

Changes in Sustainability Reporting Dynamics Observed from ESG Measures Provided by Real Estate Companies in 2020 and 2021: Evidence from Germany, Austria and Switzerland

Dominika P. Galkiewicz^{*a,1} and Bernd Wollmann²

University of Applied Sciences Kufstein Tirol

Abstract

Environment, Social and Governance (ESG) related regulations such as the Non-Financial Reporting Directive (NFRD) or the upcoming Taxonomy Regulation of the European Union (EU) had and will have a lasting impact on the real estate (RE) industry and other market participants. This study, therefore, compares the current European regulation with common sustainability reporting practices in the RE industry in Germany, Austria, and Switzerland. The aim is to investigate what type of information related to employees, social, and governance besides environmental issues is being regularly provided and by how many of the 55 largest RE firms in the years 2020 and 2021. In general, most of the measures are only reported by 20-40% of the firms on a mandatory or/and voluntary basis. The majority of the sustainability measures is more often reported in 2021 than in 2020. Irrespective of the positive development, however, there is still a lot of room for improving reporting quality to increase reader usability as small reporting frequencies are identifiable for the following “ESG” measures: violations of the code of conduct (mentioned by 1 time in 2020 and 2 firms in 2021), safety inspections of buildings (5 in 2020 and 8 in 2021), total number of suppliers (4 in 2020 and 6 in 2021), share of expenses for local suppliers in % (2 in 2020 and 3 in 2021), and obtained well-being certificates (5 in 2020 and 4 in 2021), energy consumption BOP MWh (6 in 2020 and 4 in 2021), emissions intensity of BOP kg CO₂e/m² (8 in 2020 and 7 in 2021) and Scope 3 t CO₂e (7 in 2020 and 11 in 2021). The provided evidence highlights that it is key for individuals, organizations, and politicians introducing new sustainability reporting rules in Europe to understand that too complex rules may not be fully

* E-mail: dominika.galkiewicz@fh-kufstein.ac.at (D. Galkiewicz), bernd.wollmann@fh-kufstein.ac.at (B. Wollmann).

We thank students from International Business Studies for helpful research assistance and comments.

¹ Dominika Galkiewicz is affiliated with University of Applied Sciences Kufstein Tirol, Finance, Accounting & Auditing, Andreas Hofer-Str. 7, 6330 Kufstein, Austria, Phone: +43 5372 71819 181.

² Bernd Wollmann is affiliated with University of Applied Sciences Kufstein Tirol, Marketing & Customer Experience, Andreas Hofer-Str. 7, 6330 Kufstein, Austria, Phone: + 43 5372 71819 217.

complied with and keep uniform EU taxonomy reporting requirements besides CSRD easy to apply in the future.

Key words: *Sustainability, Report, ESG, Real Estate, NFRD, Taxonomy.*

1 Introduction

The importance of sustainability and reporting on it has evolved rapidly over the past two decades. Nowadays people and businesses are aware of the need for fighting against climate change and for behaving ethically when interacting with communities, customers, suppliers and employees of companies. Even though the United Nations (UN) defined the term sustainability in 1987 for the first time, it took almost thirty years (until the 2015 Paris Agreement) to create the 2030 Agenda for Sustainable Development with 17 Sustainable Development Goals (SDGs) and 169 targets (United Nations (1987) and United Nations General Assembly (2015)). Sustainability is used as a term for describing many "green" concepts and corporate responsibility, while the abbreviation ESG (standing for Environment, Social and Governance) has become the preferred term for investors and capital markets. The reported ESG risks and performance measures show which risks a company faces and how it mitigates them to sustainably act and generate long-term financial returns. Unfortunately, various stakeholder groups have difficulties to follow the provided information, because of different coexisting ESG reporting standards and frameworks besides non-mandatory reporting regimes. For companies the high costs of data collection and additional reporting matter the most. However, effective ESG data management and sustainability reporting are essential for complying with the requirements of the existing Non-Financial Reporting Directive (NFRD) and upcoming in 2024 European Taxonomy combined with the Corporate Sustainability Reporting Directive (CSRD).

This study analyzes the status quo of mandatory and voluntary sustainability reporting, as the relevant laws in the European Union (EU) are only very rudimentarily formulated. The aim of the study is to show what kind of information related to environment, employees and other social and governance issues is provided by how many companies (this corresponds to "E", "S" and "G" of the ESG dimensions). A key success would be to fix the traceability of ESG information provided in annual reports and other sustainability reports as this is essential/material for decision-making. The focus of this study is, therefore, on how comparable the ESG measures from large listed real estate companies from Germany, Austria and Switzerland are. The importance of ESG reporting by real estate companies can also be

deduced from the commonly known fact that they are responsible for more than 30% of global CO₂ emissions. The European Real Estate Association (EPRAs) has issued recommendations on which measures to report and how to calculate them in advance, especially the environmental indicators. Finally, the analysis aims to promote best practices developed by the largest companies in the sample for which sustainability reporting is mandatory.

In this study, the focus is on 55 companies with a market capitalization of more than 100 mio. EUR that submitted an annual report or/and a sustainability report in 2020 and 2021. Currently, there are no studies that explicitly address environmental, social and governance reporting by real estate companies in the DACH region (Germany, Austria and Switzerland). Studies analyzing listed companies emphasize investor's demand for ESG information (e.g., Holder-Webb et al., 2009, Khan et al., 2013, and Reverte, 2009) and provide crude measures of stakeholder sustainability orientation (e.g., Branco and Rodrigues, 2008, Campbell et al., 2006, and Huang and Kung, 2010). The study of Samani, Overland, and Sabelfeld, 2023, focuses on how the NFRD Directive (EU 2014/95) and employee board representations affect the scope and quality of employee-related disclosures for Swedish companies listed on the Nasdaq OMX Stockholm Exchange. Both the policy itself and employee representation on the board are found to have a positive impact on the scope and quality of employee-related disclosures. In addition, it is confirmed that employee-related disclosures are significantly more detailed for companies with employee representatives. The studies by Contrafatto, 2014, and O'Dwyer and Unerman, 2016, provide evidence on the drivers of mandatory corporate social responsibility (CSR) reporting by unlisted companies. Herndon, 2022, examines whether companies with established CSR practices achieve higher stock valuations than firms that do not practice CSR. The result of Herndon's study shows that CSR has a slightly positive to neutral impact on stock prices as CSR has been shown to cause a nominal increase in stock price mainly due to social capital, community relations, public relations, and general market perception, but not because of company performance. Past research also shows that companies can subconsciously or consciously influence policy decisions through their ESG reporting (e.g. Morsing and Roepstorff, 2015, Shirodkar et al., 2018, Weyzig, 2008, and Zhao, 2012) or/and consumer behavior (e.g. Carrigan and Attalla, 2001, Vogel, 2005, and Asay et al., 2022). Several studies show that consumers are willing to pay more for products that communicate a CSR component (Becker-Olsen et al., 2006, Bhattacharya and Sen, 2004, and

Sankar and Bhattacharya, 2001), while employees are looking for companies that follow good governance practices (Georgios and Ioanna, 2018, and Waples and Brachle, 2020).

Finally, the corporate and financial systems should be expanded toward climate protection and adapted to climate change so that the transition to a circular economy can succeed. Subsequently, the circular economy should make an essential contribution to preventing environmental pollution as far as possible, protecting water resources and maintaining the biodiversity of ecosystems (Schumacher, 2022). Sustainable finance and ESG investing-related operations deal with large amounts of non-financial data and scientific performance metrics, such as GHG emissions, biodiversity loss, hydrology, atmospheric science, marine biology, pedology, or zoology. Unfortunately, we have to acknowledge that still many of the global ESG frameworks and national sustainable finance strategies do not sufficiently address the discrepancy between the claim of professional ESG expertise and the actual gaps in the expertise of many so-called ESG experts. Regarding to general greenwashing of sustainable finance and ESG investments, a mandatory, public-blind peer review by experts could help to underpin the integrity of ESG investments at the sector level (Schumacher, 2022, and Webb, 2022). The results of the underlying study provide guidance to companies from different industries for their own reporting on sustainability, especially in relation to their environmental, social and governance issues based on best practices from the real estate industry in German-speaking countries. Additionally, it contributes to the literature by showing how patchy voluntary sustainability reporting still is in the real estate industry in 2020 and 2021. Implications for various stakeholder groups and more political action arise from these differentiated findings.

In the following, section 2 provides the regulatory background and section 3 describes the data and methodology. The discussion of the empirical results follows in section 4, while section 5 concludes the paper.

2 Background on Sustainability Regulation and Reporting Requirements

The Sustainability Movement's Short History. As early as 1987, sustainable development was defined in the World Commission on Environment and Development's 1987 Brundtland report "Our Common Future" as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs."³ It seeks to reconcile economic development with the protection of social and environmental balance. Next, in

³ Hauff, 1987, available at https://www.nachhaltigkeit.info/artikel/brundtland_report_563.htm (assessed on 02.11.2022).

1992, the UN Summit took place and the Sustainable Development Action Plan (Agenda 2021) was developed showing better measurement methods. At this time sustainability was still an abstract and unmeasurable concept, as there were no tools for quantifying sustainable actions (Caradonna, 2014 and Thaler, 2021).

In 2005, the UN World Summit recommended the use of the model with the three “E”, namely Environment, Economy and Equity/Social Justice, and the intersection S (Sustainability). This was the turning point as corporate social responsibility (CSR) and the triple bottom approaches were substituted. Subsequently, the UN issued the Millennium Development Goals (MDGs) before formulating the currently applicable Sustainable Development Goals (SDGs) for responsible investing in 2015 (the Paris Agreement). With the 2030 Agenda adopted in 2015 and enforced from 2016 on, the United Nations committed itself to 17 global SDGs and 169 sub-goals for a better future. The goal of the 2030 Agenda is to enable a dignified life worldwide, while at the same time permanently preserving the natural foundations of life. This includes economic, ecological and social aspects. The 2030 Agenda underlines the joint responsibility of politics, business, science and civil society including every individual for future living. In line with this argument, authors like Edmans, 2018, stress that the primary goal of businesses is serving society, rather than focusing solely on profit maximization.

In the World Economic Forum's (WEF) Global Risk Report 2020 one can recognize the top five long-term risks: extreme weather, climate change mitigation failure, natural disasters, biodiversity loss, and environmental disasters (WEF, 2020). All of these developments reflect man-made environmental changes and are therefore indicative of the increased importance of harmonized sustainability reporting. Sustainability standards provide an opportunity for firms and institutions to address environmental and social problems, while creating a sustainable economy. In sum, there are three broad categories of standards (Behnam & MacLean, 2011):

- Principle-based standards (e.g., UN Global Compact),
- Certification standards (e.g., external auditors are certifying compliance with the minimum requirements of the ISO 14001 environmental standard),
- Reporting standards (e.g., disclosure and transparency frameworks such as these provided by the Global Reporting Initiative (GRI)).

EU Sustainability Reporting Regulation. In 2001, the European Commission (EC) referred to activities carried out on a voluntary basis in its first policy paper on CSR. Later it was

recommending the EU improving the reporting and disclosure of corporate social and environmental activities in 2011 (EC, 2011). Subsequently, Directive 2014/95/EU, known as the CSR Directive or Non-Financial Reporting Directive (NFRD), required public interest entities to improve the comparability of non-financial disclosures starting in 2017 (EU member states were required to implement the directive by December 6, 2016). The NFRD applies to public interest entities with an average of more than 500 employees, total assets of more than 20 mio. EUR or net sales of more than 40 mio. EUR in a financial year. Public interest entities are credit institutions, insurance companies, companies listed and traded on a market of an EU Member State, or companies deemed to be of public interest (European Parliament and Council of the European Union, 2014 and Thaler, 2021). These companies are required to either include a non-financial statement in their management report or prepare a separate sustainability report for the public. Statutory auditors should only verify that the organizations delivered the non-financial report. In 2017 and 2019, the EC published guidelines for non-financial reporting and expanded them to include applicable sustainability standards such as the Carbon Disclosure Project (European Commission, 2017b and European Commission, 2021b).

On April 21, 2020, the EU Commission adopted a proposal for a Corporate Sustainability Reporting Directive (CSRD) to apply from 2024 on. Its aim is to amend and supplement existing directives to include a wider range of companies (and audits) and to refine reporting requirements (European Commission, 2021b). On November 3, 2021, the IFRS Foundation's Trustees established the International Sustainability Standard Board (ISSB) with a headquarter in Frankfurt, Germany. Its goal is developing a global basis for sustainability-related disclosure standards. In order to create comparable information, an EU reporting standard for sustainability reporting is to be created. International frameworks such as Global Reporting Initiative (GRI), Sustainability Accounting Standard Board (SASB), International Accounting Standards Board (IASB), Task Force on Climate Related Disclosures (TCFD), as well as UN Global Compact and the SDGs need to be considered. The EU sustainability reporting standards will be published in a delegated act of the EC (supplementary guidelines follow by Oct. 31, 2023).

Sustainability Reporting Requirements. Minimum reporting on environmental, social and employee issues, human rights, anti-corruption and anti-bribery, and diversity policy is required. In addition, the company's business model, business policy, risks and risk management in relation to the aforementioned aspects need to be disclosed. Its due diligence

policies, the results of these policies and non-financial performance indicators should be reported. The NFRD regulations lead to changes in the Third Book of the German Commercial Code, in particular in sections 289b to 289e and 315b to 315d HGB. The content required for the non-financial statement or sustainability report is set out in Section 289c HGB. In addition, it is recommended that organizations base their reporting on recognized national and international standards and indicate which standard has been used. The NFRD cites the Eco-Management and Audit Scheme (EMAS), the United Nations Global Compact (UNGC), the Guiding Principles on Business and Human Rights, the Organization for Economic Cooperation and Development (OECD) Guidelines for Multinational Enterprises, the International Organization for Standardization ISO 26000 Social Responsibility Framework, and the GRI. All in all, the NFRD includes the following basic principles:

- Essential, critical information
- Presented in a fair, balanced, unbiased and understandable manner
- Presented comprehensively but concisely
- Providing insights into future strategy and processes
- Taking into account all stakeholder requirements
- Consistently and coherently prepared over time (European Commission, 2017)

Similar rules apply to Austrian companies of relevant size. The NFRD was retroactively implemented into Austrian law for 2017. The Sustainability and Diversity Improvement Act (NaDiVeG) came into force on December 6, 2016 and the amendment to non-financial reporting is found in Sections 243b and 267a of the Austrian Business Code. Occasional changes occurred in the Austrian Stock Corporation Act and the Limited Liability Companies Act (Bernhard and Riedlberger, 2021 and Thaler, 2021). Lastly, on April 21, 2020, the EC adopted a proposal for the CSRD and these rules equally apply to Germany and Austria.

CSRD Regulation Relevant from 2024 on. The CSR Directive, published in the Official Journal of the European Union on December 14, 2022, amends the existing NFRD of 2014. Uniform European reporting standards and reporting rules following the principle of double materiality are specified. The CSRD also introduces an audit requirement for sustainability reporting and improves the accessibility of the information by requiring its publication in a digital and machine-readable format in the management report. The EU rules apply to all large companies (250 employees, net sales of 40 mio. EUR, total assets of 20 mio. EUR) and to all companies listed on regulated markets (listed micro-enterprises are exempted). A

subsidiary will be exempted from the CSRD, if the parent company includes the subsidiary in its consolidated CSRD compliant management report. Companies currently applying the NFRD have to implement the CSRD starting in 2024, while others follow in later years.

Recent Swiss Regulation. There is still no legal obligation for reporting sustainability measures in Switzerland, even though the discussions in the Federal Council are currently dealing with this topic in detail. On Feb. 23, 2022, the Federal Department of Justice and Police (FDJP) commissioned the Federal Office of Justice (FOJ) to investigate the impact of the current EU regulations on sustainability reporting, transparency and due diligence obligations, and to survey any need for integrating into Swiss law. GRI is currently working with the European Financial Reporting Advisory Group and the International Sustainability Standards Board to align their respective sustainability reporting standards (Flach, 2022). ESG recommendations were already added to the Swiss Code of Best Practice for Corporate Governance in 2014. The Six Swiss Exchange even introduced the option for sustainable reporting (an opt-in option). Currently, four standards are accepted by the exchange: Global Reporting Initiative (GRI), United Global Compact (UNGC), Sustainable Accounting Standard Board (SASB), and European Real Estate Association (EPRA) (Kleibold and Vesper, 2019).

In 2015, the Swiss Federal Council published a statement on CSR calling for (voluntary) transparency and non-financial reporting on corporate sustainability activities (Baumüller et al., 2018). The Federal Assembly provided an indirect counterproposal with the following two new regulations for the Code of Obligations in 2020 (Swiss Confederation, 2020). First, it introduces mandatory non-financial reporting for organizations defined similarly to the NFRD. Thus, companies affected are public interest entities with at least 500 employees in two consecutive financial years, total assets of more than 20 mio. CHF or net sales of more than 40 mio. CHF. The report must be made available to the public for ten years and have similar content to the NFRD. Second, companies will be required to conduct due diligence and reporting on conflict zone minerals and child labor. This reporting and due diligence requirement applies to companies that import materials from conflict zones or high-risk areas as well as companies that offer products or services potentially linked to child labor. In sum, potential risks must be defined and countermeasures established (Swiss Confederation, 2020 and Thaler, 2021).

It is expected that the new EU sustainability reporting obligation will also apply to non-EU companies that generate net sales of more than 150 mio. EUR in the EU and have at least one subsidiary or branch in the EU from 2028 on. Besides the currently estimated 50 000 companies affected by the new CSRD regulation in the EU several large Swiss companies will also be affected in future by the latter. In the context of the updating process of the OECD Guidelines for Multinational Enterprises Switzerland is lobbying for adopting disclosure recommendations consistent with other international standards.

3 Data and Methodology

In the following, we analyze sustainability reporting practices of 55 publicly listed Real Estate (RE) firms from Germany, Austria and Switzerland having a market capitalization above 100 mio. EUR in 2020 and 2021. Their annual reports or sustainability reports, if provided separately, are compared with regard to the comparability of sustainability measures. Ideally, following EU law sustainability/ESG reporting is informative (materiality) and comparable. Our three largest German entities are Vonovia (XTRA: VNA), Deutsche Wohnen SE (XTRA: DWNI) and LEG Immobilien AG (XTRA: LEG), while in Austria these are CA Immobilien Anlagen AG (WBAG: CAI), IMMOFINANZ AG (WBAG: IIA), S IMMO AG (WBAG: SPI). In Switzerland, the relevant top3 counterparts are Swiss Prime Site AG (SWX: SPSN), PSP Swiss Property AG (SWX: PSPN) and Allreal Holding AG (SWX: ALLN).

The applied methodology is known as a content analysis based on investigating individual documents like non-financial text passages or statements (Wooldridge (2013)). As stated similarly in Austrian and German law, a **minimum reporting is required on environmental, social and employee concerns, human rights, anti-corruption and bribery issues, and diversity policies** (e.g. § 289c of the German Commercial Code/HGB). This minimum reporting on ESG issues is being further investigated. The majority of sample firms provide this information on a **voluntarily basis** as their numbers of employees lie below 500. Mandatory disclosure would only be required if a company was classified as a public interest entity, which is here not the case.

4 Results

The annual or separate sustainability reports of the largest 55 real estate firms from the German-speaking area of Germany, Austria, and Switzerland provide an overview of common sustainability reporting practices. **Table 1** shows how many entities provided environmental

measures recommended by the EPRA together with the type of information provided in the years 2020 and 2021. The direct comparison of the figures in these years allows to observe the “E” (from ESG) measures reporting dynamics like the level of acceptance and voluntary implementation.

The “E” measures from the annual or separate sustainability reports. In the following we investigate the “E”-measures that are required, for example by the EPRA, to document the status quo of environmental reporting. More than 50% of companies show the number of rented units in both years, but the typical environmental measures are only reported by 20 to 40% out of 55 RE companies as can be seen in **Table 1**. The total energy consumption MWh was reported by 24 entities in 2020 and 18, which is 25,0% less in 2021, while the energy intensity of rentable area kWh/m² as recommended by EPRA was shown by 20 firms in 2020 and 16 in 2021 (-20,0%). The general heating consumption in portfolio MWh was given by 20 firms in 2021 (16 in 2020), while the overall water consumption million m³ could be identified for 19 entities in 2021 (18 in 2020) – in both cases an almost constant development. The waste volume tonnes (t) are observable 16 times in 2020 and 12 in 2021 (-25,0%). The next measure, which is being reported following the EPRA recommendations, is the emission intensity of rentable area kg CO₂e/m² showing up 21 times in 2021 and 14 in 2020, which is equivalent to a decrease of approx. 33,3%.

Table 1: Overview of the Changing Number of Firms Reporting Environmental Measures in 2020 and 2021 (55 Sample Firms)

Information type	No. of reporting firms in 2020/2021
Number of rented units	33/33 (+/-0,0%)
Total Energy Consumption MWh	24/18 (-25,0%)
Energy intensity of rentable area kWh/m ²	20/16 (-20,0%)
Heating consumption in portfolio MWh	20/16 (-20,0%)
Water consumption million m³	18/19 (+5,6%)
Waste volume t	16/12 (-25,0%)
Energy consumption BOP MWh	06/04 (-33,3%)
Emission intensity of rentable area kg CO ₂ e/m ²	21/14 (-33,3%)
Scope 1 t CO₂e	16/18 (+12,5%)

Scope 2 t CO2e	17/18 (+5,9%)
Scope 3 t CO2e	07/11 (+57,1%)
Emission intensity of BOP kg CO2e/m²	08/07 (-12,5%)
Limited engagement opinion by auditors (Yes/No)	02/02 (+/-0,0%)
EPRA Recommendations are followed on? (Yes/No)	11/18 (+63,6%)
Which Env. Standards are used? (e.g. GRI, UNGC)	11/14 (+27,3%)

Additionally, the Scope 1 t CO₂e (emissions directly caused by the company) reporting increased by 12,5% from 16 entities in 2020 to 18 in 2021. Similarly, the Scope 2 t CO₂e (emissions indirectly caused by the company) reporting increased by ca. 6% from 17 entities in 2020 to 18 in 2021, while the Scope 3 t CO₂e (emissions caused by the company's suppliers) reporting rose by ca. 57,0% from 7 entities in 2020 to 11 in 2021. Only the measures energy consumption BOP MWh and Emission intensity of BOP kg CO₂e/m² are seldom mentioned by ca. 10% of the 55 RE firms in both years. Finally, 18 companies stated in 2021 (11 in 2020) to actively follow the EPRA recommendations and another 14 entities in 2021 (11 in 2020) list the standards applied e.g. GRI, SASB, UNGC, which means that in both cases a positive increase by around 60 % and 30% is observable, respectively.

Individuals and organizations interested in **sustainability reporting (best) practices** can focus on the sustainability reports of the largest RE companies and EPRA recommendations. For example, Vonovia's report consists of more than 100 pages and contains many visualizing pictures, boxes, graphs combined with relatively easy to understand text passages. Readers with a higher level of business knowledge may rather be interested in the tables placed at the end of the report, which show the development of quantitative ESG measures over time. The ESG performance indicators can also be looked up in an excel file separately provided by the entity on its webpage. It contains more than 15 sheets and can be used for orientation when developing an own ESG reporting system. Almost all of the largest RE firms in the sample provide very solid sustainability reports that can be recommended for further hands-on guidance. Summing up the majority of environmental measures was 30 to 60% more often reported in 2021 than in 2020, but the baseline figures were relatively low. The complexity of the topic and the parallel coexistence of multiple standards seems to overwhelm companies.

The “S” and “G” measures from the annual or separate sustainability reports. Table 2 shows how many companies provided employee, other social and governance related

information together with the type of information provided in the years 2020 and 2021. We observe that more than 50% of the analyzed firms mentioned the total number of employees, supervisory board members, the share of women and the number of permanent full-time contracts in 2020. In 2021, this reporting frequency was only observable with regard to the total number of employees, supervisory board members, proportion of female executives and % of women on the board of directors. Hence, while 49% of the companies surveyed still reported the total number of employees in 2020, the reporting rate fell by 14.3% in 2021. By contrast, the proportion of female executives rose by 33.3%, and the percentage of women on the board of directors by as much as 50%. In 2020, more than a third of the 55 firms commented on the proportion of female executives, % of women on the board of directors, staff turnover rate, new hired employees, full-time employees and part-time employees. In 2021, the share of women, staff turnover rate, new hired employees, total accidents, average age, full-time employees, and the part-time employees' number were mentioned by more than a third of companies.

Finally, in 2020 and 2021 less than a third of the Real Estate firms provided information on the salary ratio of woman to man, average sick days/year, total number of trainees, executive pay ratio, and employee-satisfaction with the exception of total accidents and average age that were seldom mentioned in 2020.⁴ In **Table 2**, it can be observed that several ESG measures are being mentioned more often in 2021 than in 2020.

Table 2: Overview of the Changing Number of Firms Reporting Employee, Other Social and Governance Information in 2020 and 2021 – Part I (55 Sample Firms)

Information type	Number of reporting firms in 2020/2021	Information type	Number of reporting firms in 2020/2021
Number of employees	49/42 (-14,3%)	Average sick days per year	11/11 (+/-0%)
Share of women	28/26 (-7,1%)	Total number of trainees	14/11 (-21,4%)
Employees with permanent contract	28/16 (-42,9%)	Executive pay ratio	07/10 (+42,9%)

⁴ The proportion of female workers (mentioned by 21 firms in 2020 and 28 ones in 2021) lies between ca. 27% and 74% (not reported). The percentage of women in executive positions is rather low, which is partially the reason why the gender pay ratio is seldom provided.

Proportion of female executives	21/28 (+33,3%)	Total Accidents	10/18 (+80,0%)
% of women on the board of directors	18/27 (+50,0%)	Average age	14/18 (+28,6%)
Salary ratio of woman to man	12/13 (+8,3%)	Full-time employees	23/22 (-4,3%)
Staff turnover rate	20/21 (+5,0%)	Part-time employees	19/17 (-10,5%)
New hired employees	20/24 (+20,0%)	Employee-Satisfaction	08/12 (+33,3%)

For example, some numbers increased by approx. 20% new hired employees, approx. 35% average age, approx. 50% the % of women on the board of directors, executive pay ratio and employee-satisfaction, ca. 80% total accidents. In contrast, less often are mentioned in 2021: the total number of employees in Austria and Switzerland (in Germany this information is mandatory), share of women, employees with a permanent contract, total number of trainees and full-time employees, which is surprising as the latter information does not seem to be too difficult to be obtained from internal data.

In **Table 3**, further information regarding employee, other social and governance measures is provided. In sum, most of the companies (37 in 2020 and 39 in 2021 out of 55) list their supervisory board members, which is mandatory for many firms. In 2020 and 2021, more than a third of the 55 companies confirm to have anti-corruption processes implemented and report 2 in 2021 (0 in 2020) proven cases of corruption and 1 in 2021 (0 in 2020) incident of discrimination. However, firms are not willing to comment on these issues. Moreover, in both years 25 companies directly relate their activities to the SDGs and 20 out 55 firms obtained sustainability certificates in 2021 versus only 14 out of 55 having one in 2020.

Small reporting frequencies are observable in case of the following ESG measures: violations of the code of conduct (mentioned 1 time in 2020 and 2 times in 2021), safety inspections of buildings (mentioned 5 times in 2020 and 8 times in 2021), total number of suppliers (mentioned 4 times in 2020 and 6 times in 2021), share of expenses for local suppliers in % (mentioned 2 times in 2020 and 3 times in 2021). Obtained well-being certificates, which confirm that firms are offering good working conditions for their workforce, were only reported by 5 firms in 2020 and 4 ones in 2021. Only 5 (2) firms planned in 2021 (2020) to tie the board compensation to sustainability measures. These surprises, because tying the board's and management's compensation to common sustainability measures (with low chances to be

manipulated) could be the most effective tool in speeding up sustainability efforts. In this context it is interesting to recognize that the number of companies which developed their own sustainability performance index increased from 4 in 2020 to 9 in 2021 (+125%). This together with the fact that 20 firms in 2021, instead of 14 in 2020, obtained a sustainability certificate shows a positive trend towards sustainable changes.

Less than a third of companies confirm to follow the human rights guidelines (14 in 2020 and 12 in 2021 out of 55). In addition, as shown in **Table 3** 11 in 2020 and 7 in 2021 companies mention to offer ESG specific employee training, while another 7 in 2020 and 15 in 2021 firms mentioned employees examining a Code of Conduct training. In 2020 and 2021, 10 and 14 firms respectively, undertook customer surveys to further improve service/product quality and on supplier side 13 firms report in both years to have business partner Code of Conduct/Supplier Code of Conduct rules established. Finally, 8 in 2020 and 13 in 2021 companies engaged in regional sponsoring projects.

Table 3: Overview of the Changing Number of Firms Reporting Employee, Other Social and Governance Information in 2020 and 2021 – Part II (55 Sample Firms)

Information type	No. of reporting firms in 2020/2021	Information type	No. of reporting firms in 2020/2021
Proportion of employees with Code of Conduct training	07/15 (+114,3%)	ESG specific training (Yes/No)	11/07 (-36,4%)
Violations of the Code of Conduct	01/02 (+100,0%)	Customer Survey (Yes/No)	10/14 (+40,0%)
Regional sponsoring projects	08/13 (+62,5%)	Well-being certificate (Yes/No)	05/04 (-20,0%)
Supervisory Board members	37/39 (+5,4%)	Business partner Code of Conduct/ Supplier Code of Conduct	13/13 (+/-0%)
Proven Case of corruption	21(0)/19(2) (-9,5%)	Own Sustainability Performance Index (Yes/No)	04/09 (+125,0%)
Incidents of discrimination	16(0)/17(1) (+6,3%)	Board Compensation tied to Sustainability measures (Yes/No)	02/05 (+150,0%)
Safety inspection of buildings	05/08 (+60,0%)	Anti-Corruption processes implemented (Yes/No)	22/21 (-4,5%)
Total No. of suppliers	04/06 (+50,0%)	Human-rights issues commented/followed	14/12 (-14,3%)

		(Yes/No)	
Share of expenses for local suppliers (in %)	02/03 (+50,0%)	Sustainability Certificates (Yes/No)	14/20 (+42,9%)
		UN SDG's Included in the Report	25/25 (+/-0%)

On the one side, the involvement of firms, customers, suppliers and employees in following human rights guidelines, ESG and Code of Conduct rules could be extended towards more firms. On the other side, it is important to admit that several measures were mentioned more often, even though the original 2020 frequency level was low (**Table 3**). The number of employees with a code of conduct training more than doubled, regional sponsoring projects increased by ca. 60%, mentioning the total number suppliers, safety inspections of buildings, customer surveys, developing own performance indices, tied board compensation to sustainability measures and obtaining sustainability certificates increased by ca. 50%.

Even though the comparability of employee, other social and governance measures increased over time, one has to admit that there is still a lot of room for improvement. Companies should invest more time and resources to increase sustainability reporting quality to make the latter comparable. This type of basic sustainability reporting should become mandatory to a wide range of firms, not only the largest ones. Over time sustainability indicators will be generated directly in the finance department and supervised by the Chief Financial Officer (CFO). Finally, the sustainability trend can be perceived as an opportunity for increasing innovativeness and publishing confirming ESG scorecards. From all 55 analyzed real estate companies only a few are planning to tie compensation to sustainability measures or self-developed indices in the coming years, which would be motivating management most to rise sustainability reporting quality to the next level.

Many of those, who still search for the right approach, often purchase (pseudo-)sustainability certificates and show up to 10 certificates from various private firms, not necessarily known for their sustainability know-how, on their webpages. This is not necessarily how sustainability awareness and action were meant to be. The new EU regulation which comes into effect in 2024 can lead to improvements in sustainability reporting quality in the future, but these requirements should not be too complex at the beginning and transparent across all industries. After 3 to 5 years, one could then extend the reporting requirements to be more specific, i.e. industry oriented, otherwise, the companies will follow the rules on paper and fill the measures with unprecise numbers. In fact, in order to save the planet, we need only a few

environmental measures to be improved and correctly reported. Requiring a high level of pseudo-precision from the companies from the beginning on, will most probably, lower their acceptance for ESG measures implementation and increase reporting of fake facts, which will be difficult to detect for auditors, who are not engineers by definition. If this grey zone appears, we will reach the goal of CO2 neutrality in 2050 only on paper, but not in reality. The goal of regulators in the EU and elsewhere in the world should, however, be reaching the zero net goal to save the planet for future generations.

5 Conclusion

This study aims to show common sustainability reporting practices of real estate firms in 2020 and 2021, given existing European regulations. In recent years, sustainability has become a buzzword, and sustainability reporting is often perceived only as a marketing tool. However, it is unclear, whether firms establish sustainable structures or whether they argue existing processes into being sustainable. Finally, transformative work towards sustainability needs to be done as investors/consumers are aware of the necessity to go green.

Generally, it is not easy to compare the reported sustainability measures focused on social, governance, and environmental issues across entities stemming from one industry in one country (e.g. Real Estate in Germany). In all three countries, we find evidence that several ESG measures are being mentioned more often in 2021 than in 2020, but one should not forget that only 20-40% of the large RE companies reported any of them to begin with. The largest companies use several sustainability reporting standards in parallel, which makes a direct comparison difficult – there are too many coexisting ESG reporting schemes. Thus, even though a positive trend in the reporting of sustainability measures can be recognized, the general reader usability of environmental reporting seems to be rather low in 2020 and 2021. Our findings are indicative as only two years of data and a relatively small sample of 55 entities stemming from one industry were analyzed. Thus, future research could focus on smaller firms in this industry and undertake a content analysis across various industries for several years.

Sustainability standards, and especially environmental measures, arguably play an essential role as they allow corporations to evaluate and disclosing their sustainability related activities. The number of sustainability standards is constantly increasing, while one global less complex system for companies is still missing – this remains problematic. The creation of the ISSB and extension of sustainability reporting requirements for different industries at the EU level from

2024 on may improve reporting quality or lead to a failure (flood of unprecise numbers). Policymakers, lobbyists, and regulators should be aware of our findings and recommendations and control the level of complex bureaucracy put on companies to make the planet greener.

References

- Asay, H. S., Hoopes, J. L., Thornock J. R., and J. H. Wilde, 2022, Tax boycotts. Working Paper.
- Baumüller, J., Mühlenberg-Schmitz D., and D. Zöbeli, 2018, Die Umsetzung der CSR-Richtlinie und ihre Bedeutung für die Schweiz: Zu den Folgen der EUweiten Gesetzesreformen im deutschsprachigen Raum, *Expert Focus* 92(12), 981–986. <https://www.swissauditmonitor.ch/wp-content/uploads/2019/04/Die-Umsetzung-der-EU-CSR-Richtlinie-und-ihre-Bedeutung-fuer-die-Schweiz.pdf>
- Becker-Olsen, K. L., Cudmore, B. A., and R.P. Hill, 2006, The impact of perceived corporate social responsibility on consumer behavior. *Journal of Business Research*, 59(1), 46-53.
- Bhattacharya, C. B., and S. Sen, 2004, Doing Better at Doing Good: When, Why, and How Consumers Respond to Corporate Social Initiatives. *California Management Review*, 47(1), 9-24.
- Behnam, M. and T. L. MacLean, 2011, Where Is the Accountability in International Accountability Standards? A Decoupling Perspective. *Business Ethics Quarterly* 21(1), 45–72. <https://doi.org/10.5840/beq20112113>
- Bernhard, B. and N. Riedlberger, 2021, Nichtfinanzielle Berichterstattung österreichischer nichtfinanzieller Unternehmen im Jahr 2019. *Statistiken - Daten & Analysen Q1/21*, 18(1), 39–47.
- Branco, M. C. and L. L. Rodrigues, 2008, Factors Influencing Social Responsibility Disclosure by Portuguese Companies, *Journal of Business Ethics* 83(4), 685–701.

- Campbell, D., Moore, G., and P. Shrives, 2006, Cross-sectional effects in community disclosure, *Accounting, Auditing and Accountability Journal* 19(1), 96–114.
- Caradonna, J. L., 2014, *Sustainability: A History*, Oxford University Press. <http://search.ebscohost.com/login.aspx?direct=true&scope=site&db=nlebk&db=nlabk&AN=806526>
- Carrigan, M. and A. Attalla, 2001, The myth of the ethical consumer – do ethics matter in purchase behaviour?, *Journal of Consumer Marketing* 18, 560–578.
- Contrafatto, M., 2014, The institutionalization of social and environmental reporting: An Italian narrative, *Accounting, Organizations and Society* 39(6), 414–432.
- Edmans, A., 2018, The purpose of profit, *London Business School Review*, 30(2-3), 18–21. <https://doi.org/10.1111/2057-1615.12304>
- Edmans A., 2020, *Grow the Pie: How Great Companies Deliver Both Purpose and Profit*, 1st edition, Cambridge University Press.
- Edmans A., 2021, *Grow the Pie: How Great Companies Deliver Both Purpose and Profit*, 2nd edition, Cambridge University Press.
- European Commission, 2011, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: A renewed EU strategy 2011-14 for Corporate Social Responsibility. Retrieved 06/05/2021, from <https://eur-lex.europa.eu/legalcontent/EN/TXT/PDF/?uri=CELEX:52011DC0681&from=EN>
- European Commission, 2017a, Communication from the Commission. Guidelines on non-financial reporting (methodology for reporting non-financial information). Retrieved 10/01/2022, from [https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52017XC0705\(01\)&from=EN](https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52017XC0705(01)&from=EN)
- European Commission, 2021a, Proposal for a Directive of the European Parliament and of the Council amending Directive 2013/34/EU, Directive 2004/109/EC, Directive 2006/43/EC and Regulation (EU) No 537/2014, as regards corporate sustainability reporting. Retrieved 10/01/2022, from <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52021PC0189&from=EN>

- European Commission, 2021b, European Commission. (2017b). EMAS User's Guide. Retrieved 15/01/2022 from <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:02013D0131-20171212&from=EN>
- The European Parliament and the Council of the European Union, 2014, Directive 2014/95/EU of the European Parliament and of the Council of 22 October 2014 amending Directive 2013/34/EU as regards disclosure of non-financial and diversity information by certain large undertakings and groups. Retrieved 10/01/2022, from <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014L0095&from=EN>
- Flach, B., 2022, Auswirkungen der neuen CSR-Richtlinie für die Schweiz, 2from <https://www.parlament.ch/de/ratsbetrieb/suche-curia-vista/geschaefte?AffairId=20224142>
- Georgios, T., and Y. Ioanna, 2018, Corporate social responsibility influences employee engagement. *Social Responsibility Journal*, 14(1), 123-137.
- Hauff, V. (Ed.), 1987, *Unsere gemeinsame Zukunft. Der Brundtland-Bericht der Weltkommission für Umwelt und Entwicklung*, Eggenkamp, from https://www.nachhaltigkeit.info/artikel/brundtland_report_563.htm [assessed on 20.12.2022]
- Herndon, D.C., 2022, Critically Appraised Topic (CAT): Do companies that follow corporate sustainability responsibility (CSR) practices achieve higher stock valuations than firms that do not practice CSR? SSRN working paper. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4322743
- Holder-Webb, L., Cohen, J. R., Nath, L., and D. Wood, 2009, The supply of corporate social responsibility disclosures among U.S. firms, *Journal of Business Ethics* 84(4), 497–527.
- Huang, C.-L. and F.-H. Kung, 2010, Drivers of environmental disclosure and stakeholder expectation: Evidence from Taiwan, *Journal of Business Ethics* 96(3), 435–451.

- Khan A., Muttakin M. B. and J. Siddiqui, 2013, Corporate Governance and Corporate Social Responsibility Disclosures: Evidence from an Emerging Economy, *Journal of Business Ethics* 114(2), 207– 223.
- Kleibold T. and M. Vesper, 2019, Corporate Social Responsibility: Aktuelle Entwicklungen in der Schweiz, *Zeitschrift für Internationale Rechnungslegung IRZ*, 325-329.
- Morsing, M. and A. Roepstorff, 2015, CSR as corporate political activity: Observations on IKEA`s CSR identity – image dynamics, *Journal of Business Ethics* 128, 395–409.
- O`Dwyer B. and J. Unerman, 2016, Fostering rigour in accounting for social sustainability. *Accounting, Organizations and Society* 49, 32–40.
- Rajgopal S., 2021, Does Philip Morris International (PMI) Provide The Managerial Playbook for Western Oil Majors, published in *Forbes* 19.12.2021, retrieved 21/01/2022, from <https://www.forbes.com/sites/shivaramrajgopal/2021/12/19/does-philip-morris-international-pmi-provide-the-managerial-playbook-for-western-oil-majors/?sh=23b27b4a8ce2>
- Reverte, C., 2009, Determinants of corporate social responsibility disclosure ratings by Spanish listed firms, *Journal of Business Ethics* 88(2), 351–366.
- Samani, N., C. Overland, and S. Sabelfeld, 2023, The role of the EU non-financial reporting directive and employee representation in employee-related disclosures. *Accounting Forum*. <https://doi.org/10.1080/01559982.2022.2158773>
- Sankar, S., and C. B. Bhattacharya, 2001, Does Doing Good Always Lead to Doing Better? Consumer Reactions to Corporate Social Responsibility. *Journal of Marketing Research*, 38(2), 225-243.
- Schumacher, K., 2022, Environmental, Social, and Governance (ESG) Factors and Green Productivity. The Impacts of Greenwashing and Competence. *Productivity Insights* 2(11), 9-18.
- Schweizerische Eidgenossenschaft, 2020, Obligationenrecht: Indirekter Gegenvorschlag zur Volksinitiative «Für verantwortungsvolle Unternehmen – zum Schutz von Mensch und Umwelt»). Retrieved 10/01/2022, from

<https://www.parlament.ch/centers/eparl/curia/2016/20160077/Schlussabstimmungstext%5C%202%5C%20NS%5C%20D.pdf>

Shirodkar, V., Beddewela, E. and U. H. Richter, 2018, Firm-Level Determinants of Political CSR in Emerging Economies: Evidence from India, *Journal of Business Ethics* 148, 673–688.

Stölzle, S.C. and D.P. Gałkiewicz, 2020, Green Bonds Representing Green Finance in Europe – Basic Characteristics, *Selected Papers of the Sixth International Scientific-Business Conference LIMEN 2020*, 27-36. <https://doi.org/10.31410/LIMEN.S.P.2020.27>

Thaler A., 2021, Sustainability Standards in Business: An Integrated Perspective for Companies in the DACH Region, University of Applied Sciences Kufstein Tirol Master Thesis.

United Nations, 1987, Report of the World Commission on Environment and Development: Our Common Future. Retrieved 19/12/2021, from <http://www.undocuments.net/our-common-future.pdf>

United Nations, 1992, AGENDA 21: United Nations Conference on Environment & Development Rio de Janeiro, Brazil, 3 to 14 June 1992. Retrieved 19/12/2021, from <https://sustainabledevelopment.un.org/content/documents/Agenda21.pdf>

United Nations General Assembly, 2015, Transforming our world: the 2030 Agenda for Sustainable Development. Retrieved 15/01/2022, from https://www.un.org/ga/search/view_doc.asp?symbol=A/RES/70/1&Lang=E

Vogel, D.J., 2005, Is there a market for virtue? The business case for corporate social responsibility, *California Management Review* 47, 19–45.

Waples, C. J., and B. J. Brachle, 2020, Recruiting millennials: Exploring the impact of CSR involvement and pay signaling on organizational attractiveness. *Corporate Social Responsibility & Environmental Management*, 27(2), 870-880.

Webb D., 2022, Consultants overestimate quality of own advice on climate, report suggests. *Responsible Investor* 2022. <https://www.responsibleinvestor.com/consultants-overestimate-quality-of-own-advice-onclimate-report-suggests/> [assessed on 20.12.2022]

- Weyzig, F., 2009, Political and Economic Arguments for Corporate Social Responsibility: Analysis and a Proposition Regarding the CSR Agenda, *Journal of Business Ethics* 86, 417–428.
- World Economic Forum, 2020, The Global Risks Report 2020 (15). Retrieved 10/01/2022, from http://www3.weforum.org/docs/WEF_Global_Risk_Report_2020.pdf
- Wooldridge, J. M., 2013, *Introductory econometrics: A modern approach, 5th Edition*, Mason OH: South Western Cengage Learning.
- Zhao, M., 2012, CSR-based political legitimacy strategy: Managing the state by doing good in China and Russia, *Journal of Business Ethics* 111(4), 439–460.