local governments (Bello, 2006) highlights the integration between intangibles reports, such as social and environmental information, regarded as of great utility. In line with this, Monfardini (2004) states that the absence of benchmarking implies a "freedom" that allows peculiarities regarding social information to contribute to the location of best practices, although it does not permit to assure reliability to the information provide. Another line of research is focused on the study of the implementation of disclosure of integrated reporting in SOEs worldwide which is followed by Surty *et al.* (2018), Andrades *et al.* (2019), Andrades and Jorge (2019), Farneti *et al.* (2019) and Nicolò *et*

al. (2020). The findings of their articles, reveal a low level of information reported by SOEs. Furthermore, Surty *et al.* (2018) indicate that the level of reporting disclosure by SOEs has increased, while Farneti *et al.* (2019) state that integrated reporting framework led to a reduction in social disclosures. Nicolò *et al.* (2020) consider the possibility of considering that the introduction of a mandatory regulation did not activate non-financial disclosure by SOEs in a significant manner. In the last year authors such as Dragomir *et al.* (2022), Redmayne *et al.* (2022), Zanellato and Tiron-Tudor (2022), have focused their research on examining, respectively, the quality, the application and the level of NFR in different samples of SOEs. In the case of LOEs, Dicorato *et al.* (2020) show the difficulty to conduct comparisons not only with the previous years but among other organisations. The sustainability disclosure in LOEs is also reviewed by Ligorio *et al.* (2022) who reveal the commitment to social and environmental responsibilities of these companies.

Additionally, the preparers' perspective has also been analysed by authors such as Muserra *et al.* (2019), Adhariani and de Villiers (2019), and Lakshan *et al.* (2021). They conclude that people which elaborate this information convert challenges into opportunities demonstrating a high level of interest and a favourable attitude towards NFR. Arora *et al.* (2022) highlight in their study that preparers consider this report as a flexible tool to communicate both financial and non-financial information in an integrated form.

From a theoretical overview, some approaches contribute to explain the role of the sustainability information applicable to LOEs, especially the stakeholder theory. The stakeholder theory considers that disclosure and stakeholders are related. Sustainability information would be considered as being material to account users (Deegan and Rankin, 1996). This theory supports the fact that social and environmental reporting generates many interesting questions about what motivates managers to disclose information (Deegan 2002; 2019). In the case of SOEs, Nicolò *et al.* (2019) state that these corporations exploit the integrated information as a tool to improve transparency and accountability towards stakeholders, which might be applicable to LOEs too. This means that the organisations include a proactive and transparent strategy on NFRs when stakeholders demand more information about their social performance (Monfardini *et al.*, 2013; Rodrigue *et al.*, 2013, Kaur and Lodhia, 2019).

Methodology

Sample

The Spanish Ministry of Finance and the National Audit Office collect local government financial information, publicly available in their websites, which facilitates the analysis of financial data. However, obtaining samples of non-financial information from LOEs has been an extensive task, researching corporation by corporation, because NFR is not a part of the comprehensive financial report of local governments. First of all, the Inventory of Local Governments website [1] was used for selecting those with more than 50,000 inhabitants. We found 331 LOEs and, between them, we identified 25 companies under NFR Spanish legal requirements.

The data about consolidated asset and net amount of the consolidated annual turnover of these companies were collected on the Spanish National Audit Office' website [2] and the number of employees were obtained from each corporation's website. We identified 12 enterprises which disclosed NFR in 2018 and 2019 (see Table I). They provide this information in the same section as the Management Commentary report.

All AECA indicators about environmental, social and fighting against corruption and bribery matters are included in every NFR analysed. The corporate governance information, not

required by the Law 11/2018, is disclosed in different reports -such as the Management Commentary or the Corporate Social Responsibility-, included in the comprehensive financial report and accessible at the same time as the NFR. Because of this, we have considered this information reported. For each indicator, together with its code, the model includes its name and definition, some remarks and the cross-reference to other above mentioned accepted proposals about sustainability (see Appendix) [3].

Table I

The structure of the NFR in each LOE is not the same. This is the reason why the indicators disclosed by these twelve corporations under the Law 11/2018 requirements have been analysed by looking for their counterpart in the AECA model, which defines 61 key performance indicators (KPIs): 18 financial indicators, 9 environmental indicators, 24 social indicators and 10 corporate governance indicators.

The Delphi method

The Delphi method has been used with the aim of analysing the opinion of the experts who carried out the first NFRs at Spanish LOEs. The Delphi method allows the analysis of NFR pioneers at local corporations regarding the objectives of this report, the comparability of the KPIs, the level of difficulty in collecting this information and its usefulness. This method is used when it is not possible to use statistical methods because there is not enough information. It is characterised by the selection of a panel of experts that show their opinion through successive surveys, which provide anonymous feedback to the panel.

The aim of the Delphi method is to arrive at an agreement amongst experts within a particular field of research, especially where little is known about the topic (Hennessy and Hicks, 2003). According to Helmer (1967), the Delphi method is a multiple iteration survey technique that enables anonymous, systematic refinement of expert opinion with the aim of arriving at a combined or consensual position. All opinions form part of the final answer, obtaining the most reliable consensus of opinion (Dalkey and Helmer, 1963). The panel of experts (preparers) in our study is composed by the seven managers who accepted to collaborate in the study, out of the twelve corporations above mentioned that disclose NFR: Madrid EMT, Barcelona Activa, Barcelona BSM, Sevilla TUSSAM, Palma EMAYA, Córdoba SADECO and Rivamadrid. Cantrill *et al.* (1996) considers that four experts could be enough in some cases.

The number of survey rounds finishes when criteria for consensus are achieved and when results become repetitive or when an impasse is reached (Pina *et al.*, 2011). The experts must be consulted at least twice on each question (Landeta and Barrutia, 2011) or through three rounds (Powell, 2003), unless the consensus reached in the first round is considered sufficient (Ishikawa *et al.*, 1993). We have used two rounds, in order to obtain consistent results. As for the definition of consensus, the previous literature suggests different techniques such as the relative interquartile range, the typical deviation of different resulting distributions or the coefficient of variation (Landeta, 1999; Landeta and Barrutia, 2011). In this study, the survey questions have five options (one to five) and consensus is achieved when the mean value of answers is between 1 and 2.33 or between 3.66 and 5 (following Torres, 2005), Torres *et al.*, 2005) and Pina *et al.*, 2011). We have also used the definition of consensus for this study according to Alejos Garmendia (2001): when an answer has a percentage equal or greater than 80% of the votes. In case of divergence of these two approaches, we have chosen the most restrictive to decide what question must be consulted with a second round. In the Delphi method consensual answers are important and also non-consensual responses.

The questionnaire contains five sections. The first two deal with the objective of NFR and the comparability of the information disclosed; both sections have been prepared with Likert Scale questions from 1 to 5, 1 being 'Totally disagree' and 5 'Totally agree'. The following three refer to each different group of indicators (KPIs) established by AECA (environmental, social and corporate governance), with Likert Scale questions about the usefulness of the indicators and the difficulty in collecting them. The initial contact with panellists was by phone. We provided them with the electronic survey by Google Forms, including the instructions to complete it. The process of contacting with the managers of the LOEs, showing the survey and obtaining answers lasted six months. The starting point of the study began in December 2020 and we received the last answer in the first round in April 2021. From this moment we were focused on the analysis of the results. We started the second round of the survey in May 2021, sending each corporation an email which contained the aggregated results, their chosen answers in the first round and the electronic questionnaire with the questions within consensus was not reached. We also reviewed and checked the corporations included in the October 2021 sample to see whether any more companies submitted statements during this NFR period.

Analysis of results

Graphs I, II and III show the number of environmental, social and corporate governance common indicators reported by the LOEs studied, which makes the information comparable. For this purpose, the number of indicators reported by the twelve companies is compared with the number of indicators of the AECA model, represented in the first bar of the graph.

Graph I

Three companies report the nine indicators included in the environmental group: Valencia EMT, Sevilla LIPASAM and Rivamadrid. All companies reported at least one of the six indicators about Energy efficiency and emissions set by AECA, Valencia EMT, Sevilla LIPASAM, Sevilla TUSSAM and Rivamadrid being the companies which report all these indicators.

Barcelona Activa, Barcelona BSM, Valencia EMT, Sevilla LIPASAM and Rivamadrid report the three indicators about Waste management efficiency set by AECA.

The results show a good level of disclosure and comparability of the environmental information taken the AECA model as a benchmark.

Graph II

In Graph 2, the human capital typology shows a high level of reporting and comparability, Madrid EMT and Rivamadrid being the corporations with most indicators reported, 90%. As for social capital indicators, only Palmas Guaguas and Rivamadrid publish 75% and five corporations only report 25%, a low level of reporting. In the human rights, fighting against corruption and bribery typology, where AECA recommends reporting five indicators, only Sevilla LIPASAM publish 100%.

Graph III

About the corporate governance typology, Valencia EMT presents five indicators and Madrid Destino and Rivamadrid, four, out of the ten indicators proposed by AECA. This is the typology of indicators with a lower level of comparability. *Board members* and *gender diversity on management board* are the indicators disclosed by more companies.

This analysis allows us to establish a ranking across the sample by comparing the total indicators that AECA suggest reporting in environmental, social and corporate governance fields (43 indicators), Rivamadrid being the company which reports the highest number of indicators (32), followed by Valencia EMT (30), Sevilla LIPASAM (28), Palmas Guaguas (25), Barcelona BSM (24), Madrid EMT and Barcelona Activa (23), Madrid Destino, Palma EMAYA and Córdoba SADECO (21), Sevilla TUSSAM (17) and Palma EMT (16).

An overall view shows that, together with the financial indicators, disclosed by all companies, environmental and social indicators have high degree of disclosure and comparability, and corporate governance are the last in the ranking. In environmental, Energy efficiency and emissions typology (6 indicators) shows four indicators disclosed for more than 80% (*energy consumption and polluting emissions Scope 1* are reported by all the corporations studied and *water consumption and transportation emissions and distribution in Upstream activities Scope 3* by more than 80%). In the case of social indicators, human capital typology, 9 out of 15 indicators are disclosed by 80% companies (*employees, gender diversity of employees, top management positions, gender diversity of top employees, job stability, disability, absentee, employee training, and employees under collective agreement*).

The results of the Delphi method, about the preparers view, can be found in a comparative table for each of the five sections: objectives of NFR, comparability, and usefulness and difficulty of the three groups of environmental, social and corporate governance indicators.

The results of Section 1 are shown in Table II. There is a consensus in the first round about that *the objectives of NFR are to achieve an improvement in the fair view of the activities carried out by the LOEs, and in the information provided to the citizens, other public administrations, and suppliers* (score of 5, totally agree). To some extent there is a consensus in *improving the information provided on company potential costs* (score of 4). However, the preparers do not reach consensus in the first round in that one *objective* of NFR of LOEs *is to improve fulfilment of company objectives*. In the second round, the results are worse. So, there is decoupling between the NFR rhetoric and what preparers consider the objectives of the company are.

Table II

Comparability is not possible without a benchmark and the AECA model allows stakeholders to carry out this. The results of Section 2 (Table III) show consensus about that NFR facilitates the comparability of the information provided by LOEs with respect to *the information prepared by the corporation in previous years*, and unanimity in the second round, regarding the disclosure of NFR in facilitating the comparability of the information provided by the company with respect to *the information of other similar municipal companies*. These are the two traditional ways to also compare the financial information: with the own company along the time and with other similar companies. There is also consensus in the first round about the NFR facilitates de comparability of the information provided by the company with respect to the information provided by the central government of other municipal companies of different local administrations. However, there are no consensus, even in the second round in that NFR facilitates the comparability of the information provided by the company, with respect to *the information of other LOEs of different local administrations provided by the local administrations and by the autonomous governments*. These answers show same suspicious opinion of preparers about the comparability of the information provided by sources other than central government. When an indicator can be constructed in different ways, preparers do not consider information disseminated by other municipalities as reliable, but only when there is the single source of the central government because of its homogeneity.

Table III

Within Section 3, environmental indicators (Table IV), *polluting emission Scope 2*, *waste generation* and *waste processed* achieve the consensus as very useful indicators. In the second round, 80% of preparers consider the environment indicators to be, at least, *considerably useful*. The level of usefulness in implementing environmental indicators may vary depending on the service provided by the company. For instance, the transport municipal companies are more concern with the pollution problems than cultural and tourism municipal companies.

With respect to the difficulty of being calculated, there is consensus about the high difficulty of *recovered waste*. Although there is no consensus, most preparers agree that the calculation of *energy consumption*, *water consumption*, *waste generation* and *waste processed* has a little difficulty. This is because the companies pay on a regular basis for its consumption to providers. However, preparers found it considerably difficult in preparing indicators about emissions (*transportation emissions and distribution in downstream activities Scope 3*). This could be because the emissions need a more sophisticate way to be calculated. In general, the more difficulty in measuring the indicator, the lower the level of information disclosed.

Table IV

Focusing on social indicators (Table V), the usefulness of the following indicators shows consensus in the first round: *employees*, *absenteeism*, *legal regulation concerning customers*, *respect from human rights*, *actions in defence of human rights*, *irregularities in terms of corruption and bribery* and *proceedings in cases of corruption and bribery*. Most of them show a low level of difficulty of elaboration and are disclosed by most companies, except for *legal regulation* and *irregularities*. However, there is no consensus about the usefulness of *gender diversity of top employees*, *net employment*, *employees under collective agreement*, and *training for fighting against corruption and bribery*, the latter with medium level of difficulty and low level of disclosure.

In general, all social indicators present medium-low difficulty in the opinion of preparers - except for *right to maternity leave* and *suppliers*, *conflict mineral policy*. Results show that social indicators present high level of utility in the opinion of preparers and are disclosed by most companies.

Table V

In corporative governance (Table VI), there is consensus, in the first or in the second round, about the utility of 50% of these indicators, especially in *total remuneration of the board* and *gender diversity on management board*. All indicators show a low to medium level of difficulty and the lower level of disclosure of all the indicators studied. However, they are not required by Law. Most of them are required by the Securities and Exchange Commission and none of the LOEs are listed in capital markets.

Table VI

Discussion

The hybrid character of LOEs creates an enabling environment for the introduction of NFR, as a first step for its application to the whole local government. Usually, accounting and management innovations are introduced first in public sector companies and, then, in the public administrations, as in the case of the IPSAS.

The evidence shows that the LOEs analysed acknowledge the importance of NFR to justify that the entity is doing the right to create public value and for accountability purposes through the

disclosure of their corporate, social and environmental actions. Their NFR reports studied comply with the legal requirements enacted by the Law 11/2018 and also include other indicators required by the IFRS Foundation, SASB, CDSB, IIRC and GRI, focused on providing material information for investor's needs, and the EFRAG, focused on investors and other stakeholders (double materiality). Hybrid entities are able to prepare high quality NFR that supplement financial information (Biondi and Bracci, 2018).

The LOEs studied are 100% owned by the local government and provide the services under monopoly conditions, being the disclosure of sustainability information just a political matter, rather than the disclosure of sustainability information useful for decision-making. Because of this, we have detected that some LOEs required by the Law 11/2018 do not provide NFR report yet: 50% of the entities required to disclose this information do so, but the other 50% do not. This is not only the case of the LOEs. According to La Torre *et al.*, (2020), it is necessary to improve the efforts in sustainability reporting because some corporations still do not publish them.

Preparers agree that the objectives of NFR are to achieve an improvement in the accountability of the activities carried out by the LOEs and in the information provided to the citizens, other public administrations, and suppliers, according to the legitimacy and the stakeholders theories. However, for preparers, the disclosure of sustainability indicators is not part of the core objectives of these companies although, considering their opinion about the utility of these indicators, their view about the usefulness of sustainability dimension of the company for long-term decision making, should change in the future. The new European Directive 2022/2464/EU, which amends the 2018 EU Directive, requires disclosure of an entity's intangible resources related to financial reporting and the provision of information in electronic format to enhance comparability. Therefore, preparers of sustainability reports will have to provide information about those intangible assets related to the creation of public value which will provide useful information for the coordination of collaborative networks in the framework of robust governances.

Although comparability is currently a pending issue, and the Corporate Sustainability Reporting Directive tries to provide common European reporting rules, preparers show consensus that the NFR disclosed, based on the Law 11/2018 and the group of the five standards setters, provides a framework for making the sustainability information more comparable with the information disclosed in previous years and with respect to the information provided by similar LOEs. They also agree that the NFR facilitates de comparability of the information provided by the company with respect to the information disclosed by the central government about other LOEs of different local governments. However, preparers are suspicious about the comparability of the information provided by other LOEs, that's to say, by sources other than central government. This is because the same indicator may be calculated following different measurement criteria. Although stakeholders can consult non-financial information because it is publicly accessible, comparability is not possible without a reference or benchmark and, in this case, the AECA model allows stakeholders to carry out this comparison.

Preparers obtain consensus on the usefulness of environmental indicators, but not on the difficulty of their collection except for *emissions* and *recovered waste*, considered very difficult and, for this reason, they show the lowest level of disclosure. Their usefulness and difficulty may vary depending on the service provided by the LOE.

In general, all social indicators present, in the opinion of the preparers, high level of utility and medium-low difficulty and are disclosed by most companies. Some of them, with social and

political demand, disclosed by all entities, do not show consensus about their usefulness for preparers such as *gender diversity of top employees* and *employees under collective agreement*. There is also no consensus about the usefulness of *training for fighting against corruption and bribery*, with medium level of difficulty and low level of disclosure. Social indicators are a broad and heterogeneous group that should include information on intellectual capital (internal, external and human capital) and social capital in terms of people's stock of relationships. However, as can be seen in the Appendix, most of the indicators included in this group only provide information for accountability purposes related to the fulfilment of human rights, equality and equity, but with important shortcomings on intellectual and social capital information related to the creation of public value of LOEs needed to build robust governance.

There is consensus about the utility of fair corporative governance indicators, with low level of difficulty and the disclosure. Most of them are required by the Securities and Exchange Commission and none of the LOEs are listed in capital markets.

One of the reasons why preparers consider most sustainability indicators useful may be because the AECA model used as a benchmark adapts the proposal of the “group of five” and the legal regulations to the Spanish case. The result is a set of indicators that summarises these proposals and is useful regardless the industry in which each company operates.

Conclusions

This paper studies the sustainability disclosure of Spanish LOEs from the preparers' perspective and its utility for building a robust governance. We identified 12 LOEs that submitted NFR information in 2018 and 2019, out of 25 required to do so. The analysis has been carried out using the AECA model as a benchmark to obtain comparable information about these reports.

LOEs disclosing NFR follow the European Directive 2014/95/EU and the Spanish Law of 2018, which require them to publish reports on their policies on environmental protection, social responsibility and diversity on corporate boards. Social and environmental are the typologies with more indicators reported by LOEs (except for those about emissions) and the majority are included in the GRI proposal, and the rest in others such as the CDSB, IIRC, CDP, OECD and UN. Social responsibility information tends to focus on issues of equity, inclusion, human rights, etc., which, although of great importance, do not provide information on the intangible assets of entities relevant to explain the creation of public value, which can contribute to the creation and effective coordination of collaborative networks.

The preparers consider that the main objective of NFR is to achieve an improvement in the accountability of the activities carried out by the LOE and in the information provided to citizens, other public administrations and suppliers (stakeholders and legitimacy theories). However, the preparers do not reach consensus about that one objective of NFR of LOEs is to improve fulfilment of company objectives. For them, the disclosure of NFR allows the company to gain legitimacy. Therefore, the use of sustainability disclosures for decision-making purpose for building robust governance is, at present, a challenge for the preparers and regulatory bodies. The EU and the EFRAG should better define the objective of sustainability disclosure, who makes decisions based on this information, and for what purpose. To this end, standard-setters need to better detail the stakeholder group, as it itself appears to be a generic and fuzzy set of undefined actors.

The preparers reach consensus about that NFR facilitates the comparability of the information provided by the company with respect to the information prepared by itself in previous years

(comparability over time), with respect to the information of other similar municipal companies and with respect to the information provided by the central government about other municipal companies of different local administrations. Preparers consider as positive the contribution of proposals of sustainability standard-setting bodies to comparability of NFR. The challenge is to converge the different non-financial reporting models into a single model that allows for real comparability of information. Their lack of confidence in the information provided by other LOEs highlights the need to define how to construct homogeneous indicators. Constructing indicators in different ways damages the usefulness, comparability and reliability of these indicators and opens the door to “markets of excuses”.

The level of usefulness and difficulty in implementing environmental indicators vary depending on the service provided by the company. The future convergence of models should combine the development of a broad set of common indicators, with the characteristics of each industry.

These results have allowed us to conclude that sustainability disclosure aims to justify that the entity is doing the right to create public value, rather than providing useful information to build effective structures and robust governance. This shortcoming does not contribute to the development of collaborative networks to cope with crises in turbulent times.

This study highlights the lesson to be learnt by other LOEs, municipalities and all public entities which would probably be obliged to include this report in their integrated reporting in a near future. The experience of preparers in this study can be useful for policymakers to improve and reinforce the legislation in this area.

The main limitation of this research is that it focuses on the first years of the new NFR Spanish regulation and mandatory reporting for private and public sector companies, and because of this the sustainability disclosure was limited. Future research could improve the channels for cross-company comparisons also in the public sector.

Notes

[1] <https://www.hacienda.gob.es/es-ES/CDI/Paginas/Inventario/Inventario.aspx>

[2] <https://www.rendiciondecuentas.es/es/consultadeentidadesycuentas/buscarCuentas/>

[3] There is some additional guidance on the AECA website at <https://is@aece.es/>

Table I. Spanish LOEs which reported non-financial information in 2018 and/or 2019

Local Government	Enterprise	id	Year	Service provided
Madrid	Empresa Municipal de Transportes de Madrid, S.A. (EMT)	Madrid EMT	2018	Tranports
Madrid	Madrid Destino Cultura, Turismo y Negocio, S.A.	Madrid Destino	2018, 2019	Culture
Barcelona	Barcelona Activa SAU (SPM)	Barcelona Activa	2018, 2019	Employment
Barcelona	Barcelona de Servicios Municipales, SA (BSM)	Barcelona BSM	2018	Culture
Valencia	Empresa municipal de Transportes Urbans (EMT)	Valencia EMT	2019	Tranports
Sevilla	Empresa Limpieza Pública del Ayuntamiento de Sevilla S.A.M. (LIPASAM)	Sevilla LIPASAM	2018, 2019	Urban cleaning
Sevilla	Transportes Urbanos de Sevilla, SAM (TUSSAM)	Sevilla TUSSAM	2018, 2019	Tranports
Palma	Empresa municipal d'Aigües i Clavegueram, S.A. (EMAYA)	Palma EMAYA	2018, 2019	Water supply
Palma	Empresa municipal de Transportes Urbans (EMT)	Palma EMT	2018	Transportes
Las Palmas de Gran Canaria	Guaguas Municipales S.A.	Palmas Guaguas	2018, 2019	Transportes
Córdoba	Saneamientos de Córdoba, S.A. (SADECO)	Córdoba SADECO	2018	Waste collecting and treatment
Rivas- Vaciamadrid	Rivas-Vaciamadrid Empresa Municipal Servicios, S.A. (Rivamadrid)	Rivamadrid	2019	Municipally services

Source: Authors' elaboration.

Table II. Objectives of presenting Non-Financial Report

The objective of the Non-Financial Report of local-owned enterprises is to achieve an improvement in ...

	Round 1					Round 2				
	Mean	Totally disagree			Totally agree	Mean	Totally disagree			Totally agree
	1	2	3	4	5	1	2	3	4	5
1. ... The fair view of the activities carried out by the municipal company.	4.86			14%	86%					

2. ... The information provided to the citizens.	4.86				14%	86%						
3. ... The information provided to other Public Administrations.	4.86				14%	86%						
4. ... The information provided to suppliers.	4.86				14%	86%						
5. ... The fulfilment of the objectives of the company.	4.14			28%	29%	43%	4.00			29%	43%	29%
6. ... The information provided on the costs of the company.	3.86			14%	86%							

Source: Authors' elaboration.

Table III. Comparability of the NFR.

The Non-Financial Report facilitates the comparability of the information provided by the company, with respect to...

Round 1						Round 2					
Mean	Totally disagree				Totally agree	Mean	Totally disagree				Totally agree
	1	2	3	4	5		1	2	3	4	5

1. ... The information prepared by the company in previous years.	4.86				14%	86%						
2. ... The information of other similar municipal companies.	3.86		14%		71%	15%	4.00				100%	
3. ... The information of other municipal companies of different local administrations, by the local administration.	3.43		14%	29%	57%		3.71			29%	71%	
4. .. The information of other municipal companies of different local administrations, by the autonomous government.	3.43		14%	29%	57%		3.43		14%	29%	57%	
5. .. The information of other municipal companies of different local administrations, by the central government.	3.86			14%	86%							

Source: Authors' elaboration.

Table IV. Environmental indicators.

		Round 1							Round 2						
		Mean	Not at all	A Little	Neutral	Considerably	A Lot	No Answer	Mean	Not at all	A Little	Neutral	Considerably	A Lot	No Answer

ENVIRONMENTAL INDICATORS

Energy Efficiency and Emissions

KPI_E1	Utility	4.57				43%	57%		4.57				43%	57%	
	Difficulty	2.29	14%	57%	14%	15%			2.57		71%	14%		15%	
KPI_E2	Utility	4.50				43%	43%	14%	4.43				57%	43%	
	Difficulty	2.67	14%		43%	14%	14%	15%	2.71		71%		14%	14%	
KPI_E3	Utility	4.57				43%	57%		4.57				43%	57%	
	Difficulty	3.14		43%		57%			3.43		29%		71%		
KPI_E4	Utility	4.86				14%	86%								
	Difficulty	3.29		29%	14%	57%			3.29		29%	14%	57%		
KPI_E5	Utility	4.29		14%	29%	57%			4.29			14%	43%	43%	
	Difficulty	4.14		14%	43%	43%			4.00		14%		57%	29%	
KPI_E6	Utility	4.00		14%	14%	29%	43%		4.14			14%	57%	29%	
	Difficulty	4.14		14%		43%	43%		4.14		14%		43%	43%	

Waste management efficiency

KPI_E7	Utility	4.86				14%	86%								
	Difficulty	2.57	15%	57%		14%	14%		2.57		71%		29%		

KPI_E8	Utility	4.86				14%	86%								
	Difficulty	2.43	14%	57%		29%			2.43		71%	14%	15%		
KPI_E9	Utility	4.43			14%	29%	57%		4.29			14%	43%	43%	
	Difficulty	3.71		14%		86%									

Source: Authors' elaboration.

Table V. Section 4: Social indicators.

		Round 1							Round 2						
		Mean	Not at all	A Little	Neutral	Considerably	A Lot	No Answer	Mean	Not at all	A Little	Neutral	Considerably	A Lot	No Answer

SOCIAL INDICATORS

Human capital

KPI_S1	Utility	4.14				86%	14%								
	Difficulty	2.14		86%	14%										
KPI_S2	Utility	4.43				57%	43%		4.43				57%	43%	
	Difficulty	2.14		86%	14%										
KPI_S3	Utility	4.29			14%	43%	43%		4.43				57%	43%	
	Difficulty	2.14	14%	57%	29%				1.86	29%	57%	14%			
KPI_S4	Utility	4.00			29%	42%	29%		4.00			29%	42%	29%	
	Difficulty	2.71	14%	29%	43%		14%		2.00	29%	43%	28%			
KPI_S5	Utility	4.50				43%	43%	14%	4.43				57%	43%	
	Difficulty	2.33		57%	29%			14%	2.14	14%	57%	29%			
KPI_S6	Utility	4.29			14%	43%	43%		4.43				57%	43%	
	Difficulty	2.43		57%	43%				2.29		71%	29%			
KPI_S7	Utility	4.29	14%			43%	43%		4.43				57%	43%	
	Difficulty	2.43			43%	57%			2.29		57%	43%			

KPI_S8	Utility	4.29			14%	43%	43%		4.29			14%	43%	43%	
	Difficulty	2.29		71%	29%				2.29		71%	29%			
KPI_S9	Utility	4.29			14%	43%	43%		4.29			14%	43%	43%	
	Difficulty	2.86		14%	86%										
KPI_S10	Utility	4.71				14%	86%								
	Difficulty	2.71		43%	43%	14%			2.71		43%	43%	14%		
KPI_S11	Utility	4.14			14%	57%	29%		4.14			14%	57%	29%	
	Difficulty	2.43		57%	43%				2.43		57%	43%			
KPI_S12	Utility	3.71			43%	43%	14%		3.71			43%	43%	14%	
	Difficulty	2.14		86%	14%										
KPI_S13	Utility	4.14			14%	57%	29%		4.14			14%	57%	29%	
	Difficulty	2.00	14%	71%	14%				2.00	14%	71%	15%			
KPI_S14	Utility	4.33			14%	29%	43%	14%	4.14			14%	57%	29%	
	Difficulty	2.00	14%	57%	14%			15%	2.14			86%	14%		
KPI_S15	Utility	3.71		28%		43%	29%		3.71		28%		43%	29%	
	Difficulty	1.86	29%	57%	14%				1.86	29%	57%	14%			

Social Capital

KPI_S16	Utility	4.29				86%	14%								
	Difficulty	2.29		71%	29%				2.29		71%	29%			

KPI_S17	Utility	4.14			14%	57%	29%		4.29				71%	29%	
	Difficulty	2.57		71%	14%		15%		2.43		71%	14%	15%		
KPI_S18	Utility	3.33		29%	14%	29%	14%	14%	3.29	14%	14%	14%	43%	15%	
	Difficulty	3.83		14%	14%	29%	29%	14%	3.14	14%	29%	14%	14%	29%	
KPI_S19	Utility	4.43				57%	43%		4.43				57%	43%	
	Difficulty	2.14		86%	14%										

Human rights, fighting against corruption and bribery

KPI_S20	Utility	4.14				86%	14%								
	Difficulty	2.57		71%	14%		14%		2.43	14%	57%	14%	15%		
KPI_S21	Utility	4.14				86%	14%								
	Difficulty	2.57	14%	29%	29%	14%			2.57	14%	29%	43%	14%		
KPI_S22	Utility	3.83		14%	14%	29%	29%	14%	3.86		14%	14%	43%	29%	
	Difficulty	2.67		29%	43%			14%	2.71		29%	71%			
KPI_S23	Utility	4.14				86%	14%								
	Difficulty	2.00	14%	71%	14%				2.00	14%	71%	15%			
KPI_S24	Utility	4.14				86%	14%								
	Difficulty	2.29	14%	43%	43%				2.14	14%	57%	29%			

Source: Authors' elaboration.

Table VI. Section 5: Fair Corporative Governance indicators.

		Round 1							Round 2						
		Mean	Not at all	A Little	Neutral	Considerably	A Lot	No Answer	Mean	Not at all	A Little	Neutral	Considerably	A Lot	No Answer
FAIR CORPORATIVE GOVERNANCE															
KPI_CG1	Utility	3.29		14%	43%	43%			3.14		14%	57%	29%		
	Difficulty	1.86	29%	57%	14%				1.86	29%	57%	14%			
KPI_CG2	Utility	3.14		29%	29%	43%			3.00	14%	14%	29%	43%		
	Difficulty	2.14	14%	57%	29%				1.57	57%	29%	14%			
KPI_CG3	Utility	2.83	14%	14%	29%		29%	14%	3.14		14%	57%	29%		
	Difficulty	1.83	43%	14%	29%			14%	2.00	43%	14%	43%			
KPI_CG4	Utility	3.17		14%	42%	29%		15%	3.14		14%	57%	29%		
	Difficulty	2.00	29%	29%	28%			14%	2.00	29%	43%	28%			
KPI_CG5	Utility	3.50			43%	43%		14%	3.43			57%	43%		
	Difficulty	2.00	29%	29%	28%			14%	2.14	29%	28%	43%			
KPI_CG6	Utility	2.83	14%	14%	29%	29%		14%	2.86	14%	14%	43%	29%		
	Difficulty	2.00	29%	29%	28%			14%	2.14	29%	28%	43%			
KPI_CG7	Utility	3.17		29%	14%	43%		14%	3.00	14%	14%	29%	43%		
	Difficulty	1.83	29%	43%	14%			14%	1.86	43%	29%	28%			
KPI_CG8	Utility	3.86			14%	86%									
	Difficulty	1.86	29%	57%	14%				1.86	29%	57%	14%			

KPI_CG9	Utility	4.14				86%	14%								
	Difficulty	2.29	29%	43%	14%		14%		2.71	15%	43%	14%	14%	14%	
KPI_CG10	Utility	4.00			29%	29%	28%	14%	3.86			43%	29%	28%	
	Difficulty	2.17	29%	29%	14%		14%	14%	2.14	29%	43%	14%	14%		

Source: Authors' elaboration.

Appendix. Integrated Scoreboard: IRM- FESG from AECA

FINANCIAL INDICATORS

Code	Denomination	Definition	Observations	References
<i>Economic Efficiency</i>				
KPI_F1	Revenue	Total revenues of the year	Addition of all revenues coming from sales and services provided, work performed by the entity capitalized, increase (decrease) in inventories, from financial and non-financial investments and from selling intangible and tangible assets.	(GRI) 1(UNCTAD-ISAR) Taxonomy IFRS 2011: IAS 1, IAS 18, IAS 28, IAS 31, IFRS 8, IAS 26, IAS 29
KPI_F2	Suppliers' expenses	Expenses related to purchases and services	Expenses related to purchase by suppliers and other operations.	(GRI) 4(UNCTAD-ISAR) Taxonomy IFRS 2011: IAS 1
KPI_F3	Added value	Addition of outflows to all stakeholders.	Revenue suppliers' expenses	
KPI_F4	Employee benefits	Expenses related to employee compensation.	Employee expenses.	(GRI) 6(UNCTAD-ISAR) Taxonomy IFRS 2011: IAS 1
KPI_F5	EBITDA	Earnings Before Interest, Taxes, Depreciation and Amortization	Addition of profit or loss after taxes, plus financial expenses income taxes and depreciation-amortization.	
KPI_F6	Financial expenses	Financial costs.	Expenses related to liabilities.	Taxonomy IFRS 2011: IAS 1
KPI_F7	Owners' retribution	Dividends to owners/ investors (dividends to all shareholders)	Dividends and similar retribution to investors, as proposal from Management Board to Shareholders.	(GRI) Taxonomy IFRS 2011: IAS 1, IAS 10
KPI_F8	Income taxes	Income taxes	Income taxes registered as expense.	(GRI) 14(UNCTAD-ISAR) Taxonomy IFRS 2011: IAS12 Taxonomy IFRS 2011: IAS 7 Law 11/2018, Article One section Two
KPI_F9	Economic contribution to the community	Donations and financial help, of altruist character	Amount of contribution payments to the community	(GRI) 15(UNCTAD-ISAR)
KPI_F10	Total contribution to Public Administration	Payments to public agencies.	Total payments to public agencies.	
KPI_F11	I+D+I Investment	Economic contribution to research, development and innovation activities.	Total expenses and increase of assets related to research, development and innovation activities.	Taxonomy IFRS 2011: IAS 38
KPI_F12	Total investment	Net increase of assets	Net increase of total assets	Taxonomy IFRS 2011: IAS 7
KPI_F13	Profitability	Return on assets	Profit (loss) of the year/Equity	Taxonomy IFRS 2011:

				Profit or loss after tax in IFRS: IAS 1, IAS 28, IAS 7 IFRS 1 IFRS 8 Equity IFRS: IAS 1, IFRS 1
KPI_F14	Level of debts	Level of debt at the end of the year, divided by equity	Current and noncurrent liabilities/ Equity	Taxonomy IFRS 2011: Current and non-current debt IFRS: IAS 1 IAS 31 Equity IFRS: IAS 1, IFRS 1
KPI_F15	Treasury shares	Book value of treasury shares	Treasury shares/ Equity	Taxonomy IFRS 2011: Own actions IFRS: IAS 1, IAS 32 Equity IFRS: IAS 1, IFRS 1
KPI_F16	Grants	Public subsidies received	Amount of public funding received	Law 11/2018, Article One section Two Taxonomy IFRS 2011: IAS 7
KPI_F17	Environmentally sustainable investment	Annual net investment in environmentally sustainable assets	Net increase in assets, payments made	Regulation (EU) 2020/852 of the European Parliament and of the council
KPI_F18	Socially responsible investment	Annual net investment in responsible sustainable assets	Net increase in assets, payments made	EU overview sustainable finance and European Green Deal Dec. 2019

ENVIRONMENTAL INDICATORS

Code	Denomination	Definition	Observations	
<i>Energy Efficiency and Emissions</i>				
KPI_E1	Energy consumption	Direct energy consumption in gigajoules (GJ)	GJ of energy consumption	CDP 2018 (C8.2), (GRI), IC (UNCTAD-ISAR)
KPI_E2	Water consumption	Water consumption in cubic meters (m3)	Water consumption in cubic meters (m3)	GRI), IA (UNCTAD-ISAR)
KPI_E3	Polluting emissions Scope 1	Greenhouse gases emissions, directly deductible from energy consumption	Direct greenhouse gasses in CO2 equivalent tons	CDP 2018 (C6.1)
KPI_E4	Polluting emissions Scope 2	Greenhouse gases emissions, indirectly deductible from energy consumption	Indirect greenhouse gasses in CO2 equivalent tons	CDP 2018 (C6.3)
KPI_E5	Transportation emissions and distribution in Upstream activities Scope 3	Total emissions generated by transport	Sum of transmission and distribution emissions in Upstream activities in equivalent tons of CO2	CDP 2018, (C4.1b)
KPI_E6	Transportation emissions and distribution in		Sum of transmission and distribution emissions in - Downstream activities in equivalent tons of CO2	CDP 2018, (C4.1b)

	Downstream activities Scope 3	Total emissions generated from transport		
Waste Management Efficiency				
KPI_E7	Waste generation	Waste generation, hazardous and nonhazardous	Waste generation in tons	(GRI) IE (UNCTAD- ISAR)
KPI_E8	Waste processed	Waste processed; over total residues generated	Tons of waste processed	(GRI)
KPI_E9	Recovered waste	Waste recovered	Waste recovered in tons	
SOCIAL INDICATORS				
Code	Denomination	Definition	Observations	
Human capital				
KPI_S1	Employees	Employees with a labor contract	Number of employees with a contract at year end	(GRI) 5 (UNCTAD- ISAR)
KPI_S2	Gender diversity of employees	Women with a labor contract	Number of women with a contract at the year	(GRI)
KPI_S3	Top management positions	Employees with a labor contract in top management positions	Number of employees with a contract in top management positions, at year end	
KPI_S4	Gender diversity of top employees	Women with a labor contract in top management positions	Number of women with a contract in top management positions, at year end	
KPI_S5	Job stability	Employees with a permanent contract	Number of employees with a permanent contract	(GRI) 5 (UNCTAD- ISAR)
KPI_S6	Right to paternity leave	Male employees on paternity leave	Number of male employees on paternity leave during the year	ISO 26000 Section 6.4.4
KPI_S7	Right to maternity leave	Female employees on maternity leave	Number of female employees on maternity leave	ISO 26000 Section 6.4.4
KPI_S8	Disability	Employees with disabilities	Number of employees who have a recognized degree of disability at the end of the year	OECD Guidelines for Enterprises Multinationals (Chapter V, paragraph 58)
KPI_S9	Occupational risk	Employees who participate in work activities considered high risk	Number of employees who participate in work activities considered high risk by potential occupational accidents or illnesses	ISO 26000 Section 6.4.6 and Declaration tripartite principles on enterprises multinationals and ILO social policy, paragraph 43.
KPI_S10	Absentee	Lost days due to any cause	Number of days lost by absentee due to any reason life-work related injury or disease or for non- professional reasons for all the employees during the reporting period	
KPI_S11	Employee turnover	Employees who abandon the organization	Total number of employees leaving employment during the reporting period	(GRI) 7 (UNCTAD- ISAR)
KPI_S12	Net employment	Employment generation or destruction	New contracts- employee turnover	
KPI_S13	Seniority	Years of performance in the company	Average number of years of permanence of all employees	
KPI_S14	Employee training	Training received by the employees	Number of training hours for the year	(GRI) 10 (UNCTAD- ISAR)
KPI_S15	Employees under collective agreement	Percentage of employees	Number of employees	Ley 11/2018

		working from a collective agreement		
Social capital				
KPI_S16	Legal regulation concerning customers	Number of incidents of noncompliance with regulation concerning customers	Incidents of noncompliance with regulations resulting in a fine penalty	(GRI)
KPI_S17	Supply chain	Incidents in suppliers	Number of complaints due to incidents with suppliers	(OCDE)
KPI_S18	Suppliers, application of policy on supplier relations	Vendor due diligence on supplier relations	Number of suppliers that apply a due diligence policy regarding conflict zones	OECD Guidelines on Diligence due for the responsible management of the mineral supply chains from conflict-affected areas and high-risk areas (3rd Edition) (ANNEX I Five-Step Framework for Risk-Based Due Diligence in the Mineral Supply Chain)
KPI_S19	Payment to suppliers	Average invoices payment period	Average number of days between invoice dates and payment dates	
Human rights, fighting against corruption and bribery				
KPI_S20	Respect from human rights	Incidents concerning the respect of human rights as a consequence of the actions of the company	Number of incidents during the year	GUIDING PRINCIPLES ON ENTERPRISE AND THE HUMAN RIGHTS OF NATIONS UNITED (PRINCIPLE N° 15)
KPI_S21	Actions in defense for human rights	Initiatives implemented to mitigate the negative effects on human rights that the company may have caused	Number of actions and measures	GUIDING PRINCIPLES ON ENTERPRISE AND THE HUMAN RIGHTS OF NATIONS UNITED (PRINCIPLE N° 15)
KPI_S22	Training for fighting against corruption and bribery	Training to employees on fighting against corruption and bribery	Number of training hours received by employees	OECD Guidelines for Enterprises Multinationals (Chapter VII, paragraph 6)
KPI_S23	Irregularities in terms of corruption and bribery	Incidents and complaints of irregularities about corruption and bribery.	Number of incidents and complaints received regarding corruption and bribery	OECD Guidelines for Enterprises Multinationals (Chapter VII, paragraph 2)
KPI_S24	Proceedings in cases of corruption and bribery	Initiatives in the fighting against corruption and bribery	Number of actions and measures	OECD Guidelines for Enterprises

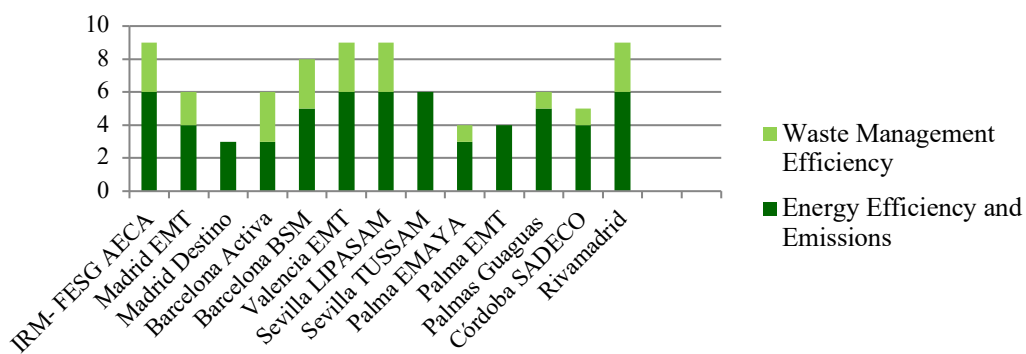
				Multinationals (Chapter VII, paragraph 2)
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CORPORATE GOVERNANCE INDICATORS

Code	Denomination	Definition	Observations	
KPI_CG1	Board members	Number of board members	Number of board members	IAGC (CNMV)
KPI_CG2	Independent board members	Number of independent board members	Number of independent board members	IAGC (CNMV)
KPI_CG3	CRS board members	Number of independent board members with specific responsibility regarding CSR issues	Number of independent boards with specific responsibility regarding CSR issues regardless if they form a CSR committee or not	RSC\$ (AECA)
KPI_CG4	Executive committee	Number of members of Executive Committee	Number of members of Executive Committee	IAGC (CNMV)
KPI_CG5	Audit Committee	Number of members of Audit Committee	The Audit Committee is responsible for controlling and monitoring of external and internal auditors	IAGC (CNMV)
KPI_CG6	Nominations Committee	Number of members of Nominations Committee	Number of Nomination Committee members	IAGC (CNMV)
KPI_CG7	Meeting of the Board	Number of meetings of the Board	Number of meetings by the Board annually	IAGC(CNMV)
KPI_CG8	Total remuneration of the Board	Board remuneration costs	Remuneration paid to board members	IAGC(CNMV)
KPI_CG9	Gender diversity on Management Board	Women with a labor contract that have a position in the Management	Number of women at the Management level	LA13 (GRI 3.1)
KPI_CG10	Corruption and bribery	Cases of corruption and bribery on Management Board	Number of incidents of corruption and bribery cases	

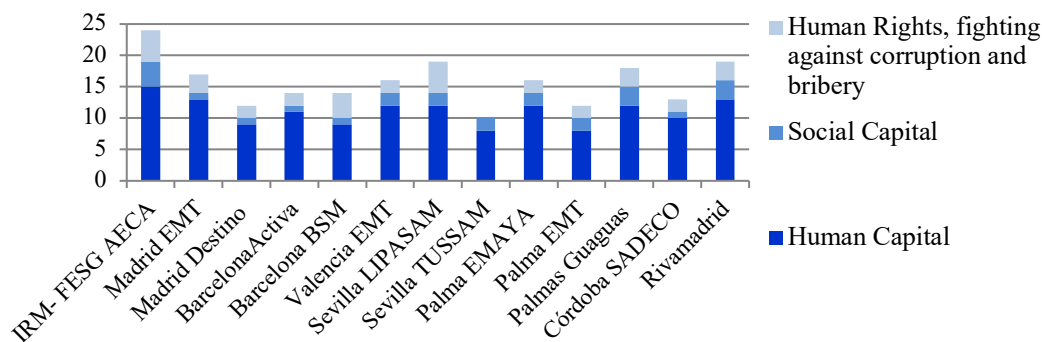
Source: Authors' adaptation of AECA Integrated Suite (<https://is.aeca.es/suite/#/home>)

Graph I Environmental indicators reported by company.



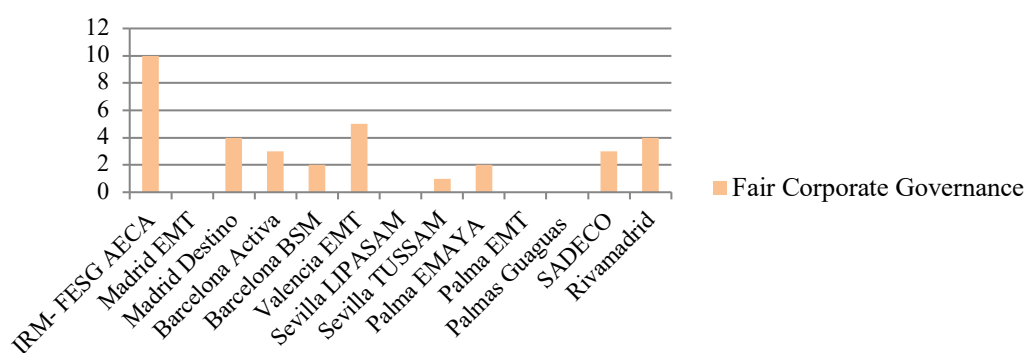
Source: Authors' elaboration.

Graph II. Social indicators reported by company.



Source: Authors' elaboration.

Graph III. Governance corporate indicators reported by company.



Source: Authors' elaboration.

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