

Early Disclosure of the Double Materiality Concept in a European Oil and Gas Company

Valentin Florentin Dumitru¹, Ionela Corina Chersan² and Cătălina Gorgan³

¹⁾³⁾ Bucharest University of Economic Studies, Romania
²⁾ Alexandru-Ioan Cuza University, Iaşi, Romania
E-mail: valentin.dumitru@cig.ase.ro; E-mail: macov@uaic.ro
E-mail: catalina.gorgan@cig.ase.ro

Please cite this paper as:

Dumitru, V.F., Chersan, I.C. and Gorgan, C., 2023. Early Disclosure of the Double Materiality Concept in a European Oil and Gas Company. In: R. Pamfilie, V. Dinu, C. Vasiliu, D. Pleşea, L. Tăchiciu eds. 2023. 9th BASIQ International Conference on New Trends in Sustainable Business and Consumption. Constanța, Romania, 8-10 June 2023. Bucharest: ASE, pp. 425-432

DOI: <u>10.24818/BASIQ/2023/09/006</u>

Abstract

First used in 2019 by the European Union, the double materiality concept raises questions for companies and academics. The purpose of our study is to show the extent of double materiality disclosure in the sustainability report of TotalEnergies, one of the top European companies included in the Integrated Oil and Gas industry. We used a qualitative methodology, content analysis. We find that most of the aspects related with materiality are vaguely presented. This is one of the first studies dedicated to the reflexion of the double materiality in the reports. Double materiality has the potential to help companies integrate sustainability into their internal processes. Our research has implications for standard-setters. We argue that there is a need for clear standards that will help companies contribute to the achievement of global sustainability-related goals.

Keywords

Double materiality, Corporate Sustainability Reporting Directive, European Union, Oil and Gas, Sustainability reports.

DOI: <u>10.24818/BASIQ/2023/09/006</u>

Introduction

The European Union adopted in 2022 a new Corporate Sustainability Reporting Directive, CSRD (EC, 2022). One of the significant aspects brought about by the new CSRD is the requirement for the establishment of double materiality. The European Union mandated the European Financial Reporting Advisory Group (EFRAG) to issue EU sustainability reporting standards (ESRS). The draft ESRS asks only for the material aspects to be disclosed, granting importance to this concept. Thus, the main research question of our paper is: *To what extent does a top European company disclose information on double materiality*?

To address the research question, we selected TotalEnergies, a company operating in the Integrated Oil and Gas industry and ranked first in the STOXX 600. We selected this industry because it is environmentally sensitive and previous research showed that these companies are more likely to improve their sustainability reporting (Tiron-Tudor et al., 2019).

We adopt a content analysis methodology, searching for the relevant information in the most recent sustainability report. We created a grid with the requirements included in the ESRS and analysed the report accordingly.

We contribute to an understanding of the extent of the disclosure of double materiality. Our research is useful to understand the way companies prepare for regulatory requirements before they come into force.



The paper is structured as follows: we present a review of the scientific literature regarding the double materiality and also a discussion of the relevant regulations; we describe the research methodology, the results of our study, discussions and conclusions.

1. Review of the scientific literature

The double materiality concept appeared first in the document Guidelines on reporting climate-related information, released by the European Union in 2019 and is now explicitly formulated in CSRD and ESRS. It asks for the materiality to be established in two steps: first, the impact, 'inside-out' perspective of the material environmental and social aspects, and second, the financial, 'outside-in' materiality. The concept is used in the CSRD, but is not used in the Global Reporting Initiative (GRI) or in the Sustainability Accounting Standards Board (SASB) guidelines. According to ESRS 1, a matter is double material "if it is material from the impact perspective or the financial perspective or both" (EFRAG, 2022a, p. 25). Impact materiality may be actual or potential, positive or negative, in the short, medium, or long term. By adopting this approach, companies will respond to the information needs of capital providers and other stakeholders. The information required by the ESRS to be disclosed is synthesised in Table no. 1.

No.	Explanation	Reference
D1.	The process used by the companies to establish the impact materiality (e.g. stakeholder engagement).	EFRAG 2022a, p.11: pct. 46-49
D2.	The process used by the companies to establish financial materiality (e.g. by identifying sustainability-related risks and opportunities that have or may have financial effects).	EFRAG 2022a, p.11: pct. 41, 50-55
D3.	The disclosure of thresholds used for materiality determination.	EFRAG 2022a, p.11: pct. 45
D4.	The disclosure of scale, scope, and irremediable character (if it is the case) for negative impact materiality.	EFRAG 2022a, p.9, 11: pct. 29, 46-48
D5.	The scale and scope of actual positive impacts; scale, scope, and likelihood of potential positive impacts.	EFRAG 2022a, p.12: pct. 46, 49; EFRAG 2022b, p. 14: pct. 51 (b) iv
D6.	The material impacts, risks, opportunities, disaggregation, policies and due diligence, actions and resources, metrics, and targets disclosed.	EFRAG 2022b, p.13: pct.46, p.15: pct.57-75
D7.	The time frame.	EFRAG 2022a, p.11: pct. 78-85

Table no.	1.	Grid	of	materia	litv	information
I able no.		OTIU	UI.	materia		mormation

A first remark based on the above table is that the requirements are not grouped in the draft ESRS, which will make it difficult for the companies to identify everything they have to report regarding the double materiality.

The academic community largely agrees that double materiality is a step forward in sustainability disclosure. We believe that currently the debate about double materiality has become more alive because, for example, in Europe, ESRS are being discussed. In practice, sustainability materiality analysis is more difficult than for financial reporting, due to the wide range of information that sustainability reports must include (Sepúlveda-Alzate, García-Benau and Gómez-Villegas, 2022) and the fact that there is still no clear demarcation between what is and what is not material, a fact that generates confusion in the evaluation and publication of information on sustainability (Fiandrino, Tonelli and Devalle, 2022). A new concept, increasingly highlighted in sustainability reporting and related to double materiality, is dynamic materiality. It requires the reflexion of the time dimension of materiality, in the sense that what was significant in the past can lose its significance in the present, so that companies must always analyze and prioritize the sustainability information to publish (Jørgensen, Mjøs and Pedersen, 2022). In the debate on materiality analysis, different topics were identified: "materiality stress and the importance of the issue;" "materiality determinants and indicators," and "issues that are material for companies and stakeholders" (Torelli, Balluchi and Furlotti, 2020); "pressures on materiality analysis," "material information and value relevance of materiality" and "materiality in sustainability assurance" (Fiandrino, Tonelli and Devalle, 2022); "the evaluation of materiality in sustainability information" and "models for materiality analysis" (Sepúlveda-Alzate, García-Benau and Gómez-Villegas, 2022); "the materiality determination and assessment process within sustainability assurance" (Canning, O'Dwyer and Georgakopoulos, 2019).

Recent studies have focused on the contribution of large companies and the banking sector to the achievement of the objectives defined by The European Green Deal (Dănilă et al., 2022), as well as on how "the digital transformation can support companies in the field of corporate social responsibility" (Ionașcu





et al., 2022). Regardless of the objectives defined and the tools used to achieve them, entities must assess the impact of all activities on the environment, to minimise it.

Several catalysts of double materiality have been identified in the literature. For example, corporate governance characteristics (such as board size and gender diversity – Fasan and Mio, 2017; Gerwanski, Kordsachia and Velte, 2019; participation of board member in sustainability-related actions – Cosma et al., 2021; board activity and board independence – Fasan and Mio, 2017; Sie and Amran, 2021), company characteristics (e.g., size – Taliento et al., 2019; industry – Fasan and Mio, 2017; Barkemeyer, Preuss and Lee, 2015), country (Barkemeyer, Preuss and Lee, 2015), assurance of nonfinancial information (Gerwanski, Kordsachia and Velte, 2019).

2. Research methodology

We analyse the sustainability report of TotalEnergies. We selected a company from the European Union because it will have to comply with the requirements of the CSRD. We chose a company from the Energy, Integrated Oil and Gas industry because this is one of the main contributors to the greenhouse gas emissions (GHG) in Europe. Also, this domain is environmentally sensitive, and previous research showed that this category of companies is more likely to disclose more information (Cho, 2009).

We used as a data source the sustainability report disclosed for 2021, since the [Draft] ESRS 1 specifically states that sustainability matters should be included in sustainability statements, which are a part of the "undertaking's management report" (EFRAG 2022a, p.20, 8.111). Also, the information included in the reports covers all the material sustainability issues, is comparable from one year to another, and is more likely to be subject to assurance, and thus reliable.

We used content analysis, a 'research technique for making replicable and valid inferences from data according to their context' (Krippendorff, 1980, p. 21). In order to analyse the information related with the (double) materiality, we created the grid presented in Table no. 1, starting from the ESRS requirements. We benchmarked the information disclosed in the report against the reporting standard. Our objective is to provide an image of the extent of the double materiality disclosure before the implementation of the ESRS, in order to understand how companies react to regulatory requirements. The reports used are: "Sustainability & Climate 2022 Progress Report" and the integrated report, which includes a nonfinancial statement, in accordance with the requirements of the European Directive 2014/95/EU.

3. Results

Headquartered in France, TotalEnergies is a global company that employs 100,000 people in more than 130 countries. It is a "multi-energy company", producing and selling "oil and biofuels, natural gas and green gases, renewables and electricity" (TotalEnergies, 2022, p. 4-5). Sustainability is integrated in the entity's projects and operations. It uses a multitude of sustainability-related standards for its disclosures, including guidelines set by GRI, Sustainable Development Goals (SDG), SASB, Task Force on Climate-Related Financial Disclosures (TCFD), serving the information needs of all their stakeholders (Albu et al., 2013). Its climate goal is to reach net zero emissions by 2050, in line with the Paris Agreement.

The material themes of TotalEnergies are established through stakeholder engagement and in accordance with TCFD, but the company "hasn't disclosed a detailed materiality analysis" (TotalEnergies, 2022, p. 604-605). The process leads to setting the risks, rather than the risks, impacts, and opportunities. There are six material categories (TotalEnergies, 2022, p. 120-121), as presented in Table 2. The risks are measured on a Likert scale from 1 (less material) to 4 (more material). When necessary, TotalEnergies makes a new materiality assessment.

Category	Number of Risks	Average Score of Materiality
Climate challenges	4	3
Market environment parameters	1	4
Risk relating to external threats	2	3
Geopolitics and developments in the world	2	2.67
Risks relating to operations	5	3
Innovation	2	2.5

Table no.	. 2. Material	categories
-----------	---------------	------------

Source: Authors' compilation based on TotalEnergies (2022, p. 120-121).



We notice that the highest importance is given to the market environment parameters. This includes financial aspects ("sensitivity of results to oil and gas prices, refining margins, exchange rates, and interest rates"). The concerns are related to the evolution of global indicators. For example, the National Balancing Point, "which is widely used as a price benchmark for the natural gas markets in Europe" (TotalEnergies, 2022, p. 48-49) increased from 3.3 in 2020 to 16.4 in 2021 (4.97 times). However, the variable cost margin decreased during the same period. The values were established before the Russian-Ukrainian Conflict.

For climate change adaptation, TotalEnergies discloses information based on a normative scenario starting from the International Energy Agency requirements, which generates very optimistic figures. The company recognises that the scenario does not observe the reality.

Sustainability-related risks are not translated into material financial indicators (as recommended by EFRAG 2022a) in the reports published by TotalEnergies.

Environmental and climate change, safety, and societal indicators reporting include the company's subsidiaries which are not material from a financial point of view (TotalEnergies, 2022). As such, the consolidation perimeters of financial and nonfinancial information do not overlap. For example, thresholds are set so that 99% of GHG emissions are disclosed and "no site accounting for more than 2% of an indicator excludes this indicator from its reporting" (TotalEnergies, 2022, p. 356-357).

When disclosing sustainability impacts, a company will refer to the scale ("how grave the negative impact is or how beneficial the positive impact is for people or the environment" - ESRS, 2022, p. 28, ar. 5), the scope ("how widespread" the impacts are, e.g. geographic area or number of persons affected - ESRS, 2022), the irremediable character, when it is the case (e.g. the impact cannot be reversed), and the likelihood of potential impacts.

The environmental impacts are managed according to the Avoid - Reduce (through technology use) - Compensate (through the preservation of the biodiversity, protection of water resources, and circularity) principle. An example of a negative impact is on arable land, but the scale and scope are not described. A value is presented for the impact of the changes in carbon price:

"Assuming a carbon price of \$200/ton as from 2030 and an annual increase of 2% thereafter (i.e., a \$100/ton increase from the base scenario), TotalEnergies estimates a negative impact of around 9% on the discounted present value of its assets (upstream and downstream)" (TotalEnergies 2023, p. 26-27).

There is one positive impact disclosed, determined by the new projects, on biodiversity. The scale is described as "producing a net positive impact in areas of priority interest for biodiversity" and the scope is to run "eight biodiversity action plans" (TotalEnergies 2023, p. 60-61). Thus, the description is rather vague, not stating how beneficial the action is and not mentioning the geographic area. These actions include one wind and three solar sites. As the company is present in 130 countries, there are positive projects planned or conducted in only 6.15% of them. There are no scales or scopes disclosed for the potential impacts.

TotalEnergies provides a lot of comparative data, but most of it indicates very optimistic goals and fewer achievements. For what TotalEnergies has already achieved, the comparisons target reference periods that suggest important investments and results (for example, for the gross installed capacity for renewable power, the comparison targets the period 2017-2021, with an increase from 0.7 GW in 2017 to more than 10 GW in 2021). For 2025, an increase to 35 GW of gross capacity and 100 GW in 2030 is estimated, citing identified projects in development as arguments.

Renewable energy represents an opportunity for the company and is largely presented in the report. TotalEnergies is involved in many solar power and offshore wind projects in Europe, North and South America, Asia, Africa, and Australia. One of the explanations can be the fact that, especially in Europe, "offshore wind offers high utilization rates with significant development potential" and a higher level of acceptability (better acceptability) than onshore wind (TotalEnergies 2023, p. 15). In 2021, partnerships were made with important entities from the Renewable Electricity market.

Some statements are based on assumptions which do not depend solely on the actions of TotalEnergies. Thus, it is stated that there will be a stagnation in the demand for petroleum products, followed by a significant decline until 2050, as a result of "technological progress and evolving uses" (TotalEnergies 2023, p. 18). This assumption is also based on the evolution of sales of petroleum products. Thus, the share of petroleum products in the sales mix decreased to 44% in 2021, compared to 65% in 2015, excluding the impact of Covid-19. The objective for 2030 is to reach 30%.



In order to achieve the objectives regarding GHG (for example, to reduce methane emissions by 80% by 2030 - TotalEnergies 2023, p.16, 34), the company has carried out or intends to carry out several actions. In this sense, in 2021, it abandoned the production of heavy oils in the Orinoco Belt (Venezuela), expanding its presence in areas where exploitation can be done with low costs and low emissions. TotalEnergies also states it will not extract oil from the Arctic Sea ice or increase its mining capacity in Canada's oil sands.

In the next 10 years, TotalEnergies wants "to double the circularity of its businesses" through purchasing, sales and production, and through an adequate management of its own waste (p.19). The company has already transformed a refinery into a biorefinery. The company also wants to produce biogas, setting its objectives "to produce 2 TWh per year of biomethane starting in 2025 and over 5 TWh per year by 2030." Agreements were established with Clean Energy and Veolia.

4. Discussions and conclusions

Materiality is important as it is assumed that it determines everything that will be included in the annual or sustainability reports. The idea of assessing it from various perspectives is not new. For example, IIRC (2013) stated that the materiality determination process "applies to both financial and other information" (para. 3.19). However, this moment is very important, as research could support EFRAG in creating a useful set of standards.

Described as "sophisticated" (Dragomir, 2012), the European regulatory framework can be a catalyst for better reporting, but also an inhibitor, as it can create confusion for reporting entities. Thus, the establishment of a clear methodology by the regulators for setting the double materiality would help the companies. For instance, a description of the way in which the companies should disclose the steps taken for the double materiality assessment (i.e. that they first assessed the sustainability materiality and afterwards the financial one) would be helpful. Also, in our opinion, the stakeholder engagement is not enough to establish the material items. Our recommendation is for EFRAG to include other perspectives as well (e.g. companies in the same industry).

Standards and academics specifically ask for sustainability materiality to be established first. However, companies sometimes first consider financial materiality. As described in the reports of TotalEnergies, there is no reference to sustainability materiality and only vague information about financial materiality. The impacts and opportunities, as well as the financial assessment of the risks, are missing from the reports. The company does not include the affected indicators at all. Baumüller and Sopp (2022, p. 22) stress "the difficulty of determining materiality levels for ecological and social information per se, i.e. not taking financial impacts into consideration". The selection of material topics by the companies, without specific guidelines "will not increase data availability, comparability and standardization" (Bossut et al., 2021, p. 11).

Risks reporting, at the expense of impact and opportunities, can be the consequence of the fact that entities are used to this type of information within the annual report, where they must present "the principal uncertainties it faces" (IFRS Foundation, 2020 - IAS 1.13) and "non-financial disclosures, e.g. the entity's financial risk management objectives and policies" (IFRS Foundation, 2020 - IAS 1.14), although "many entities also present, outside the financial statements, reports and statements such as environmental reports..., particularly in industries in which environmental factors are significant" (IFRS Foundation, 2020 - IAS 1.14).

The results obtained from the TotalEnergies analysis can be correlated with the literature, relevant to different problems in the application of double materiality: "poor disclosure of the process of determining material sustainability issues," "stakeholder engagement is used to increase transparency and accountability but also to manage risks by reducing materiality attached to reporting information" (Adams et al., 2021, p.8), the tendency to present the good performances and omit the weak ones, the use of sustainability reports to legitimize the actions (Beske et al., 2020).

In general, an optimistic tone is felt within the company's sustainability report, where very ambitious goals and assumptions that do not fully depend on the company's actions predominate. However, users are warned in the Cautionary Note, that the report "may contain forward-looking statements" that "may prove to be inaccurate in the future and are subject to a number of risk factors" (TotalEnergies, 2022, p. 83).

Through CSRD, there is a fundamental change from nonfinancial reporting to sustainability reporting, but also a transformation of expectations towards corporate responsibility and reporting. European companies are forced to face "several challenges [and] a new and considerably more demanding reporting



environment" (Baumüller and Sopp, 2022, p. 22). It is assumed that the application of double materiality causes an increase in the amount of information reported, but also the fact that the reporting can be more complete, with attention paid to the risk of the disclosing too much (Calabrese et al., 2017) and having relevance only for a limited number of stakeholders (Baumüller and Sopp, 2022). De Villiers, La Torre and Molinari (2022, p. 737) consider that double materiality "encloses an ideological conflict between the investors' financial interests and other stakeholders' needs."

A limitation is the fact that we analysed only one company. Yet, it is one of the biggest European companies in the Oil & Gas Industry, which means that it is more likely to implement best practices in an emerging domain, such as double materiality. Another limitation is that we analysed the data included in the annual and sustainability reports. As shown by (KPMG, 2020) most companies are now using other environments for sustainability reporting. However, data disclosed there (e.g. on the website) can be easily changed and is not assured. Also, the guidelines specifically ask companies to report sustainability information within the reports (EFRAG, 2022a). Thus, we consider that published reports are the most reliable source of data for conducting this type of research.

Future research directions aim to expand the number of companies subject to analysis, including making comparisons with European entities from other sectors of activity with a significant impact on GHG emissions and sensitivity to the environment. The CSRD requirements become applicable for the financial years starting January 1, 2024, in stages, depending on the characteristics of the companies (EC, 2022, art.5). It could be of interest to analyze the reports after this period, to establish the degree of compliance with the requirements of the directive. Research could also be extended by studying the costs and benefits of double materiality reporting, including the impact on financial ratios and the market. In the future, how the new directive manages to create a common language regarding sustainability reporting in Europe could also be investigated. The use of computer technologies for an objective process of establishing material aspects is another future research path. Ionaşcu et al. (2021) believe that digital transformation can support companies in reporting sustainability information, mainly environmental information. The authors suggest to the regulatory factors at the EU level the implementation of policies to stimulate digitisation, arguing the advantages for the natural environment by promoting sustainable business models.

There are authors who state, on the one hand, that "multinational organizations have become some of the most influential and powerful social institutions" and, on the other hand, that the power and influence of some NGOs (for example, the IASB, World Bank, International Monetary Fund, and World Trade Organization) have become increasingly important (Dillard and Vinnari, 2019). Thus, the question arises whether the process of establishing materiality is a fair and transparent process, in the interest of stakeholders, or a process whose objectives are represented by image enhancement, avoidance/deflection, or disclaimer (Cho, 2009).

References

- Adams, C.A. and Alhamood, A. and He, X. and Tian, J. and Wang, L. and Wang, Y., 2021. *The Double-Materiality Concept: Application and Issues*. [online] Available at: https://www.globalreporting.org/media/jrbntbyv/griwhitepaper-publications.pdf> [Accessed 12 January 2023].
- Albu, N., Albu, C.N., Dumitru, M. and Dumitru, V.F., 2013. Plurality or Convergence in Sustainability Reporting Standards? *Amfiteatru Economic*, XV(Special Issue 7), pp.729-742.
- Barkemeyer, R., Preuss, L. and Lee, L., 2015. On the effectiveness of private transnational governance regimes evaluating corporate sustainability reporting according to the global reporting initiative. *Journal of World Business*, 50(2), pp.312-325.
- Baumüller, J. and Sopp, K., 2022. Double materiality and the shift from non-financial to European sustainability reporting: review, outlook and implications. Journal of Applied Accounting Research, 23(1), pp.8–28. https://doi.org/10.1108/JAAR-04-2021-0114.
- Beske, F., Haustein, E. and Lorson, P.C., 2020. Materiality analysis in sustainability and integrated reports. *Sustainability Accounting, Management and Policy Journal*, 11(1), pp.162–186. https://doi.org/10.1108/SAMPJ-12-2018-0343.
- Bossut, M., Jürgens, I., Pioch, T., Schiemann, F., Spandel, T. and Tietmeyer, R., 2021. What information is relevant for sustainability reporting? The concept of materiality and the EU Corporate Sustainability Reporting Directive. *Policy Brief*, 7.



- Calabrese, A., Costa, R., Levialdi Ghiron, N. and Menichini, T., 2017. To be, or not to be, that is the question. Is sustainability report reliable?. *European Journal of Sustainable Development*, 6(3), pp. 519-526.
- Canning, M., O'Dwyer, B. and Georgakopoulos, G., 2019. Processes of auditability in sustainability assurance the case of materiality construction. *Accounting and Business Research*, 49(1), pp.1–27. https://doi.org/10.1080/00014788.2018.1442208.
- Cho, C.H., 2009. Legitimation Strategies Used in Response to Environmental Disaster: A French Case Study of Total SA's Erika and AZF Incidents. European Accounting Review, 18(1), pp.33–62. https://doi.org/10.1080/09638180802579616.
- Cosma, S., Leopizzi, R., Nobile, L. and Schwizer, P., 2021. Revising the non-financial reporting directive and the role of board of directors: a lost opportunity? *Journal of Applied Accounting Research*, 23(1), pp.207-226.
- Dănilă, A., Horga, M.G., Oprişan, O. and Stamule, T., 2022. Good Practices on ESG Reporting in the Context of the European Green Deal. *Amfiteatru Economic*, 24(61), pp.847-860. https://doi.org/10.24818/EA/2022/61/847.
- De Villiers, C., La Torre, M. and Molinari, M., 2022. The Global Reporting Initiative's (GRI) past, present and future: critical reflections and a research agenda on sustainability reporting (standard-setting). *Pacific Accounting Review*, 34(5), pp.728–747. https://doi.org/10.1108/PAR-02-2022-0034.
- Dillard, J. and Vinnari, E., 2019. Critical dialogical accountability: From accounting-based accountability to accountability-based accounting. *Critical Perspectives on Accounting*, 62, pp.16–38. https://doi.org/10.1016/j.cpa.2018.10.003.
- Dragomir, V.D., 2012. The disclosure of industrial greenhouse gas emissions: a critical assessment of corporate sustainability reports. *Journal of Cleaner Production*, 29–30, pp.222–237. https://doi.org/10.1016/j.jclepro.2012.01.024.
- EC, 2019. *Guidelines on reporting climate-related information*, [online] Available at: https://ec.europa.eu/info/files/190618-climate-related-information-reporting-guidelines_en [Accessed 27 January 2023].
- EC, 2022. Corporate Sustainability Reporting Directive (CSRD), [online] Available at: ">https://eurlex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32022L2464&from=EN>"> [Accessed 27 January 2023].
- EFRAG, 2022a. [*Draft*] ESRS 1 General requirements, [online] Available at: https://www.efrag.org/Assets/Download?assetUrl=%2Fsites%2Fwebpublishing%2FSiteAssets%2F0 6%2520Draft%2520ESRS%25201%2520General%2520requirements%2520November%25202022.p df> [Accessed 25 February 2023].
- EFRAG, 2022b. [*Draft*] ESRS 2 General disclosures, [online] Available at: <https://www.efrag.org/Assets/Download?assetUrl=%2Fsites%2Fwebpublishing%2FSiteAssets%2F0 7.%2520Draft%2520ESRS%25202%2520General%2520disclsoures%2520November%25202022.pdf > [Accessed 25 February 2023].
- Fasan, M. and Mio, C., 2017. Fostering stakeholder engagement: the role of materiality disclosure in integrated reporting. *Business Strategy and the Environment*, 26(3), pp.288-305.
- Fiandrino, S., Tonelli, A. and Devalle, A., 2022. Sustainability materiality research: a systematic literature review of methods, theories and academic themes. *Qualitative Research in Accounting & Management*, 19(5), pp. 665-695. https://doi.org/10.1108/QRAM-07-2021-0141.
- Gerwanski, J., Kordsachia, O. and Velte, P., 2019. Determinants of materiality disclosure quality in integrated reporting: empirical evidence from an international setting. *Business Strategy and the Environment*, 28(5), pp.750-770.
- IFRS Foundation, 2020. *IAS 1 Presentation of Financial Statements*. [online] Available at: [Accessed 19 March2023].
- International Integrated Reporting Committee, 2013. *The International <IR> Framework*. [online] Available at: ">https://www.integratedreporting.org/resource/international-ir-framework [Accessed 12 January 2023].
- Ionaşcu, I., Ionaşcu, M., Nechita, E., Săcărin, M. and Minu, M., 2022. Digital Transformation, Financial Performance and Sustainability: Evidence for European Union Listed Companies. *Amfiteatru Economic*, 24(59), pp.94-109. https://doi.org/10.24818/EA/2022/59/94.



- Jørgensen, S., Mjøs, A. and Pedersen, L.J.T., 2022. Sustainability reporting and approaches to materiality: tensions and potential resolutions. *Sustainability Accounting, Management and Policy Journal*, 13(2), pp.341–361. https://doi.org/10.1108/SAMPJ-01-2021-0009.
- KPMG, 2020. Carrots & Sticks. Sustainability Reporting Policy: Global trends in disclosure as the ESG agenda goes mainstream. [online] Available at: https://www.carrotsandsticks.net/ [Accessed 18 March 2023].
- Krippendorff, K., 1980. Content Analysis: An Introduction to its Methodology. London: Sage Publications.
- Sepúlveda-Alzate, Y.M, García-Benau, M.A. and Gómez-Villegas, M., 2022. Materiality assessment: the case of Latin American listed companies. *Sustainability Accounting, Management and Policy Journal*, 13(1), pp.88-113.
- Sie, B.N. and Amran, A., 2021. Materiality disclosure in sustainability reporting: evidence from Malaysia. *Asian Journal of Business and Accounting*, 14(1), pp.225-252.
- Taliento, M., Favino, C. and Netti, A., 2019. Impact of Environmental, Social, and Governance Information on Economic Performance: Evidence of a Corporate 'Sustainability Advantage' from Europe. Sustainability, 11(6), p.1738. https://doi.org/10.3390/su11061738.
- Tiron-Tudor, A., Nistor, C.S., Ştefănescu, C.A. and Zanellato, G., 2019. Encompassing non-financial reporting in a coercive framework for enhancing social responsibility: Romanian listed companies' case. *Amfiteatru Economic*, 21(52), pp.435–451. https://doi.org/10.24818/EA/2019/52/590.
- Torelli, R., Balluchi, F. and Furlotti, K., 2020. The materiality assessment and stakeholder engagement: A content analysis of sustainability reports. Corporate Social Responsibility and Environmental Management, 27(2), pp.470–484. https://doi.org/10.1002/csr.1813.
- TotalEnergies, 2022. Universal Registration Document 2021 including the Annual Financial Report, [online] Available at: ">https://totalenergies.com/system/files/documents/2022-03/DEU_21_VA.pdf#> [Accessed 18 March 2023].
- TotalEnergies, 2023. Sustainability & Climate 2022 Progress Report, [online] Available at: https://totalenergies.com/system/files/documents/2022-03/Sustainability Climate 2022 Progress Report EN 0.pdf>https://creativecommons.org.