



# How do organisations communicate aspects related to their social performance? A proposed set of indicators and metrics for sustainability reporting

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## ABSTRACT

The aim of this study is to determine whether it is possible to calculate indicators capable of measuring the social performance of organisations from the information that they are currently communicating in their sustainability reports (SR). To this end, a three-step methodology is proposed and applied to a case study. As a starting point, 11 frameworks to measure the social performance at the organisational level have been reviewed and the indicators of each of them were identified, classified and grouped into a common set of categories. Then, the social information communicated in a representative sample of SR was identified. As a result, 42 indicators grouped into 9 categories have been proposed. For each of them, a set of metrics and units were also proposed, based on the information that organisations commonly use in their SR. Finally, the set of indicators were applied to a Spanish organisation belonging to the energy utilities sector. This study helps to assess and improve the social performance of organisations by providing them with a clear guide on how to measure and track it using data that they already communicate in their SR.

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## 1. Introduction

Within the framework of the implementation of the Sustainable Development Goals (SDG) in the context of the 2030 Agenda (United Nations, 2015), there are numerous initiatives to promote the transition of organisations towards more sustainable models (European Commission, 2020). The European Economic and Social Committee (EESC) defines the sustainable economy as a new model of economy based on proximity, social action and solidarity that, in addition to generating employment and wealth, favours social well-being and territorial balance (EESC, 2020). As a consequence of this regulatory framework, improving the social performance of companies has been attracting increasing attention in recent decades due to the greater awareness of organisations and society of the importance of creating value by boosting business practices focused on the achievement of the SDG.

According to KPMG (2020) and Carmo and Miguéis (2022), there have been some changes in the way companies report sustainability, that is moving from using a section in the annual report to issuing stand-alone sustainability reports (SR). This fact is more remarkable since the entry into force of the Directive 2014/95/EU (European Commission, 2014;

Carmo and Ribeiro, 2022), which promotes the dissemination of non-financial information of organisations related to their social aspects in addition to the environmental ones. To this end, different frameworks have been developed in recent years, such as the Social Responsibility Guide (ISO 26000, 2010), Global Report Initiative (GRI, 2019), Economy of the Common Good (ECG, 2017), UNEP-SETAC (UNEP, 2020) or AA1000 (2018). Of them, the GRI (2019) is the one most used to communicate organisational information related to the environmental and social performance (Hamad et al., 2020; Istudor and Suci, 2020; Maia et al., 2021; Thijssens et al., 2016). In fact, as Karaman et al. (2021) concluded, reports based on the GRI (2019) framework were more likely to obtain external assurance because of the better quality of the process and guidance.

These frameworks propose guidelines for selecting and measuring sustainability indicators. However, the weight and indicators given to each of the pillars of sustainability (economic, environmental and social) differs greatly from one SR to another, with the social dimension being the least developed, as concluded by Alejandrino et al. (2022, 2021) or Calzolari et al. (2022). This fact was also noted in tools capable of measuring, monitoring and communicating the level of circularity of organisations (Valls-Val et al., 2022), where social performance was considered only in 60 % of the tools and with <20 % of the questions/indicators.

In addition, a lack of homogeneity in the way that information is communicated in the SR is clearly observed, both in the content, format or

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**Table 1**  
Literature specifically focused on analysing social information content disclosed in SR.

Reference	Reviewed sample (# SR)	Framework	Sector	Country	Year	Eco	Env	Soc	Social categories/indicators	Global social indicator	Metric analysis
Ackers and Grobbelaar (2022)	18	GRI G4	Mining	South Africa	2012–2015	x	x	x	Employee health and safety Human rights	No	No
Badrul Muttakin et al. (2022)	728	GRI G3	Various	Australia	2007–2014	x		x	Community engagement Political donations	No	No
Cubilla-Montilla et al. (2019)	201	GRI G4	Various	Various	2015			x	Board gender diversity Corporate social responsibility Labour practices and decent work Human rights	No	No
Gallego (2006)	19	GRI	Various	Spain	2002 and 2003	x	x	x	Product responsibility Labour practices and decent work Human rights	No	No
Gunawan et al. (2021)	21	GRI G3, G3.1, G4 and Standards	Banking sector	Indonesia	2009–2017	x	x	x	Product responsibility Labour practices and decent work Human rights	No	No
Habbash (2016)	267	ISO 26000	Various	Saudi Arabia		x		x	Product responsibility Board independence Role duality	No	No
Hasudungan and Bhinekawati (2022)	25	n/a	Various	Indonesia	2019	x		x	Government ownership Institutional ownership Family ownership	No	No
Loh and Tan (2020)	100	GRI Standards	Various	Singapore	2016–2018	x	x	x	Equity Human rights Community involvement (society)	Social Average	No
Lu et al. (2016)	50	n/a	Construction	Worldwide	2008–2012	x	x	x	Product responsibility Diversity and equal opportunity Occupational health and safety Training and education Labour and industrial relations Philanthropy Community Code of conduct/ethic Anti-corruption	No	No

Moufity et al. (2022)	483	n/a	Banking	USA-Europe	2006–2012	x	x	x	Anti-competitive behaviour Diversity and equal opportunities Training and education Occupational health and safety Work-life balance (PR) customer health and safety/quality (PR) product and service labelling Media Intra-corporate Reported to markets Health and safety Impact of communities Employee benefits/information Labour relations Labour training and education Compliance with social laws Human right policies Child and compulsory labour Corruption	Direct social index Indirect social index ESG score	No
Munshi and Dutta (2016)	20	GRI	Various	India & America	2011–13	x	x	x	n/a	Disclosure Index	No
Pacheco et al. (2020)	33	GRI Standards	Universities	Ecuador	2017	x	x	x	n/a	Social	No
Putri et al. (2020)	28	GRI G4	Various	Indonesia	2016 and 2017	x	x	x	Labour practices and decent work Human rights Society	No	No
Shimizu et al. (2022)	2172	GRI/ISO 26000	Various	Japan	2012 and 2020	x	x	x	Product responsibility Occupational safety and health	ESG score	No
Slacik and Greiling (2020)	186	GRI G4	Electric utilities	Various	2013–2017	x	x	x	Labour practices and decent work Human rights Society	No	No
Tarquino et al. (2018)	134	GRI G3 or G3.1	Various	Italy, Spain & Greece	2012	x	x	x	Product Responsibility Labour practices and decent work Human rights Society	No	No
Vacca et al. (2020)	168	GRI Standards	Various	Italy	2018	x	x	x	Product Responsibility	No	No
Yakar Pritchard and Çaliyurt (2021)	168	GRI G4	Cooperatives (38 sectors)	Various	2019	x	x	x	Labour practices and decent work Human rights Society	Social Performance (Overall)	No

n/a: not available

indicators (Adams and Frost, 2008; CNMV, 2018; Contreras-Pacheco and Claasen, 2017; Fonseca et al., 2014; Maia et al., 2021; Roca and Searcy, 2012). Some progress has been made in this regard (Hahn and Kühnen, 2013) with the aim of identifying communication patterns (Putri et al., 2020) or gaps in the information disclosed (Tarquinio et al., 2018). However, as Ackers and Grobbelaar (2022), Deegan (2017) and Sihvonen and Partanen (2017) highlight, more efforts should be done to reduce the ambiguity and to improve the consistency and comparability of the SR.

Considering the above and in accordance with Litfin et al. (2017) and Dumay et al. (2016), it can be stated that SR should be prepared to include the information needed by stakeholders when evaluating the organisation’s social performance and should better guide the reader, since the heterogeneity in the dissemination of indicators makes it difficult to objectively compare the behaviour of organisations. A clear and standardised set of indicators capable of quantifying/qualifying and evaluating the social performance of organisations and their progress over time is essential. This set of indicators will have an important positive impact at the social and business level, by improving firms’ reputation and organisational commitment to sustainability (Berrone, 2016).

In this context, the aim of this study is threefold. On the one hand, it intends to determine what indicators are being proposed to assess the social performance of organisations by different international frameworks. On the other hand, it aims to analyse the social information that organisations are currently communicating through their SR in order to identify the indicators and metrics/units used for that purpose. Finally, the joint analysis of this information will be used as the basis to propose a set of indicators and metrics that allow measurement of the advance of organisations towards their social sustainability.

To fulfill this objective, three research questions (RQ) were formulated:

- RQ1: What indicators can be used to measure the social performance of organisations?
- RQ2: What are organisations communicating in their SR related to their social performance?
- RQ3: Is it possible to calculate social indicators with the information that organisations are currently communicating in their SR?

To fulfill this objective and answer the RQ, this paper is structured as follows: Section 2 explores the background related to the communication of social indicators in SR, Section 3 depicts a three-stages methodology used to conduct the study, including its application to a case study. Section 4 presents the results that are discussed in Section 5, and lastly, Section 6 draws some final conclusions.

## 2. Background

To have an initial overview of the reporting practices that organisations are currently carrying out, a literature review concerning the social information disclosed in SR was conducted. The Scopus database was used to search for articles with the strings “sustainability report”, “social indicator” and “SR” within the title, keywords or abstract of the article. Of the articles found, those focused on reviewing the social information disclosed in SR were selected. The content of the articles reported in Table 1 was then analysed in depth with the aim of identifying the number of SR considered and the sector and country to which they belong, the framework used to disclose the social information, whether other sustainability aspects are analysed in addition to the social one and, finally, the information related to the social information (category, indicators and metrics/units used for each indicator).

As can be observed in Table 1, information from 18 review articles, reviewing a total of 4821 SR, was analysed. They have been published in the last decade (mainly, last three years) and belong to a variety of sectors (both industrial and service) worldwide. All of them are mainly based on different versions of GRI Standards (GRI, 2019) and to a lesser extent on ISO 26000 (2010). It is also noticeable that the vast majority of the research reviewed is based on the content analysis technique (Krippendorff, 2012).

Regarding the dimensions of sustainability, except for Cubilla-Montilla et al. (2019), Vacca et al. (2020) and Shimizu et al. (2022), which are focused only on the social one, the remaining articles reviewed all consider the social dimension together with the environmental and/or economic one. However, as Slacik and Greiling (2020) concluded, the social information in SR is still underrepresented compared to that concerning environmental and economic aspects. In addition, it is mainly related only to four main categories: labour practices and decent work, human rights, health and safety or society and product responsibility.

A number of deficiencies in the social information disclosure practices of SR have been noted by several authors. For example, Cubilla-Montilla et al. (2019) evidenced that considerably less social information is disclosed than that recommended by GRI (2019), which limits its usefulness in decision-making processes. Loh and Tan (2020), who analysed the SR of a leading brand in Singapore, revealed poor performance on environmental and social indicators and highlighted the need for organisations to take responsibility for the environmental and social impact in their supply chain so as to increase the investors’ and stakeholders’ trust. Tarquinio et al. (2018) explored the indicators disclosed in the GRI-based SR by companies in Italy, Spain and Greece and noted that the least reported indicators are social ones, and especially those related to

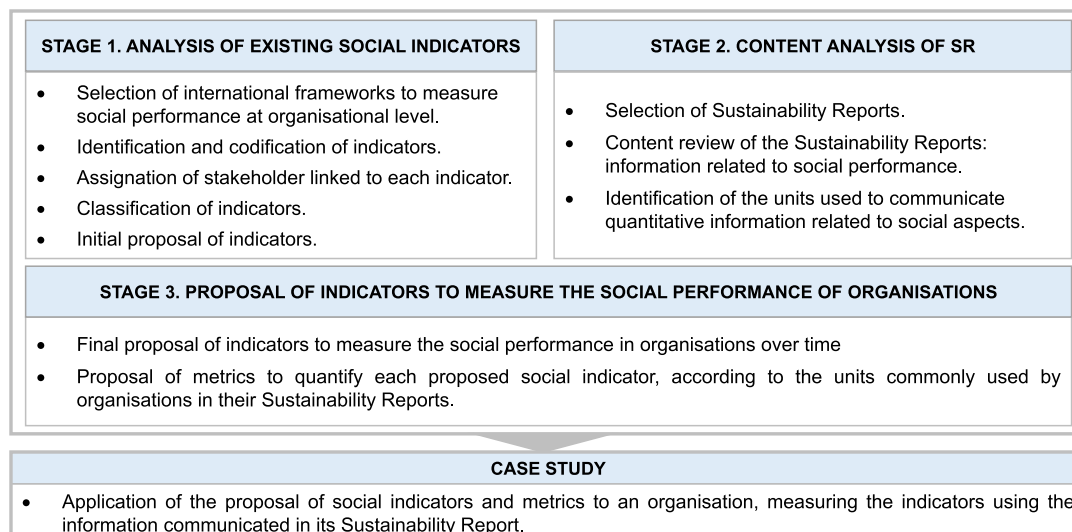


Fig. 1. Methodological approach.

**Table 2**  
Information about the eleven frameworks reviewed.

Framework	Year	Scope	# indicators
ISO 26000 (2010)	2012	Organisations	36
UNEP (2020)	2020	Products/organisations	40
OECD (2018)	2018	Organisations	16
COP (2019)	2019	Organisations	10
European Commission (2014)	2014	Organisations	15
ECG (2017)	2020	Organisations	60
The German Sustainability Code (2014)	2014	Organisations	20
AA1000 (2018)	2018	Organisations	4
SA 8000 (2014)	2014	Organisations	9
United Nations (2011)	2011	Organisations	4
GRI (2019)	2021	Organisations	59
		Total	273

The indicators included in the series 1XX – 2XX – 4XX that affect the social part were taken from GRI.

Human Rights. Contreras-Pacheco and Claasen (2017) also observed that the information provided in the SR related to social performance was not homogeneous and it was usually presented in a fuzzy way due to the lack of standardisation. Gallego (2006), Pacheco et al. (2020) and Putri et al. (2020) also highlighted significant differences among sectors when social information was disclosed, identifying the financial services sector as the one that communicates the most social information (Yakar Pritchard and Çalyurt, 2021). However, according to Ibáñez-Forés et al. (2022) the content analysis of SR belonging to Spanish organisations can therefore be considered an appropriate starting point to assess whether organisations are currently communicating information about their sustainability, since Spain was identified by Tarquinio et al. (2018) as one of the European countries that elaborate the highest quality reports.

In general, the aggregation approach to obtain a unique indicator to measure and communicate the social performance of the organisation is not applied. Only Loh and Tan (2020), Moufty et al.

**Table 3**  
Initial proposal set of indicators based on the eleven frameworks reviewed.

Initial proposed set of indicators			Reviewed frameworks - no. of indicators directly related to the proposed indicator										
Category	Indicator	Stakeholder <sup>a</sup>	ISO 26000	UNEP-SETAC	OCDE	COP	D. 2014 95 EU	ECG	GSC	AA1000	SA 8000	UN	GRI
Sustainable management	Materiality	OF	0	0	0	0	0	0	1	1	0	0	3
	Management approach/systems	WO	0	0	0	0	0	0	5	0	1	0	1
	Ethical management of inbound and outbound financial resources	OF	0	1	0	0	0	7	0	0	0	0	1
	Fair competition and cooperation between organisations	CC	2	2	0	0	0	4	0	0	0	0	1
	Selection of suppliers based on sustainability criteria and impacts on the supply chain	SU	1	2	0	0	0	4	2	0	0	0	2
Equal opportunities	Gender equality politics	WO	0	0	0	0	1	0	0	0	0	0	0
	Code of conduct	WO	0	1	0	0	0	0	0	0	1	1	1
	Cohesion and salary justice	WO	1	1	0	0	1	1	1	0	1	0	2
	Temporary employment	WO	1	0	0	0	0	3	0	0	0	0	1
	Discrimination or harassment	WO	3	2	1	1	1	0	1	0	1	0	1
Labour rights	Diversity in jobs	WO	0	0	0	0	0	1	0	0	0	0	1
	General employment conditions and rights	WO	2	2	0	0	1	4	1	0	1	0	1
	Freedom of association and collective bargaining	WO	2	1	1	1	3	1	0	0	1	0	2
	Communication and consultation between levels of the organisation	WO	2	1	0	0	2	1	0	1	0	0	2
	Participation of the employees in decision-making	WO	0	0	0	0	1	2	0	1	0	0	0
Internal social benefits	Work-life balance	WO	1	0	0	0	0	2	0	0	0	0	1
	Benefits offered to employees (health insurance, pension plan, food, mobility, etc.)	WO	0	1	0	0	0	2	0	0	0	0	1
Training programmes	Generic employee's training	WO	1	0	0	0	0	2	0	0	0	0	2
	Health and safety training	WO	2	0	0	0	0	1	0	0	1	0	2
	Human rights training	WO	0	0	0	0	0	0	0	0	0	0	1
	Anti-bribery training	WO	0	0	0	0	0	0	0	0	0	0	1
	Employee performance evaluation	WO	0	0	0	0	0	0	0	0	0	0	1
Health and safety	Health and safety (generic)	WO	0	1	0	0	1	0	0	0	0	0	0
	Health and safety management system	WO	1	0	0	0	0	0	0	0	0	0	2
	Identification of hazards at work and risk analysis	WO	1	0	1	0	0	1	0	0	1	0	4
	Preventive measures to improve health and safety	WO	1	0	0	0	0	0	1	0	1	0	1
	Health and safety protection (customers and society)	CC/SE	2	2	2	0	1	0	0	0	0	0	2
Human rights	Protection of human rights	SU/WO/CC/SE	4	2	1	2	1	2	1	0	1	3	4
	Child labour	WO	2	1	0	1	1	0	0	0	1	0	1
	Forced or compulsory labour	WO	1	1	0	1	1	0	0	0	1	0	1
Sustainability external actions	Impact on sustainability	SE	0	0	0	0	0	5	2	0	0	0	0
	Investment in local action	SE	7	6	0	0	1	1	1	0	0	0	4
	Location under consideration of local protection (heritage, people, living conditions, resources ...)	SE	0	6	0	0	0	0	0	0	0	0	1
	Ensuring sustainable consumption	CC	3	0	0	0	0	2	0	0	0	0	0
Transparency	Good environmental and impact reduction practices	SE/CC	4	2	3	3	4	9	3	1	0	0	1
	Transparency actions	SU/WO/CC/SE	0	1	1	0	0	5	0	1	0	0	0
	Communication and consultation with society and customers	SE/CC	2	1	0	0	0	3	1	0	0	0	2
	Good marketing practices and labelling	CC	2	1	1	0	0	4	0	0	0	0	3
	Bribery	SE	2	1	5	1	1	2	2	0	0	0	4
Consumer privacy	CC	1	1	0	0	0	0	0	0	0	0	1	

<sup>a</sup> Stakeholders considered based on ECG (2017): SU – Suppliers; OF – Owners and financial suppliers; WO – Workers; CC – Customers and other companies; SE – Social environment and, finally, EN – Environment.

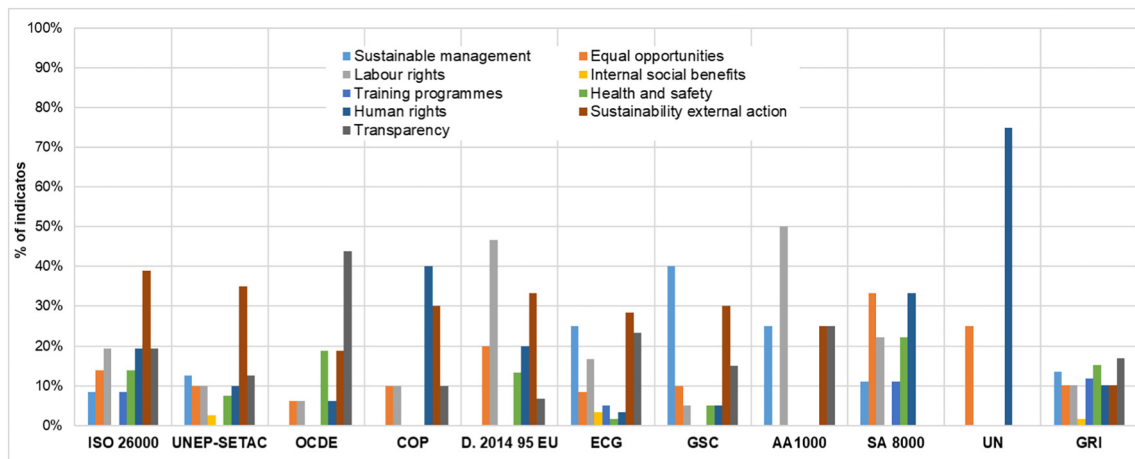


Fig. 2. Classification of indicators of the frameworks reviewed in the proposed categories.

(2022), Munshi and Dutta (2016), Shimizu et al. (2022) and Yakar Pritchard and Çalıyurt (2021) applied it. However, this practice have been widely questioned in the literature due to the requirement of normalisation and weighting techniques (Badinger and Reuter, 2015), which are commonly associated with high uncertainty and subjectivity (Brüggemann et al., 2006).

### 3. Methodology

The methodology shown in Fig. 1 was proposed with a view to selecting indicators and metrics to facilitate the communication of the social performance of organisations by interrelating indicators proposed by internationally accepted social frameworks and social information communicated by organisations in their SR.

In **Stage 1**, indicators proposed by international social frameworks (ISO 26000, 2010; UNEP-SETAC, 2020; OECD, 2018; COP, 2019; European Commission, 2014; ECG, 2017; AA1000, 2018; SA 8000, 2014; United Nations, 2011; GRI, 2019, etc.) were identified and classified with the aim of defining a common set of categories and a common nomenclature.

**Stage 2** was focused on identifying and classifying, according to the previously selected categories, the social information (qualitative/quantitative) disclosed in SR analysis. For this purpose, on one hand, public/private databases were used to select the analysed SR (e.g.: Corporate Register, 2020; Datamaran, 2021; GRI Database, 2021; United Nations Global Compact, 2021). On the other hand, an exhaustive content analysis of the SR selected were performed to identify the information related to social performance included in them. During the information extraction phase, SR were read in their entirety in order to identify both declarative information related to social issues (qualitative information) and social indicators reported through numerical or graphical data (quantitative information). The information extracted was codified and then organised using an Excel spreadsheet. Note that a keyword-based final check was carried out to ensure that all the relevant information was gathered from all the SR. Lastly, an assessment of the social information was done to identify the units and metrics most commonly used to communicate qualitative and quantitative social data. The specific physical magnitudes and generic units most commonly used to disclose each social aspect were also identified.

Information obtained in these previous two stages was jointly analysed in **Stage 3** to propose a set of indicators and metrics to measure the social performance using information that organisations already communicate in their SR.

Finally, this proposal was applied to a **case study** to assess whether it is possible to measure (qualitative/quantitatively) the social indicators

proposed in Stage III with the information included in the company's SR, that is to say, to test the applicability of the proposal and the methodology developed. Additionally, recommendations or best reporting practices that could be applied to ensure that SRs communicate all the aspects considered relevant for measuring the social performance of the organisation were established.

### 4. Results

#### 4.1. Stage 1. Analysis of existing social indicators

The frameworks reported in Table 2, which propose indicators to measure the social performance of organisations, were selected, mainly based on the recommendations of Directive 2014/95/UE (European Commission, 2014).

A total of 273 indicators were identified in the 11 frameworks selected. The indicators considered by each of them are detailed in the Supplementary material (Tables S1–S11).

It should be noted that there is no homogeneity in the number of indicators proposed by each framework, which range from 4 indicators in United Nations (2011) or AA1000 (2018) to 59/60 in GRI (2019) and ECG (2017), respectively.

As each framework groups its indicators based on its own structure, a proposal for 9 common categories was put forward to classify the 273 indicators. The proposed categories reported in Table 3 cover social issues related to employees, respect for human rights, sustainability and fight against corruption and bribery to increase the companies' transparency. After this classification, duplications were eliminated and nomenclature unified until converging in a proposal of the 40 indicators also reported in Table 3, together with the stakeholder involved. The classification of the indicators of each framework in the proposed categories is reported in detail in the Supplementary material (Table S12).

Fig. 2 shows the classification of the indicators of the frameworks in each of the proposed categories. The results show that, on the one hand, the *Sustainability external actions* category includes the largest number of indicators (25%), followed by the *Sustainable management* and *Labour rights* categories, each of them including 15% of the indicators. On the other hand, the categories of *Internal social benefits* and *Training programmes* include only 1% and 5% of the indicators, respectively. This suggests that there are some social aspects, for example those related to *Internal social benefits*, such as diets or transport covered by the organisation, or retirement plans, which are barely considered in the frameworks analysed, but are

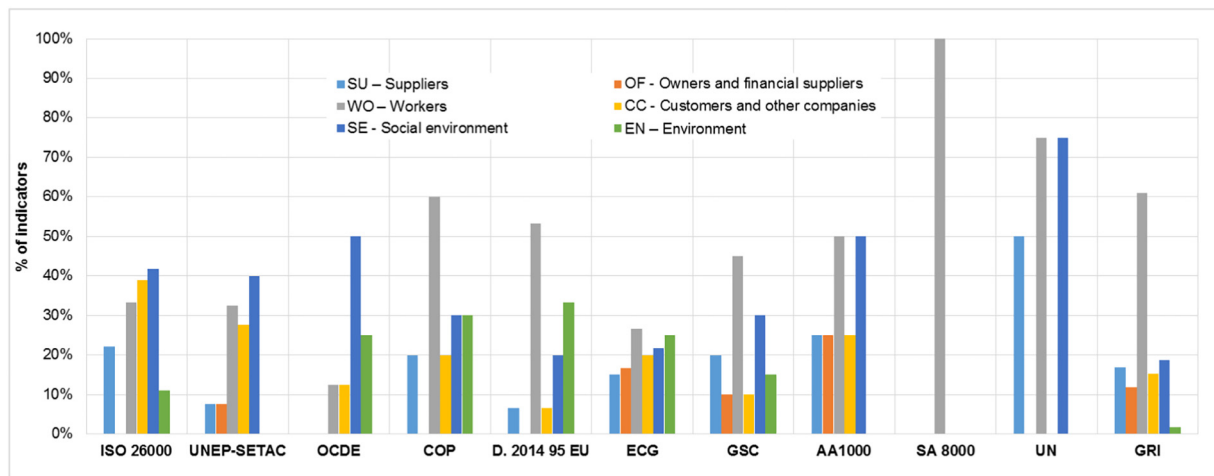


Fig. 3. Classification of indicators according to the stakeholder involved.

necessary for analysing the social performance at the organisational context.

Analysing the variety of indicators by framework, Fig. 2 shows that the only two frameworks that cover all the proposed categories are ECG (2017) and GRI (2019). Moreover, it is observed that the only three frameworks that propose indicators related to the *Internal social benefits* category are UNEP-SETAC (2020), ECG (2017) and GRI (2019).

In addition, there are differences within the proportion of indicators of each category included in each framework. For example, 39 % of the indicators in ISO 26000 (2010) are related to the *Sustainability external actions* category, while it does not propose any indicator related to the *Internal social benefits* category. Similarly, 50 % of the indicators proposed in AA1000 (2018) are related to the *Labour Rights* category, while 6 of the 9 categories proposed are left uncovered.

Next, Fig. 3 shows the classification of the 273 indicators according to the stakeholders involved.

As can be seen, all the frameworks analysed include indicators focused on *Workers*, which is the only stakeholder present in all the frameworks. Next, the *Social Environment* stakeholder is present in almost every framework, except for SA 8000 (2014). Conversely, only 40 % of the frameworks analysed include indicators related to *Owners and financial suppliers*, which is the stakeholder least considered or affected by the indicators and frameworks analysed.

#### 4.2. Sustainability Reports analysis

To determine whether the information that organisations are currently communicating is related to their social performance, the content of their SR was reviewed.

The “Sustainability Disclosure Database” (GRI Database, 2021) was selected for being the most internationally applied framework (Hamad et al., 2020; Thijssens et al., 2016). It is a large repository of SR published from 1999 to the present. The selected sample of SR includes those belonging to Spanish organisations, drawn up in accordance with the GRI Standards and published in 2020. In accordance with these criteria, 29 SR were obtained, 11 of them belonging to productive sectors such as automotive, construction or energy and the remaining 18 belonging to the service sector such as financial services or tourism.

After a content analysis of the SR, the information related to the social performance of each organisation was identified. This information was grouped into 82 social aspects, which were classified according to

the 9 categories proposed in Stage 1 (Table 3). Furthermore, the way in which each social aspect was communicated in each SR (qualitatively or quantitatively) was also identified. Figs. 4 and 5 summarise the results and includes, for each of the quantitative social aspects, the specific units used for its communication. The complete analysis can be found in the Supplementary material (Tables S13–S14).

As Fig. 4 shows, the social aspects identified were mainly related to the *Equal opportunities* (17 %), *Health and safety* (13 %) and *Transparency* (13 %) categories. The categories for which the least related social aspects have been found are *Human rights* (5 %) and *Sustainable management* (7 %).

The only social aspect reported in all the SR analysed is *Gender diversity*, followed by the *Communication channels with society, client, etc.*, communicated by 97 % of the organisations analysed. On the contrary, the least communicated social aspects are the *Promotion of sustainable consumption*, communicated by 3 % of the organisations analysed, followed by *Salary in statements of leave* and *Salary advances*, each communicated by 10 % of the organisations.

In general, most of the information is disclosed qualitatively for all the proposed categories, with the exception of *Equal opportunities* and *Health and safety*, where the information is provided, mainly, in a quantitative way. On analysing the qualitative information (yellow bars in Fig. 4), it can be observed that the social aspects most frequently communicated were *Materiality analysis*, disclosed qualitatively by 93 % of the SR, and *Communication channels with society, customers, etc.*, disclosed qualitatively by 90 % of the SR. On analysing the quantitative information (green bars in Fig. 4), the units in which each social aspect was quantified were also identified, based on six different typologies: *Aggregated amount (Number)*, *Percentage*, *Index or rate*, *Time*, *Costs (Euros)* and *Others* (see also Fig. 5).

As can be seen in Fig. 5, almost 50 % of the social aspects were communicated through a *Number* of the principal unit, and 47 % of the social aspects are being communicated by means of a *Percentage*. Information provided by measuring *Euros* was used in 16 % of the aspects communicated, such as indicators like *Extra investment in security* or *Actions against social exclusion*. Moreover, *Time* was used in 14 % of the social aspects communicated, especially to communicate the indicators of the *Training programmes* category. Finally, it should be noted that for 25 % of the social aspects, some organisations are using other specific units to communicate them, which were classified within the typology *Other*.

A second analysis was also carried out with the indicators on which the organisations perform a specific disaggregation of their

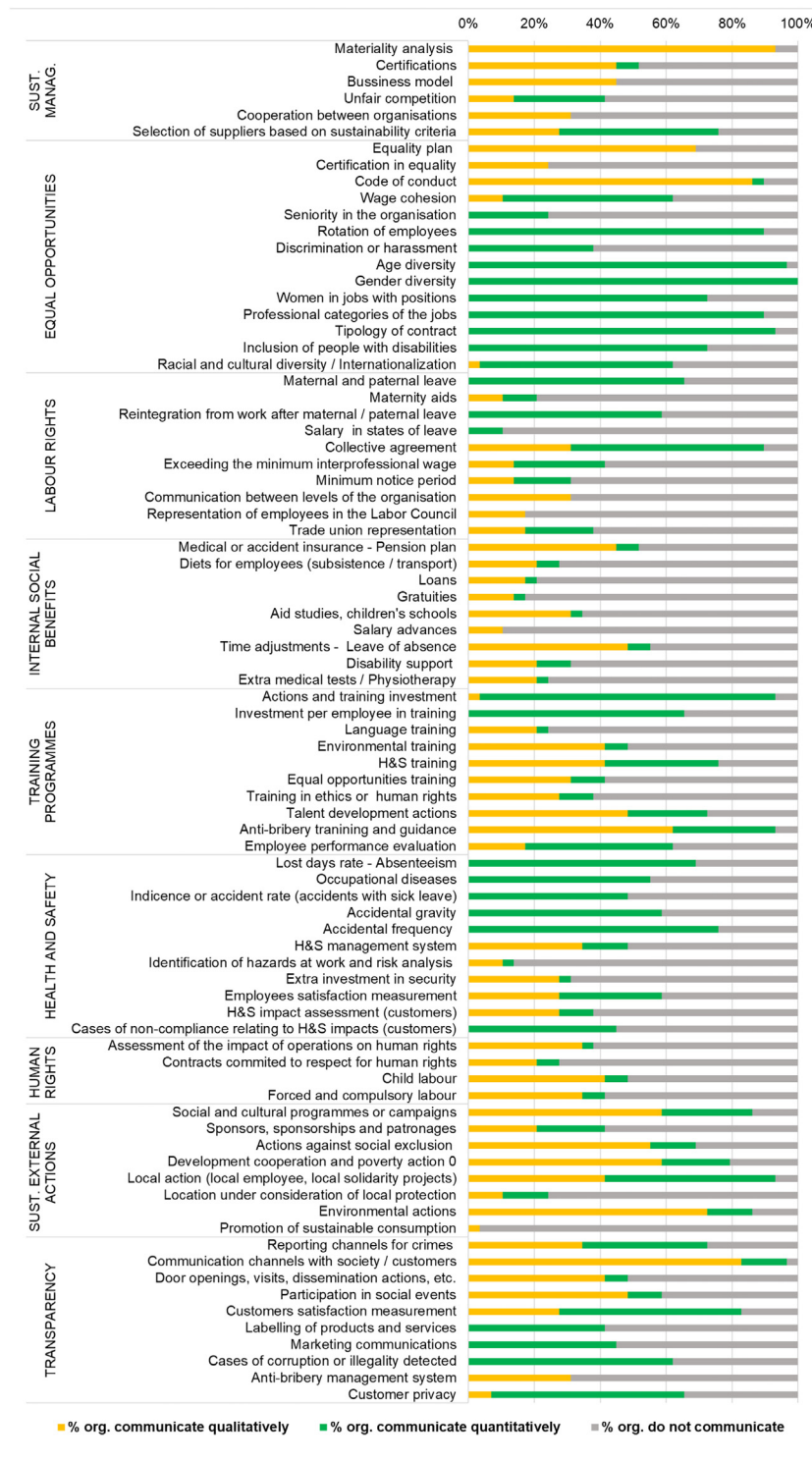


Fig. 4. Percentage of organisations that communicate each social aspect.

quantitative units (24 of the 82 social aspects marked with an \* in Fig. 5). The subcategories most frequently used to disaggregate the quantitative units were: *Gender*, *Age*, *Professional category* and *Others* (see Fig. 6).

According to Fig. 6, almost all the indicators that are reported disaggregated into subcategories are being disaggregated by gender, except *Women in jobs with positions* (by age) and the *Measurement*

*of satisfaction*. The rest of the indicators are mainly measured by referring to the total number of employees by gender that fit the respective social aspect being assessed.

The most disaggregated indicators (10 indicators) belong to the *Equal opportunities* category, including: *Wage cohesion* or *Rotation of employees*, followed by the *Labour rights* and *Health and safety* categories, each containing five disaggregated indicators.



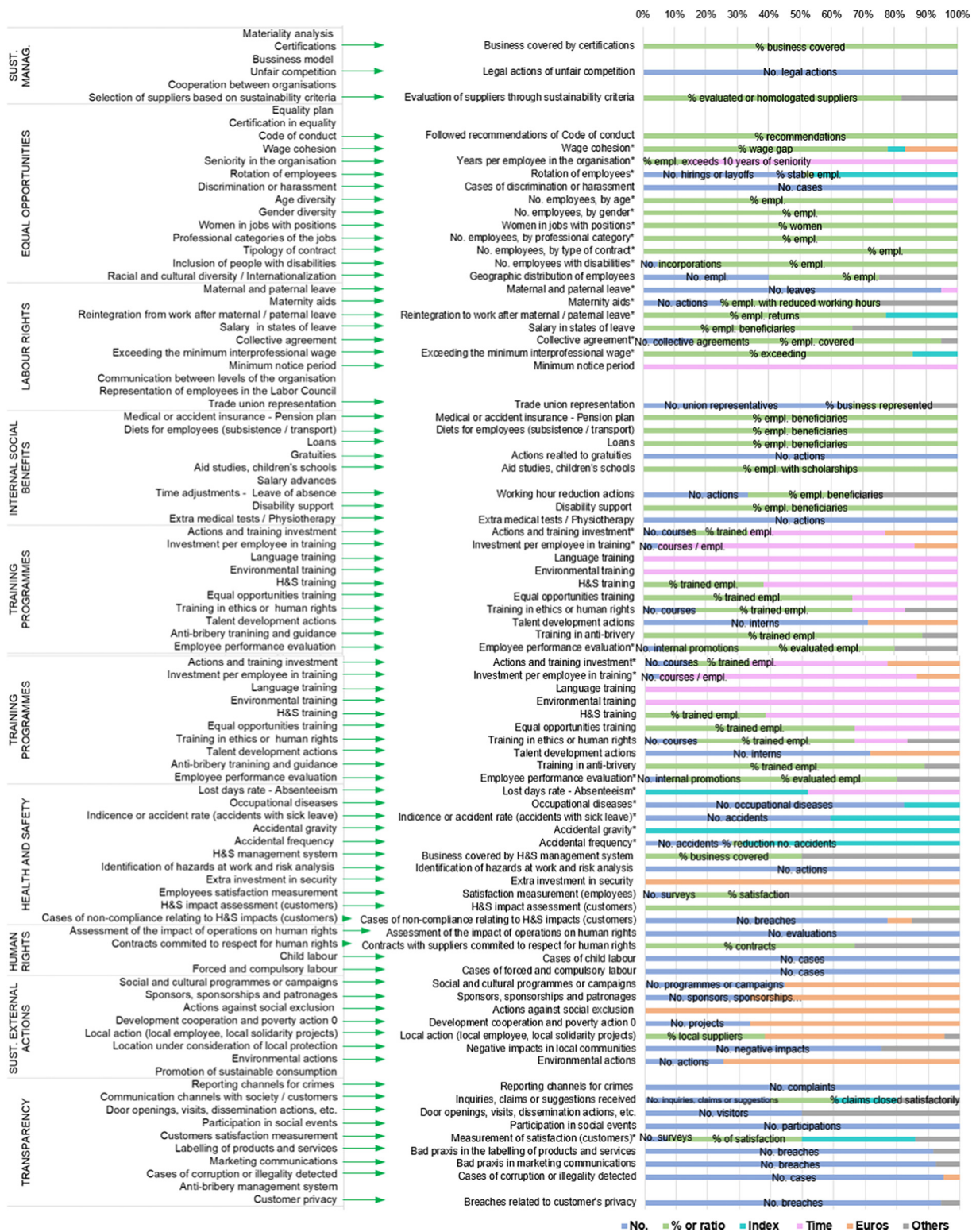


Fig. 5. Quantitative social aspects with their corresponding units.

4.3. Stage 3. Set of indicators proposed to measure the social performance of organisations

The aim of this section is twofold: a) to define the final proposal for indicators (and their metrics) to measure the social performance

of organisations based on the initial proposed set of indicators (Stage 1) and the metrics identified in Stage 2, and b) to determine whether it is possible to calculate them with the information currently communicated by organisations in their SR and identified in Stage 2.

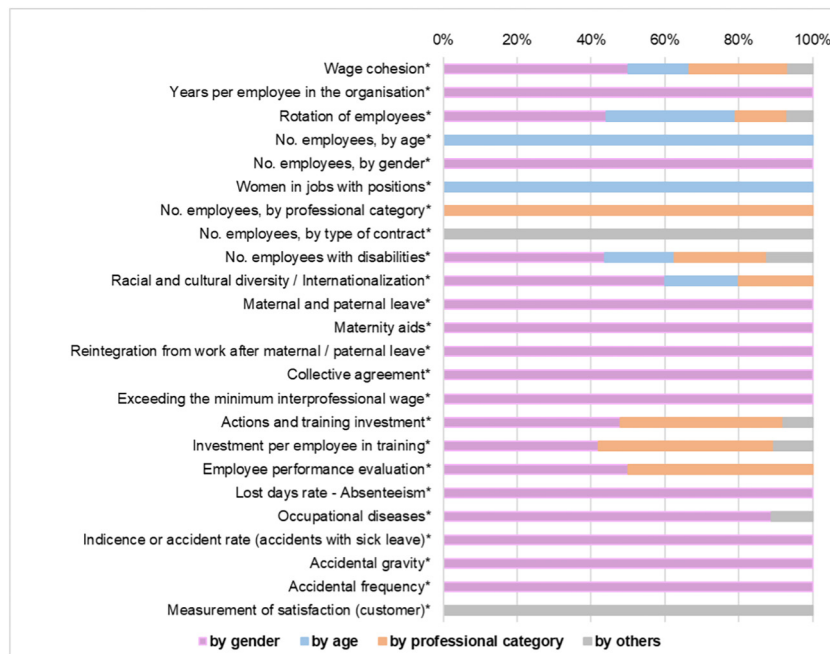


Fig. 6. Social aspects disaggregated in subcategories.

The following three indicators were incorporated into the initial proposal made in Stage 1, because they are currently communicated by organisations in their SR, as shown in Fig. 4:

- Sustainability training (including social and environmental topics) included in the Training programmes category.
- Talent development actions (scholarships, internships, etc.) included in the Training programmes category.
- Measurement of employees' satisfaction included in the Health and safety category.

The final set of indicators proposed to measure the social performance of organisations is reported in Table 4. The proposal includes 42 indicators (39 from Stage 1 and 3 from Stage 2) and their respective metrics, grouped into the 9 categories proposed in Stage 1. Note that the last column of Table 4 includes information on the polarity of the indicators, specifically indicating whether and how each indicator improves or deteriorates social performance.

The proposed metrics were based on the results from Stage 2. For indicators that are being communicated by organisations mainly through quantitative information, quantitative metrics were proposed. And, analogously, for indicators communicated mainly through qualitative information, qualitative metrics were proposed. The proposed indicators are not sector-specific ones, despite this, three indicators related to supplier's selection and environmental impact (SM05-Selection of suppliers based on sustainability criteria and impacts on the supply chain; SA04-Ensuring sustainable consumption; and SA05-Good environmental and impact reduction practices) may be more significant for manufacturing/service organisations.

#### 4.4. Case study

The set of indicators proposed to measure the social performance of organisations and its evolution were applied to a Spanish organisation belonging to the energy utilities sector with the information included in its SR based on GRI-Standards. Specifically, its SRs for 2020 and 2021 were considered, corresponding to the financial years 2019 and 2020, respectively.

To do so, both SRs were read in their entirety to identify both declarative information related to social issues (qualitative information) and

social indicators reported through numerical or graphical data (quantitative information) needed to respond the metrics proposed for each social indicator (see Table 4). A keyword-based final check was carried out to ensure that all the relevant information was gathered from the SRs. The keywords were related not only to the social indicators name, but also to the proper questions and metrics associated with each one. Lastly, for each indicator, the metrics were obtained for each SR (2020 and 2021). The changes between both magnitudes or responses were valued considering the polarity of each indicator, shown in last column of Table 4. The aim was, on the one hand, to validate whether it is possible to measure the social indicators proposed in Table 4 with the information in the SR of the company under study and, on the other hand, to analyse whether the proposal allows tracking of the social performance of those indicators and, therefore, of the company over time.

The results are shown in Table 5, where the following code was used to facilitate their interpretation:

Is it possible to measure the indicators proposed based on the SR information?	<span style="color: green;">■</span>	The proposed metric fits the information included in its SR.
	<span style="color: orange;">■</span>	The proposed metric does not fit the information included in its SR.
	<span style="color: red;">■</span>	No information is available in its SR to quantify/qualify the proposed indicator.
How does the social performance of the indicators proposed change from 2019 to 2020?	✓	The value of the proposed indicator improves with time (from 2019 to 2020).
	✗	The value of the proposed indicator gets worse with time (from 2019 to 2020).
	=	The value of the proposed indicator stays the same.

For both 2019 and 2020, Table 5 shows that 35 of the 42 indicators of the proposal (83 %) can be measured by means of the information included in the SR under study. The rest of the indicators (17 %) cannot be measured with the information disclosed. Specifically, for 2019, one indicator (*Employee satisfaction measurement*) is not mentioned in the SR under study and four are communicated by a metric other than the ones proposed. For 2020, two of the indicators proposed are not mentioned in the SR and three are communicated by a metric other than those proposed.

Table 5 also shows how 10 of the 42 social indicators proposed (23 %) improve over time (from 2019 to 2020) while four indicators (9 %) are getting worse. In addition, there are three indicators (7 %) in which some metrics are improving while others are getting worse. The categories that show the greatest improvement are *Equal opportunities*, *Training*

**Table 4**  
Final proposal for indicators and metrics for communicating the social performance of organisations in SR.

Cat.	Code	Proposed indicator	Metrics commonly used in SR	Polarity	
Sustainable management	SM01	Materiality	- Does the company perform materiality analyses?*	Yes (+)	
	SM02	Manag. approach / systems	- Does the company have certifications related to sustainability?*	Yes (+)	
	SM03	Ethical management of inbound and outbound financial resources	- Is the company's business model a cooperative one?*	Yes (+)	
	SM04	Fair competition and cooperation between organisations	- Does the company have a foundation?*	Yes (+)	
			- No. of legal actions related to unfair competition.	Less (+)	
SM05	Selection of suppliers based on sustainability criteria and impacts on the supply chain	- Does the company cooperate with other entities?*	Yes (+)		
Equal opportunities	EO01	Gender equality politics	- % suppliers evaluated*	More (+)	
			- % homologated suppliers*	More (+)	
	EO02	Code of conduct	- Does the company have an Equality Plan?*	Yes (+)	
	EO03	Cohesion and salary justice	- Does the company have any Certification in Equality?*	Yes (+)	
			- Does the company have a Code of Conduct or a Code of Ethics?*	Yes (+)	
	EO04	Temporary employment	- Wage gap (%)	Less (+)	
			- € / minimum salary (%)	Less (+)	
	EO05	Discrimination or harassment	- Years of seniority in company	More (+)	
			- Rotation of employees (%)	More (+)	
	EO06	Diversity in jobs	- No. of cases of discrimination or harassment	Less (+)	
- No. of employees, by gender, by age, by professional category and by type of contract			More (+)		
Labour rights	LR01	Freedom of association and collective bargaining	- % of employees with disabilities	More (+)	
	LR02	Communication and consultation between levels of company	- % of employees covered by collective agreement*	More (+)	
			- Days of minimum notice period	Less (+)	
	LR03	Participation of the employees in decision-making	- Does the company have channels of communication between the different levels of the company?*	Yes (+)	
			- No. of union representatives*	More (+)	
	LR04	Work-life balance	- Does the company have employee representation in the Labour Council?*	Yes (+)	
			- % maternal / paternal leaves, by gender*	More (+)	
	Internal social benefits	SB01	Benefits offered to employees (health insurance, pension plan, food, mobility, etc.)	- % returns to work, by gender*	More (+)
				- % salary received during leave of absence	More (+)
		TP01	Generic employee's training	- Does the company carry out actions to help motherhood?*	Yes (+)
- Does the company offer:					
TP02		Health and safety training	- Medical/life insurance or pension plans to the employees?*	Yes (+)	
			- Subsistence or transport vouchers to the employees?*	Yes (+)	
TP03		Human rights training	- Gratuities for birth, marriage, etc.?*	Yes (+)	
			- Aid for studies, nurseries, schools, etc.?*	Yes (+)	
TP04		Anti-bribery training	- Salary advances?*	Yes (+)	
			- Flexible schedule or leave of absence?*	Yes (+)	
TP05	Training in sustainability (social & environmental)	- Any kind of disability support?*	Yes (+)		
		- Extra medical services?*	Yes (+)		
TP06	Talent development actions	- hours, by gender and by professional category	More (+)		
		- hours/employee, by gender and by professional category	More (+)		
TP07	Employee performance evaluation	- Does the company offer health and safety training?*	Yes (+)		
		- Does the company offer training in ethics or human rights?*	Yes (+)		
Health and safety	HS01	Health and safety rates	- Does the company offer anti-bribery training?*	Yes (+)	
			Does the company offer:		
	HS02	Health and safety management systems	- Training in equal opportunities?*	Yes (+)	
			- Environmental training?*	Yes (+)	
	HS03	Identification of hazards at work and risk analysis	- Does the company offer scholarships or internship contracts?*	Yes (+)	
			- % employees evaluated*	More (+)	
	HS04	Preventive measures to improve health and safety	- No. of days lost, by gender	Less (+)	
			- No. occupational diseases, by gender	Less (+)	
	HS05	Employee satisfaction measurement	- No. accidents with sick leave, by gender	Less (+)	
			- Severity index, by gender	Less (+)	
HS06	Health and safety protection (customers and society)	- Frequency index, by gender	Less (+)		
		- Does the company have a health and safety management system?*	Yes (+)		
Human rights	HR01	Protection of human rights	- Does the company identify hazards at work and conduct risk analyses?*	Yes (+)	
			- Does the company make extra investment/actions in terms of security?*	Yes (+)	
	HR02	Child labour	- % employee satisfaction.	More (+)	
Sustainability external actions	SA01	Impact on sustainability	- No. of breaches related to the health and safety of customers.	Less (+)	
			- Does the company evaluate the health and safety impacts of processes on the customers and society?*	Yes (+)	
Human rights	HR03	Forced or compulsory labour	- Does the company evaluate human rights impact of its operations?*	Yes (+)	
			- Does the company make contracts committed to respect for human rights?*	Yes (+)	
Sustainability external actions	SA01	Impact on sustainability	- Does the company support the eradication of child labour?*	Yes (+)	
			- Does the company support the eradication of forced or compulsory labour?*	Yes (+)	
Sustainability external actions	SA01	Impact on sustainability	- No. of sponsors, sponsorships or patronages related to sustainability*	More (+)	
			- Does the company conduct social / cultural campaigns?*	Yes (+)	
			- Does the company take action against social exclusion?*	Yes (+)	
			- Does the company carry out develop. cooperation or poverty actions?*	Yes (+)	

(continued on next page)

Table 4 (continued)

Cat.	Code	Proposed indicator	Metrics commonly used in SR	Polarity
Transparency	SA02	Investment in local action	- Does the company carry out environmental actions?*	More (+)
			- % of purchases from local suppliers*	Yes (+)
	SA03	Location considering local protection (heritage, people, resources, etc.)	- Does the company carry out community development actions?*	Less (+)
	SA04	Ensuring sustainable consumption	- No. of negative impacts on local communities	Less (+)
	SA05	Good environmental and impact reduction practices	- Does company carry out actions to promote sustainable consumption?*	Yes (+)
	T01	Transparency actions	- Mass unit CO <sub>2</sub> eq. (Scope 1, 2 and 3)	Less (+)
			- No. of claims received	Less (+)
			- % of customer satisfaction	More (+)
	T02	Communication and consultation with society and customers	- Does the company have external communication channels?*	Yes (+)
			- Does the company hold open-door events, offer visits, etc.?*	Yes (+)
		- Does the company participate in social events?*	Yes (+)	
T03	Good marketing practices and labelling	- No. of breaches in information and labelling	Less (+)	
		- No. of breaches in marketing practices	Less (+)	
T04	Bribery	- No. of cases of corruption detected	Less (+)	
		- Does the company have an anti-bribery management system?*	Yes (+)	
T05	Consumer privacy	- No. of complaints regarding customer privacy	Less (+)	

\*In the absence of information in the SR, the following answers will be considered: 0 in the case of quantitative metrics or “no” in the case of questions/qualitative metrics. However, for metrics that are not marked with the symbol \*, in the absence of information, it will be indicated that the report does not disclose enough information to answer it.

programmes, Health and safety and Transparency. In contrast, the indicators that worsen belong to the Equal Opportunities and Labour rights categories.

Additionally, the significant changes in the social performance of the company from 2019 to 2020 could also be identified. For example, on the one hand, some improvements in the rotation of employees or in

the types of contracts were identified, as noted by the indicators Temporary employment and Diversity in jobs, respectively. Also, an increase was observed in the number of hours of Training for employees and in Local actions, such as valuing the proximity of the suppliers. On the other hand, aspects that get worse over time could also be identified, such as the wage gap, which increased by 2020, or the Work-life balance,

Table 5

Case study of the social indicator's proposal.

Category	Code	Proposed metric	Social indicator results for the case study		
			2019	2020	
Sustainable management	SM01	Does the organisation perform materiality analyses?*	Yes	Yes	=
	SM02	Does the organisation have certifications related to sustainability?*	Yes	Yes	X
		Is the organisation's business model a cooperative one?*	No	No	√
	SM03	Does the organisation have a foundation?*	Yes	Yes	=
	SM04	No. of legal actions related to unfair competition	The metric doesn't fit	The metric doesn't fit	=
		Does the organisation cooperate with other entities?*	No	No	=
		% of suppliers evaluated*	100%	100%	=
		% of homologated suppliers*	The metric doesn't fit	The metric doesn't fit	=
Equal opportunities		Does the organisation have an Equality Plan?*	Yes	Yes	=
	EO01	Does the organisation have any Certification in Equality?*	No	No	=
	EO02	Does the organisation have a Code of Conduct or a Code of Ethics?*	Yes	Yes	=
		Wage gap (%)	4.9%	6.8%	X
	EO03	€ / minimum salary (%)	112.6%	107.7%	X
		Years of seniority in the organisation	17.44 years	17.43 years	X
		Rotation of employees (%)	Men: 6.53% & Women: 6.90%	Men: 5.98% & Women: 6.35%	√
	EO05	No. of cases of discrimination or harassment	33 cases	34 cases	X
			Men: 7,633 empl. & Women: 1,954 empl. < 30 years: 572 empl. 31-50 years: 5,684 empl. > 51 years: 3,331 empl. Manag. team: 485 empl. Qualified technicians: 4,686 empl. Staff: 4,416 empl. Indefinite: 9,564 empl. Temporary: 23 empl.	Men: 7,587 empl. & Women: 2,008 empl. < 30 years: 571 31-50 years: 5,684 > 51 years: 3,340 Manag. team: 479 Qualified technicians: 4,796 empl. Staff: 4,319 empl. Indefinite: 9,580 empl. Temporary: 14 empl.	√
		% of employees with disabilities	4.38 %	5.77 %	√
Labour rights	LR01	% of employees covered by collective agreement*	87.4 %	87.4 %	=
	LR02	Days of minimum notice period of organisational changes	15 days	14 days	X
		Are there channels of communication between the different levels of the organisation?*	Yes	Yes	=
	LR03	No. of union representatives*	0	0	=
		Does the organisation have employees in the Labour Council?*	No	No	=
		% of employees with maternal or paternal leave, by gender*	Men: 3.94% & Women: 5.88%	Men: 4.56% & Women: 4.03%	√
	LR04	% of returns to work, by gender*	Men: 98.67% & Women: 100%	Men: 93.93% & Women: 78.90%	X
	% of salary received in states of leave	The metric doesn't fit	No information available	X	
	Does the organisation carry out actions to help motherhood?*	No	Yes	√	
Internal social benefits		Does the organisation offer medical insurance, life insurance or pension plans to the employees?*	Yes	Yes	=
	SB01	Does the organisation offer subsistence or transport vouchers to the employees?*	No	No	=
		Does the organisation offer gratuities for birth, marriage, etc.?*	No	No	=
		Does the organisation offer aid for studies, nurseries, schools, etc.?*	No	No	=
		Does the organisation offer salary advances?*	Yes	Yes	=

Table 5 (continued)

Training programmes		Does the organisation offer flexible schedule, leave of absence?*	Yes	Yes	=
		Does the organisation offer any kind of disability support?*	Yes	Yes	=
		Does the organisation offer extra medical services?*	Yes	Yes	=
	TP01	hours, by gender and by professional category	Men: 1,460,002 h Women: 316,078 h Manag. team: 22,282 h Qualified technicians: 507,853 h Staff: 1,245,945 h	Men: 1,607,653 h Women: 362,000 h Manag. team: 30,303 h Qualified technicians: 601,297 h Staff: 1,338,052 h	✓
		hours/employee, by gender and by professional category	Men: 52.90 h/empl. Women: 51.65 h/empl. Manag. team: 37.06 h/empl. Qualified technicians: 59.04 h/empl. Staff: 47.58 h/empl.	Men: 52.59 h/empl. Women: 55.12 h/empl. Manag. team: 35.23 h/empl. Qualified technicians: 60.55 h/empl. Staff: 46.75 h/empl.	✓
	TP02	Does the organisation offer health and safety training?*	Yes	Yes	=
	TP03	Does the organisation offer training in ethics or human rights?*	Yes	Yes	=
	TP04	Does the organisation offer anti-bribery training?*	Yes	Yes	=
	TP05	Does the organisation offer training in equal opportunities?*	Yes	Yes	=
		Does the organisation offer environmental training?*	Yes	Yes	=
TP06	Does the organisation offer scholarships or internship contracts?*	Yes	Yes	=	
TP07	% of employees evaluated*	77.93%	78.81%	✓	
Health and safety	HS01	No. of days lost, by gender	Men: 3,747 days & Women: 149 days	Men: 3,922 days & Women: 148 days	✗
		No. of occupational diseases, by gender	The metric doesn't fit	The metric doesn't fit	=
		No. of accidents with sick leave, by gender	Men: 201 acc. & Women: 7 acc.	Men: 72 acc. & Women: 6 acc.	✓
		Severity index, by gender	Men: 0.12 & Women: 0.01	Men: 0.08 & Women: 0.01	✓
		Frequency index, by gender	Men: 2.26 & Women: 0.21	Men: 1.61 & Women: 0.41	✓
	HS02	Does the organisation have a health and safety management system?*	Yes	Yes	=
	HS03	Does the organisation carry out actions to identify hazards at work and risk analysis?*	Yes	Yes	=
	HS04	Does the organisation make any investment or extra actions in terms of security?*	No	No	=
	HS05	% of employee satisfaction	No information available	No information available	=
	HS06	No. of breaches related to the health and safety of customers	0	0	=
Human rights	HR01	Does the organisation evaluate human rights impact of its operations?*	Yes	Yes	=
		Does the organisation make contracts committed to respect for human rights?*	Yes	Yes	=
		Does the organisation support the effective eradication of child labour?*	Yes	Yes	=
		Does the organisation support the effective eradication of forced labour?*	Yes	Yes	=
Sustainability external actions	SA01	No. of sponsors, sponsorships or patronages*	The metric doesn't fit	The metric doesn't fit	=
		Does the organisation conduct social / cultural programmes or campaigns?*	Yes	Yes	=
		Does the organisation take action against social exclusion?*	Yes	Yes	=
		Does the organisation carry out development cooperation actions or poverty 0 action?*	Yes	Yes	=
		Does the organisation carry out environmental actions?*	Yes	Yes	=
	SA02	% of purchases from local suppliers*	79%	82%	✓
	SA03	Does the organisation carry out community development actions?*	Yes	Yes	=
SA04	No. of negative impacts on local communities	2 negative impacts	2 negative impacts	=	
	Does the organisation carry out actions related to the promotion of sust. consumption?*	No	No	=	
	SA05	Mass unit CO <sub>2</sub> eq. (Scope 1, 2 and 3)	Scope 1: 5,803,460 t CO <sub>2</sub> eq. Scope 2: 863,954 t CO <sub>2</sub> eq. Scope 3: 3,858,165 t CO <sub>2</sub> eq.	Scope 1: 4,691,505 t CO <sub>2</sub> eq. Scope 2: 636,857 t CO <sub>2</sub> eq. Scope 3: 4,175,457 t CO <sub>2</sub> eq.	✓
Transparency	T01	No. of claims received	1,296 claims	810 claims	✓
		% of customer satisfaction	The metric doesn't fit	The metric doesn't fit	=
	T02	Does the organisation have communication channels with society and customers?*	Yes	Yes	=
		Does the organisation hold open-door events, offer visits, etc.?*	Yes	Yes	=
		Does the organisation participate in social events?*	Yes	Yes	=
	T03	No. of breaches in information and labelling	0	0	=
		No. of breaches in marketing practices	20 breaches	15 breaches	✓
	T04	No. of cases of corruption detected	0	0	=
		Does the organisation have an anti-bribery management system?*	Yes	Yes	=
	T05	No. of complaints regarding customer privacy	215 complaints	154 complaints	✓

since the percentage of employees who returned to work after enjoying maternity/paternity leave decreased, especially in the case of women, where the figure was reduced by almost 20 %.

Based on the results presented here, it can be said that organisations can measure and track over time most of the social indicators proposed, without making an extra effort, through the information they are currently communicating in their SR.

Nonetheless, to improve this communication, the following recommendations are given:

- *Related to the unfair competition in the organisation*: although the organisation does not commit any cases of abuse of market power or unfair competition, the communication of such a value is considered important and should be included even if it is zero.
- *Related to the salary received during leave of absence*: although there is a minimum amount regulated according to agreements, it is considered important to communicate the percentage of salary paid in

these situations, as a sign of the organisation's commitment to labour rights as well as to strengthen its transparency.

- *Related to occupational diseases*: knowing and communicating the number of occupational diseases that affect men or women can help to get a more accurate idea of the gaps that the organisation has in terms of employees' health and safety.
- *Related to satisfaction of employees*: to promote an organisational culture focused on people, it is proposed to carry out an evaluation of the work environment. This process should rate the well-being of all employees – not only suppliers as is most commonly performed – so as to favour both transparency and internal participation.

## 5. Discussion

In this study, a set of 42 indicators grouped into 9 categories were proposed to measure the social performance of organisations (RQ1). The

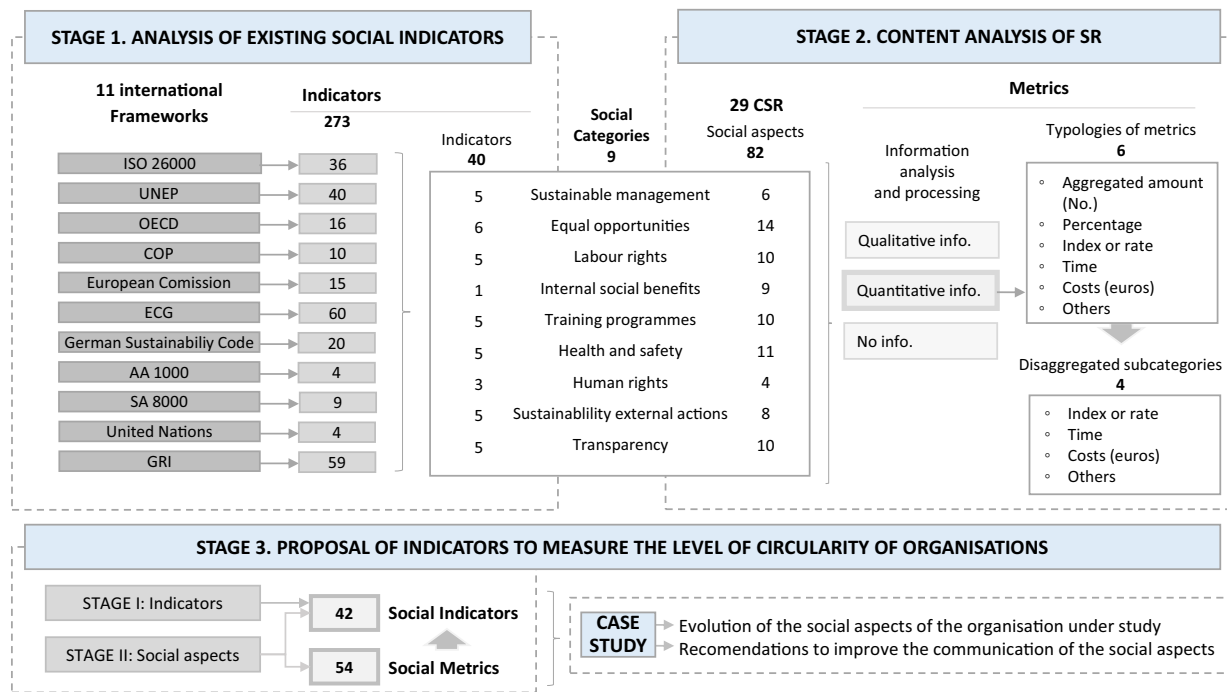


Fig. 7. Summary of the process and results carried out after applying the proposed methodology.

starting point was the review and classification of the indicators proposed in 11 international frameworks that measure social performance at the organisational level. Next, a detailed study of which social data are commonly being included by organisations in their SR was carried out (RQ2) in order to put forward specific metrics and units capable of quantifying/qualifying each indicator proposed. Fig. 7 presents this process in detail.

The proposal was tested with a case study, which stated the possibility of assessing the social performance of companies with the information that organisations are already communicating in their SR (RQ3), thereby facilitating their assessment and boosting their use. Moreover, the proposal was shown to be useful for organisations, not only because it allowed them to improve and track their social performance by identifying areas in need of improvement, but also because it enhances and propose recommendations to improve the communication of social aspects and the transparency of the company with society.

Considering the set of 11 international frameworks analysed in Stage I, it can be said that their approaches did not align with each other, in terms of the number of indicators, in the breakdown of social categories established or in the topics they covered. This is aligned with Turzo et al. (2022) statements, who affirmed that one of the major issues of the non-financial data reporting is the absence of a common standard framework. Among the analysed frameworks, GRI (2019) and ECG (2017) are those whose indicators cover more social aspects. This could be one of the main reasons why GRI (2019) is the most used framework to communicate information concerning the environmental and social performance of organisations (Ibáñez-Forés et al., 2022). Despite of that, according to Ackers and Grobbelaar (2022), it is needed to reduce ambiguity in this framework to improve the consistency and comparability of the resultant sustainability reports.

The main topics covered by most of the analysed international frameworks were sustainability issues, transparency and human rights. Contrarily, according to the results presented in Stage II, companies were mainly communicating information related to Equal opportunities, Health and safety and Transparency in their SR, which are the aspects that De Guerrero (2018) associated with business ethics and Lu et al. (2016) also identified as the most disclosed by construction companies. Specifically, Health and safety aspects seem to be more reported as bigger the company size (Shimizu et al., 2022).

Note that the information communicated by organisations through SR covered many aspects of organisational social performance (82 social aspects were identified) but varied significantly from one company to another. Therefore, organisations need better guidance in order to harness the full potential of SR as a tool to redirect the business towards more ethical models and meaningfully account to stakeholders about the impact on society and environment of their activities (Ackers and Grobbelaar, 2022). However, not only guidance but also motivation and awareness are key factors in improving the transparency of companies (Ibáñez-Forés et al., 2022).

And finally, regarding if is it possible to calculate social indicators with the information that organisations are currently communicating in their SR, it can be said that organisations could measure social indicators, with some effort, through the information they are currently communicating in their SR. The specific case study carried out in Section 4.4 (see Table 5) showed that 35 of the 42 indicators of the proposal (83%) can be measured by means of the information included in the SR under study. Therefore, the proposal and methodology applied can be considered adequate. However, caution is required when using SR data to draw conclusions on the actual performance of organisations (Maia et al., 2021), due to the lack of patterns and diversity in the reporting practices identified in Section 4.3.

## 6. Conclusion

The measurement of the social performance and the subsequent presentation of the results can be beneficial for the image of organisations, not only because it implies they present a strategy based on transparency towards society at large, but also because it allows them to stand out as innovative companies committed to a more ethical economy models.

This study contributes to improving the measurement and communication of social issues in organisations. On the one hand, a set of social indicators was proposed that can act as a form of guidance for research and companies, when measuring their social performance and exploring their potential to contribute to different dimensions of sustainability. On the other hand, based on the results of the case study, some recommendations were given related to the disclosure of quantitative

information to increase the accuracy and reliability of data contained within future SRs. Some of these recommendations include the communication of unfair competition cases; the salary received during leave of absence; the number of occupational diseases by gender; or the level of satisfaction of employees. Finally, the proposal can also help organisations to easily identify a company's weak points related to social performance and establish future interventions in their transition to a more ethical social performance in organisations.

In short, this study aims not only to facilitate the task of measuring social performance in organisations over time, but also to propose a method that encourages and makes it easier for them to publish such information in a more concise and comparable way in their SR. In addition, the proposal can help organisations to observe which social aspects have to be encouraged through their company policies, thus enabling organisations to move towards a more sustainable and ethical business model. However, enlarging the size of the sample of SR reviewed would improve the research study by allowing conclusions to be drawn in a more general way, as this is one of the main limitations of the study. Related to the case study, it would be also recommendable to apply the methodology to other SR, from both national and international organisations to identify differences between organisations from different countries.

As future steps, an effective and useful software application that allows the social performance of organisations to be measured and compared could be developed in accordance with the results obtained in the present research. Finally, a future study based on assessing the social performance of different Spanish companies by applying the proposal presented herein could be useful to identify which categories or areas need more improvements around the country, from a social point of view.

## Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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## Appendix A. Supplementary material

Tables S1–S11 include the categories, indicators and codes for the 11 frameworks analysed, Table S12 includes the initial proposal of indicators based on the programmes reviewed, Table S13 includes way in which each social aspect is communicated and Table S14 includes the units used to communicate quantitative information of each social aspect. Supplementary data to this article can be found online at <https://doi.org/10.1016/j.spc.2022.10.024>

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