

# Health and well-being key performance indicators in corporate sustainability disclosure. A review of sustainability reports from a sample of major European companies

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**Abstract.** *Background and aim:* Health and Well-Being (HWB) measurement represents a key issue for companies in all sectors and a core element of social sustainability, according to the Sustainable Development Goals (SDGs). Despite its importance for companies and in the sustainability reporting, the topic has not been investigated yet from a cross-sectoral perspective. Therefore, this research aims to assess if health and well-being are disclosed in sustainability reports of the largest European companies; *Methods:* The disclosure of Key Performance Indicators (KPIs) has been investigated and compared according to the main international frameworks of sustainability. The research focused on sustainability reporting from a sample of the 30 largest companies in three methodological steps. First, the inclusion of HWB issues has been analyzed, identifying references to the SDGs and ISO 45001 within the documents. A second level of analysis considered the adoption of the Global Reporting Initiatives (GRI) Standards, with particular attention to Health metrics (GRI:403). The third level of analysis aimed at researching health and well-being performances, linked to specific KPIs from two selected case studies. *Results:* The review highlighted that all 30 companies generally refer to SDG 3 and SDG 8 in their sustainability reporting while 83% ( $n=25$ ) of them also apply either Occupational Health and Safety ISO 45001 or Health metrics in GRI Standards; 22 (73%) companies adopted both GRI as the sustainability reporting standard and disclosed the adoption of ISO 45001 management system. Only in two cases, an additional structured framework for HWB is reported highlighting the need for more comprehensive KPIs, especially for employee's well-being. ([www.actabiomedica.it](http://www.actabiomedica.it)); *Conclusions:* The study highlighted that health indicators disclosure is generally limited to GRI Standards disclosure. To achieve greater transparency in sustainability reporting, there is a need to further investigate the issue. ([www.actabiomedica.it](http://www.actabiomedica.it))

**Key words:** Sustainability reporting, health and well-being, workplaces, key performance indicators (KPIs), GRI Standards, ISO 45001

## Introduction

Health management and health promotion represent a cornerstone in the social area of sustainability: the "S" in the frequently used ESG acronym, that refers to environmental, social, governance. Defining correct and comprehensive indicators and regularly

monitoring the results, enables the baseline setting and the target definition of health performances in the business sector. The performance assessment on an annual basis allows for comparability between different companies and the evolution of trends in different years (1). As for environmental key performance indicators (KPIs), the assessment of a HWB performance

compared to the industry average, or previous years, would make a significant contribution to the overall sustainability evaluation of companies, through a better understanding of the state of physical and mental health of its human capital.

According to the World Health Organization (WHO), health is defined as “*a state of complete, physical, mental and social well-being and non-merely the absence of disease of infirmity*” (2). The WHO definition includes social welfare as a component of overall health, establishing the connection of health with the social environment and working conditions. The relationship between people, the built environment in which they work and the environmental system, toward a sustainable ecosystem which aspires to human well-being, is very relevant today in research, and at the core of numerous studies (3,4). In this perspective, the One Health approach points out the inter-dependence between the health humans and ecosystems, encouraging the collaboration across sectors and disciplines to address health challenges (5).

Moreover, healthy workplaces, and organizations with employees in a wellness condition experience better performance, higher levels of productivity, and lower turnover rates (6). Based on WHO and ILO (International Labour Organization) estimations, 2.3 million workers die from work-related injuries and diseases on an annual basis, while over 470 million workers are exposed to non-fatal injuries or diseases per year (7). These data have a significant economic and social impact that bears on private organizations and the societies in which they operate.

It is against this background that sustainability reporting represents the ideal context to provide stakeholders with the tools to evaluate the level of health and well-being of organizations. Most large multinational corporations today publish sustainability reports, disclosing their actions and their targets (1). The document represents one of the most important annual publications, together with the financial report, with several actors merging the two documents into just one integrated report. The latest rise of sustainability disclosure all over the world has been driven by increased mandatory requirements and stakeholders' expectations regarding the commitment of companies toward the environment and the people (8). Indeed, while these documents cover different areas, from

environmental topics to governance models, the social dimension related to employees and people operating with the companies it is progressively becoming at the heart of the debate (9).

In fact, managing employee health and well-being encompasses wide-ranging processes and KPIs to be taken into consideration. In addition to occupational health and safety (OHS) management, which is expected to be exhaustively monitored and disclosed, health promotion represents the other cornerstone of corporate health strategies (10). Health promotion is formed by several different activities, including screening activities to identify potential risks, and healthy lifestyle management, like exercise programs, food and mental health promotion (11). Furthermore, if the attention on health with respect to infection controls and prevention has recently increased within corporations due to the health crisis experienced, the benefits of healthy buildings and workplaces have progressively been discussed over the last decades (12,13). The notion of healthy workplaces has evolved, moving from recreational activities for employees to current structured organizational programs to maximize HWB (14). It is estimated that 90% of organizations with at least 50 employees provide some type of program designed to promote health (15). The study conducted by Grawitch et al. identified five key healthy workplace practices: work-life balance, employee growth and development, OHS, employee involvement, and recognition (14). Workplace environments are the ideal setting for health promotion of the employed population, both at the individual level and at the community level (10).

The Covid experience has also put well-being promotion and of employee's satisfaction at the center of the debate due to the change in the workplace setting, stress increase and lockdown restrictions (15). Therefore, the establishment of healthy organizations where the well-being of employees is actively promoted has both internal and external impacts and implications. The internal positive effect targets productivity and competitiveness (16,17). The external impacts refer to Public Health, with HWB promotion policies increasing the population welfare, and the standard of living while reducing healthcare costs for public administrations.

Despite the increased interest in the promotion of employees' health and well-being, organizations lack

comprehensive indicators disclosed in their documents to analyze and evaluate the performances of companies on the topic. From an analysis of the existing literature, it can be observed that there are few studies related to the presence of indicators and health and well-being within company sustainability reports. The focus of the studies previously conducted is mainly on health and safety indicators (18-21), linked to accident rates and occupational diseases, while well-being issues and active health promotion are rarely discussed and mapped, resulting in a lack of specific indicators (22,23).

The objective of this research is therefore to provide the academy and corporations with an overview of health and well-being indicators within the sustainability reports of the main European companies. These actors represent a reference benchmark for all smaller capitalized companies and can guide positive changes in their sectors. The research more specifically aims to reach top managers, sustainability officers, health & safety managers, general counsels, and compliance officers in order to present the scenario on HWB disclosure, providing data and best practices to be ideally replicated and adopted.

A further objective of the research is the identification of relevant experiences in health and well-being KPIs disclosure within the documents analyzed by the companies in the panel. Indeed, adherence to the main international reporting standards (Global Reporting Initiative - GRI Standards) is expected, but indicators of health and well-being in addition to those required by the standards will be identified and reported, selected as case studies. The research addresses disclosures for employees, while there are other categories of

stakeholders, such as suppliers and consumers, that are not included in the scope of the analysis.

#### *Health and well-being in sustainability reporting frameworks*

The Global Reporting Initiatives (GRI) represent the main international standard for sustainability reporting (1,24,25). It is the fundamental framework for companies across all sectors for the definition of key topics, indicators and metrics to be disclosed in sustainability reporting. The GRI requires organizations to define a so-called “materiality assessment” to determine material topics, defined as “*the topics that represent the organization’s most significant impacts on the economy, environment, and people, including impacts on their human rights.*” (25). In order to establish which topics are material for the organization, companies are expected to present the potential high-impact topics to all the relevant stakeholders. The Standards require an extensive engagement process with the stakeholders, assessing the topics based on the social and environmental impact (25). The result of combined prioritizations of different stakeholders determines the most relevant topics. With the materiality assessment, companies identify the topics to be disclosed. Therefore, when health or well-being results as material topics during the materiality assessment conducted by the companies, they are expected to be disclosed the connected indicators.

As exhaustively identified by Chowdhury et al., among GRI Standards there are already indicators with a potential direct impact on employees’ health factors, as synthesized in Table 1 (18).

**Table 1.** GRI Indicators with potential direct impact on employee’s health, according to Chowdhury et. al, 2018.

GRI	Description	Specific GRI
102	<i>General disclosure</i>	102-15: A description of key impacts, risks, and opportunities.
103	<i>Management approach</i>	103-01: Explanation of the material topics and their boundaries.
		103-2: The management approach and its components.
401	<i>Employment</i>	401-2: Benefits provided to full-time employees, not provided to temporary or part-time employees.
403	<i>Occupational Health and Safety</i>	403-1; 403-2; 403-3; 403-4;403-5;403-6;403-7;403-8;403,9;403-10 (described in the Table 2)

The GRI 403 has the highest direct relevance for health and well-being discussion and has deeply impacted workplaces measurement and the reporting activity of work-related injuries. For instance, the standard has been developed with the aim of understanding the long-term impact of such injuries on employees as opposed to focusing on lost time injuries (26). After its release in 2016, the GRI 403 standard was updated in 2018 and has been effective since January 1, 2021. Due to the fundamental relevance of GRI 403 for measuring HWB within the GRI Standards, the section will be deeply explored, and all its metrics assessed in the next section (“Method”).

In addition to the GRI Standards, the organization support initiatives to assess specific topics within the reporting activities, proposing a guidance linkage between the topic and the Standards. In this regard, the partnership between the GRI Standards and the Robert Wood Johnson Foundation (RMJF) gave birth to the Culture of Health for Business (COH4B) framework, which connects health issues with the sustainability reporting standard: By linking the GRI Standards to COH4B, organizations can identify processes with HWB impacts and integrate health-related disclosures into their business strategies and decision-making. The COH4B standard defines metrics and indicators to evaluate and disclose business performance in promoting a *culture of health* (27).

The research also addresses, in parallel to the GRI Standards, another international framework, the United Nation’s Sustainable Development Goals. In particular SDG3 “*Ensure healthy lives and promote well-being for all*”, and SDG 8 “*Promote inclusive and sustainable economic growth, employment and decent work for all*” targets health and well-being issues.

More specifically, SDG 8.8 addresses health workforce “*Protect labour rights and promote safe and secure working environments of all workers, including migrant workers, particularly women migrants, and those in precarious employment*” (28). Contrary to GRI Standards, SDGs do not provide specific reporting guidelines, but most reports refer to this framework at the global level (29).

Health and well-being issues are indeed a primary parameter for stakeholders and internal sustainability strategies and the establishment of such strategies by

large corporations contributes to the achievement of the SDGs targets at a global scale (19).

## Method

### *Data collection*

The authors analyzed the sustainability reports of the top companies in the European Union (EU), listed by Statista® (<https://www.statista.com/>) and ranked based on their largest source of revenues. Statista® is one of the leading websites for data collection of market and financial information.

The documents belonging to the top thirty companies were downloaded and analyzed for the purposes of this research. The authors consider that 30% (Table 2) of the companies within the Statista® list represents a sufficient sample of analyses to understand the key disclosure trends within the main European companies.

All the documents analyzed are publicly available on the corporate website’s companies included in the list. The companies published either self-standing documents (“Sustainability Report”, “Corporate Social Responsibility Report”), or alternatively, the sustainability disclosure is integrated into the Group’s Annual Report (or “Universal Registration Document”, “Integrated Report”, Consolidated management report”).

The EU region has been selected as the geographical scope because of its advanced engagement in sustainability reporting. This is confirmed by several legislative and policy initiatives, as well as for financial and non-financial reporting, like the Corporate Sustainability Reporting Directive (CSRD) published in 2021 (30) and the European Financial Reporting Advisory Group (EFRAG). Starting from a review, the authors defined a first assessment concerning the occurrence of health and well-being metrics and the related indicators, as defined by the GRI Standards, within the sustainability documents analyzed. The extra-GRI WHB indicators are detected and considered in results section, as tools for horizontal monitoring the welfare state of companies.

The research addresses employees’ HWB indicators, while there are other stakeholders, such as

**Table 2.** Top 30 EU companies in 2021. Source © Statista 2022.

	Companies	Headquarters Country	Industry
C1	Company 1	Germany	Industrial
C2	Company 2	Germany	Industrial
C3	Company 3	France	Energy
C4	Company 4	Germany	Communication Services
C5	Company 5	Germany	Industrial
C6	Company 6	Italy	Industrial
C7	Company 7	France	Utilities
C8	Company 8	The Netherlands	Consumer Discretionary
C9	Company 9	France	Consumer Staples
C10	Company 10	Germany	Consumer Discretionary
C11	Company 11	Italy	Utilities
C12	Company 12	Germany	Utilities
C13	Company 13	Germany	Industrial
C14	Company 14	France	Energy
C15	Company 15	Germany	Information Technology
C16	Company 16	Germany	Utilities
C17	Company 17	The Netherlands	Industrial
C18	Company 18	Finland	Energy
C19	Company 19	Luxembourg	Materials
C20	Company 20	Italy	Energy
C21	Company 21	France	Consumer Discretionary
C22	Company 22	France	Industrial
C23	Company 23	Spain	Communication Services
C24	Company 24	Belgium	Consumer Staples
C25	Company 25	France	Industrial
C26	Company 26	Germany	Healthcare
C27	Company 27	Germany	Consumer Discretionary
C28	Company 28	Ireland	Industrial
C29	Company 29	France	Materials
C30	Company 30	Germany	Healthcare

suppliers and consumers, that are not included in the scope of the analysis.

#### Data analysis

A keywords analysis has been conducted through the documents in three different levels.

- i. The first level of research aimed at defining the references to international frameworks relating

to Health and Well-Being issues within the selected documents. The keywords searched in the document “SDG 3” (*Ensure healthy lives and promote well-being for all*); “SDG8” (*Promote inclusive and sustainable economic growth, employment and decent work for all*)” and “ISO 45001” were inserted in an excel file with a binary approach “yes or no”, “yes” if the reference was present, “no” if the reference was not present.



- ii. A first level of preliminary analysis was followed by a second level, related to the main international standard found in the literature, the GRI Standards, and in particular to health indicators: GRI 403 reporting standards. The including ten indicators in the area of “*Occupational health and safety*”. Within the documents, the presence of performance indicators was sought concerning the standards indicated and detailed in Table 3 and they were transported within an excel table.
- iii. Finally, a third level of investigation aimed at researching health and well-being performance indicators has been conducted through an analysis by keywords of “HEALTH” and “WELL-BEING”, linked to specific KPIs. Additional or alternative HWB indicators to those defined by the GRI standard were therefore extracted and examined in detail, presenting significant case studies.

## Results

### *Descriptive statistics*

In terms of geographical distribution, it can be observed that Germany is the first country for companies in the sample ( $n=12$ ), followed by France ( $n=7$ ), covering together 63.3% of the panel ( $n=19/30$ ). In total,

nine states of the European Union are represented (Belgium, Finland, France, Germany, Ireland, Italy, Luxembourg, Netherlands, and Spain). Organizations are ranked based on their largest sources of revenue.

As Figure 1 shows, the distribution based on the industry category proved to us a cross-sectoral presence among the industries of European countries. In accordance with the Global Industry Classification Standard (GICS), most industries are covered by the companies selected in the panel, with the exclusion of the financial and real estate sectors.

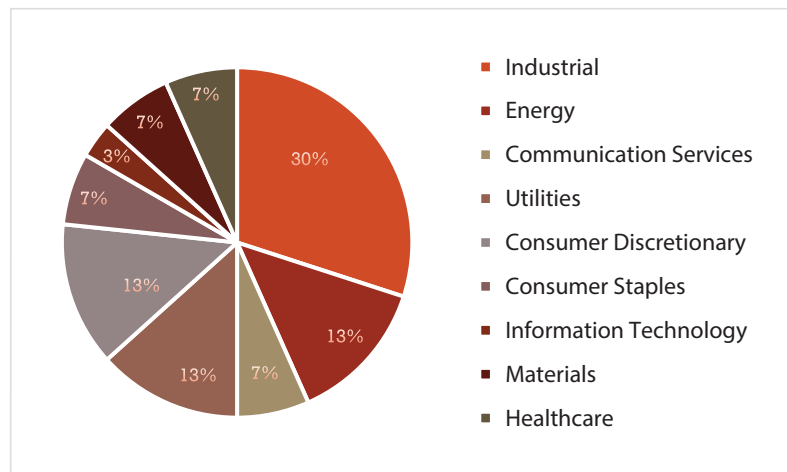
### *Assessing the presence of SDGs and ISO frameworks*

In this section a preliminary level of analysis will be presented, relating to the presence of references to health and well-being issues within the reports, specifically addressing refer to the Sustainable Development Goals (SDGs), in particular, SDG 3 and SDG 8 and to the ISO 45001 management system, referring to the management of health and safety issues. All the companies selected in the sample refer to the SDGs within their sustainability reports ( $n=30/30$ ), confirming that it is the most utilized framework for sustainability disclosure.

In addition to SDGs, the authors traced in the analysis of the sustainability reports the adoption of the ISO45001 management system. The ISO 45001 (Occupational Health and Safety) is a certification designed to provide companies with the foundation for a structured OHS management system in order to

**Table 3.** List of metrics of GRI 403: Occupational health and safety (2018).

GRI 403	Field of interest
403-1	Occupational health and safety (OHS) management system
403-2	Hazard identification, risk assessment, and incident identification
403-3	Occupational health services
403-4	Worker participation, consultation, and communication on OHS
403-5	Worker's training on OHS
403-6	Promotion of worker health
403-7	Prevention and mitigation of OHS impacts, directly linked by business relationships
403-8	Workers covered by OHS management system
403-9	Work related injuries
403-10	Work related ill health



**Figure 1.** Distribution of companies according to GICS sector classification (n=30).

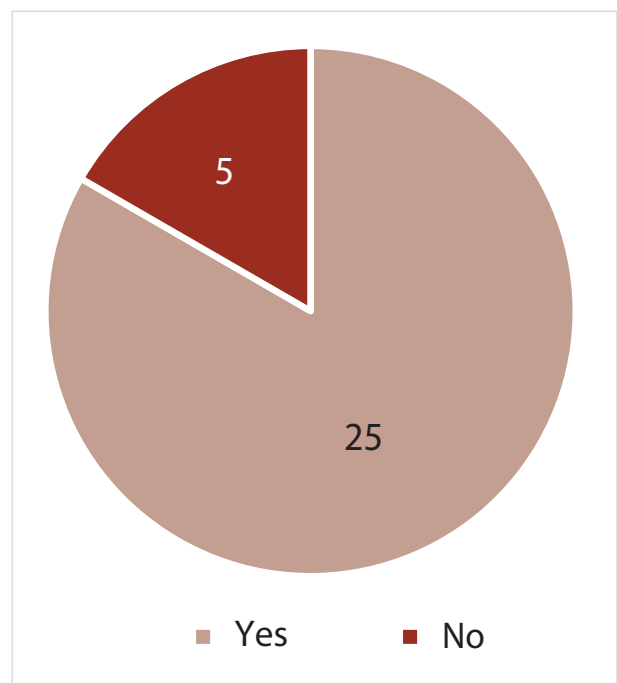
prevent and reduce risks related to OHS and improve the working conditions of employees. Consistently with the organization's OHS policies, the expected outcomes of an OHS management system include a) improvement of OHS performance; b) compliance with legal requirements c) achievement of OHS targets (31).

The analysis defines the companies that disclose, in the documents analyzed, data and indicators on the application and coverage of ISO 45001 management model to their employed population, or alternatively, companies that set quantitative coverage targets for the following years in sustainability reports. The review of references to ISO 45001 encourages the comprehension of the degree of priority of the discussed topics for the companies selected in the panel. It is conceivable that the companies have adopted the ISO 45001 management system but without disclosure of it in the analyzed documents.

From the analysis of the documents, the authors found that most companies ( $n=25/30$ ) reported in the annual sustainability documents, the adoption of the ISO 45001 management system (occupational health and safety), with the exception of C7, C9, C21, C28, and C29, as reported in Figure 2.

#### *Detecting health and well-being indicators, with GRI Standards adherence*

In the documents review, it was verified which companies in the sample have adopted the GRI Standards



**Figure 2.** Companies reporting in sustainability disclosure the adoption of the ISO45001 management system.

as the sustainability reporting standard. GRI Standards have been adopted by most companies analyzed ( $n=25/30$ ). The main set of standards for HWB, the GRI:403 as defined in Table 2, have been analyzed in its metrics. As observed in Table 4, only nine of the companies analyzed in the panel ( $n=9/30$ ) made reference to all the GRI 403 indicators. Among the standards

**Table 4.** Summary of GRI adherence and ISO 45001.

Company	GRI: 403										ISO 45001
	403-1	403-2	403-3	403-4	403-5	403-6	403-7	403-8	403-9	403-10	
Company 1	no	no	no	no	no	no	no	no	no	no	yes
Company 2	yes	yes	yes	yes	yes	yes	yes	yes	yes	no	yes
Company 3	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Company 4	yes	no	no	no	no	yes	no	no	yes	yes	yes
Company 5	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Company 6	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Company 7	yes	yes	no	no	no	no	no	no	yes	yes	no
Company 8	no	yes	no	no	no	no	no	no	no	no	yes
Company 9	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	no
Company 10	yes	yes	yes	yes	yes	yes	yes	no	yes	no	yes
Company 11	yes	yes	yes	yes	yes	yes	yes	no	yes	no	yes
Company 12	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Company 13	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Company 14	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	yes
Company 15	no	no	no	no	no	no	no	no	yes	yes	yes
Company 16	yes	yes	yes	yes	yes	yes	no	yes	yes	no	yes
Company 17	yes	yes	yes	yes	yes	yes	yes	yes	yes	no	yes
Company 18	yes	yes	yes	no	yes	yes	no	no	yes	yes	yes
Company 19	yes	no	no	no	yes	yes	yes	yes	yes	no	yes
Company 20	yes	yes	no	yes	yes	yes	yes	no	yes	yes	yes
Company 21	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	no
Company 22	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	yes
Company 23	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Company 24	yes	no	yes	yes	yes	yes	yes	no	yes	no	yes
Company 25	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	yes
Company 26	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Company 27	yes	yes	yes	yes	no	no	no	no	no	no	yes
Company 28	yes	no	no	no	no	yes	no	yes	no	no	no
Company 29	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	no
Company 30	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes

Legend

- ( ) yes: the report refers to the standard
- ( ) no: the reports does not refer to the standard
- ( ) n/a: the report does not adopt the GRI as a reporting standard

disclosed, the most referred in the sample are GRI 403-1 ( $n=22/30$ ) and GRI 403-9 ( $n=21/30$ ). On the contrary, 403-8 ( $n=14/30$ ) and 403-10 ( $n=14/30$ ) are the least adopted standards. Therefore, indicators have not been defined and the performances are not presented.

*Additional HWB indicators from selected case studies*

A further objective of our study is the assessment of the HWB indicators disclosed in addition to the requirements defined by GRI Standards. Since



the GRI is internationally leading among the other standards, and is very widespread even in the panel analyzed, the identification of further KPIs allows scholars and professionals to understand the areas that are not fully covered by GRIs. Best practices selection enforces the measurement and the better understanding of the state of health and well-being of a workplace. The performance indicators assessment through keyword analysis in the documents has confirmed the expected adherence to the GRI Standards, without the definition of additional KPIs other than those envisaged.

#### *Company 1: A set of “extra GRI” health and well-being KPIs*

The company defined a set of KPIs in its annual sustainability report (2021), as presented in Table 5.

Quantitative KPIs in relation to health and well-being issues have been disclosed. Most refer to the GRI standards, but the company also presented new indicators in addition to those defined by the standard. In particular, KPI 4 and KPI 5 refer to the application of ISO 45001, KPI 10-13 refer to well-being. Unlike the *Company 11* case study presented in the next paragraph, *Company 1* discloses punctual quantitative KPIs.

#### *Company 11: Well-being assessment with ad-hoc pillars and indicators*

During the financial year 2021, *Company 11* established a well-being framework for all the employees at the global level, as presented in details in Table 6. The system, which has been designed in a co-participation with its stakeholders, it is based on 8 pillars, with corresponding metrics assessed by a survey.

The results of this first assessment, conducted during the financial year 2021 have not been published yet. It is interesting to see that several aspects of well-being are covered, establishing the baseline for monitoring the well-being status of the workforce across the years. After the first-year assessment, the *Company 11* metrics presented in the “Well-Being Assessment” can be transposed into quantitative performance indicators stating from sustainability report 2022.

## Conclusions

### *Research outlook*

The results obtained from the analysis are aligned with authors’ expectations. Most companies refer exclusively to the GRI Standards framework, and the set of indicators used to measure and report HWB performance are generally limited to health issues, with the perspective defined by the standard.

Predominantly, corporations refer to OHS in line with the requested indicators by the GRI Standards, with most companies ( $n=25/30$ ) adopting GRI as a sustainability reporting framework, and therefore making full or partial reference to the GRI:403 indicators. As noted, less than a third of the companies analyzed in the sample refer to all the standards set out in GRI 403.

Therefore, sustainability disclosure lack of specific indicators of employee well-being, within the GRI Standard and consequently in the documents analyzed. Eventually, it is possible that companies internally collect additional HWB data, but they prefer not to publicly disclose them, providing the human resources (HR) department with elements on which to define internal actions and policies.

### *Public health implications of healthy workplaces*

The research addresses the need to strengthen transparency and public disclosure of health information among private companies, since health and well-being promotion has a significant impact at the public health level. Indeed, HWB promotion policies increase the population welfare, and the standard of living, while reducing healthcare expenditures. Corporations represent an essential pillar of national public health systems, considering that employees during their job activities make many decisions affecting their own HWB as well as the HWB of colleagues, families, and communities (32). People in the job market and consequently largely exposed to the workplace and work environments represent the majority population in many areas, as in the European Union (52.07%) and the US (60%) (33). The workplace is therefore a fundamental place in

**Table 5.** Company 1 - Health KPIs (Authors elaboration).

	<b>Preventive health and occupational safety (KPIs)</b>	
1	(#) Initial checkups by the health department.	GRI 403-6
2	(#) Subsequent checkups by the health department	GRI 403-6
3	(#) Total checkups by 2010	GRI 403-6
4	(#) Group sites certified in accordance to ISO 45001	Extra GRI
5	(%) Proportion of employees' coverage in accordance to ISO 450001	Extra GRI
	<b>Accidents reported (KPIs)</b>	
6	(v) Index of accident frequency	GRI 403-9
7	(v) Index of accident severity	GRI 403-9
8	(v) Index of accident frequency	GRI 403-9
9	(v) Index of accident severity	GRI 403-9
	<b>Well-Being</b>	
10	(%) Opinion survey on satisfaction (participation)	Extra GRI
11	(#) Opinion survey on satisfaction (participating companies)	Extra GRI
12	(v) Employer attractiveness	Extra GRI
13	(v) Employer satisfaction index	Extra GRI

**Table 6.** Company 11 - Well-being framework (Authors elaboration).

	<b>Pillar</b>	<b>Definition</b>
1	Psychological well-being	Ability to manage perceived stress
2	Work-life harmony	Balance between working and personal life
3	Physical well-being	Attention to take care of physical health
4	Social well-being	Sense of connection and belonging to the community
5	Economic well-being	Satisfaction for the economic condition
6	Sense of protection	Sense of security perceived
7	Ethical well-being	Satisfaction for the alignment with personal values
8	Cultural well-being	Satisfaction for personal growth and learning new skills

health promotion and for the achievement of public health goals.

The pandemic experience has raised several work conditions and public health issues. Employers, public health agencies and regulators have struggled to maintain the economic activities ongoing while challenging unprecedented public health burdens (34). In addition to the severe health impact of Covid-19 on the population in working environments, employees have also suffered a significant decline in health and well-being conditions with negative effect such as worsening mental health, psychological distresses and burnout. These results of

the pandemic period are strongly connected with job uncertainty, loss of income and the change of working conditions (34,35). As a result of the undergoing depletion of health and well-being of employees, turnover and resignation rates increased, and the studies conducted demonstrate that employees are seeking working conditions that would allow them to support their welfare (36).

Therefore, ensuring transparency and disclosure in the measurement of health and well-being performances in company reporting is a fundamental objective and a first step in strengthening the promotion of HWB within companies.

### *Limitations and future developments*

The main limitations of the research are linked to the analysis of a panel of 30 companies, albeit representative of the main European companies, and to the analysis exclusively of a single “GRI Standards” sustainability reporting standard, even though it represents the most widely used standard.

Further areas of research may be identified taking into consideration that the study has targeted employee health and well-being indicators, while other stakeholders have not been included in the analysis. Customers’ HWB indicators for example have been discussed in other studies (19,37) but with different panel selections and with limited ambition on proposing new models for HWB indicators. Further developments of the research could also consider all the main existing sustainability reporting standards through a comparative survey and a wider panel of companies, to propose a set of health and well-being KPIs applicable to all companies in the European region.

A further possible area of research could investigate the integration of the sixteen GRI Standards for health and well-being indicators (which includes the GRI 403 standard analyzed in this research), as identified in the framework COH4B previously described.

In addition, consistently with the COH4B framework, there is an element that is only marginally treated at the GRI level which could be further explored: the physical environment. The element proposed by COH4B outlines the role of the built environment in promoting health and well-being, which is currently poorly addressed by the GRI Standards. The mentioned COH4B is defined as “*managing air quality, lighting, green buildings, attempts to promote health through the built environment other than OHS*” (27). Concerning this topic, the lack of indicators in sustainability reporting, evaluating the impact of the built environment on people’s health and well-being encourage future research to define the set of KPIs. Existing tools for measuring the impact of physical space on users’ well-being in complex buildings could be taken into consideration, reviewed, and adapted to workplaces (38, 39).

In light of the gains in terms of competitiveness and public health from the implementation of HWP promotion at the corporate level, the strengthening of well-being indicators is desirable. Many stakeholders, starting from large corporation, could benefit from large-scale disclosure of these indicators, which contributes to public health promotion, as discussed in the previous paragraph.

Integrating detailed HWB indicators with the international standards, given the upcoming binding nature of disclosure (30), in particular, in the GRI and the upcoming European sustainability reporting standards (ESRS) may enhance transparency and comparability on OWB in the private sector.

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