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The Link between Corporate ESG Performance and the UN Sustainable Development Goals

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Abstract. *There is a growing interest in the contribution of organizations to the achievement of sustainable development goals worldwide, with the involvement of various actors, such as governments, regulators, private entities, public interest entities, financial institutions, and civil society. The alignment between environmental, social and governance (ESG) performance and sustainable development goals helps academics and practitioners in observing corporate contributions to sustainable growth, both at micro and macroeconomic levels. There are few studies that analyze the association between corporate ESG performance and the United Nations Sustainable Development Goals (UN SDGs), or the contribution of company ESG indicators to sustainability. Thus, the aim of this study is to analyze such relationships in a case study for which an original mapping is proposed. Data were collected from Refinitiv Eikon, for two companies (in the oil and gas and financial services sectors), located in Romania, for the financial year 2021. Interpretative analysis was applied to the proposed mapping of sustainability practices reflected through ESG indicators, in relation to 17 SDGs. Our qualitative research included the computation of a total score based on the impact of ESG performance in pursuing the SDGs. Our results show that in Romania, the largest oil and gas company disclosed more information on ESG indicators and obtained a score (40) higher than the analyzed bank. The highest contribution to the achievement of the SDGs is related to the social pillar, especially the workforce and community dimensions. The bank obtained a lower score (30), while the most significant contribution to meeting the SDGs is linked to the environmental pillar, specifically emissions. Thus, corporate ESG performance is mapped to the SDGs, for entities activating in either financial or non-financial industries, with different importance allocated to each of the three ESG pillars. This research is important for various stakeholders, such as governments, business, and civil society, depending on the role within the organization, either direct or indirect.*

Keywords: ESG performance, United Nations Sustainable Development Goals, Environment, Social, Governance.

Introduction

In 2015, all United Nations (UN) member states adopted the 2030 Agenda for Sustainable Development containing 17 Sustainable Development Goals (SDGs),[1] in a global partnership that has multiple objectives, such as ending poverty, improving health and education, reducing

[1] https://sdgs.un.org/goals

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inequality, supporting economic growth, preserving oceans and forests and addressing climate change. Therefore, there is global pressure on the achievement of the SDGs from worldwide stakeholders. Also, the adoption of the SDGs represents an unprecedented global compass in navigating sustainability changes (Del Río Castro et al., 2021). It also represents an opportunity for powerful parties worldwide to work together to achieve significant gains in terms of reduced poverty and securing a more sustainable future for humanity and the planet (Scheyvens et al., 2016). Various actors, such as government, businesses and civil society, are expected to be equally responsible for progression on a more sustainable path forward (Scheyvens et al., 2016). While government pressure plays a significant role, incorporating SDGs into business targets leads to improved environmental performance in terms of carbon dioxide emissions, waste management, energy consumption, resource efficiency, water management and pollution emissions (Nishitani et al., 2021). Conversely, Ike et al. (2019) mentioned that the private sector plays a key role in achieving the SDGs through corporate sustainability actions.

In practice, in the latest PricewaterhouseCoopers (PwC) Global Investor Survey, it was observed that investors believe that governments play an important part in environmental, social and governance (ESG) aspects by implementing various measures to incentivize sustainable corporate behaviors such as: imposing taxes on unsustainable activities (54% of respondents), adopting corporate disclosure requirements that provide transparency on corporate actions on sustainability risks (54%), providing subsidies to companies that undertake various actions or initiatives that address sustainability priorities (48%) (PwC, 2022).

In a systematic literature review on a sample of 101 papers published in the period 2015-2020, Mio et al. (2020) observed that the main topics discussed by researchers are related to strategy execution. From a different perspective, ESG scores provide insight into the role of companies in strengthening sustainability performance (Dicuonzo et al., 2022). The academic literature is interested in measuring and tracking contributions of companies towards SDG implementation. Thus, it is important to identify different indicators that can be computed based on available ESG data, to explore corporate contributions towards SDGs and align corporate strategies with the UN 2030 Agenda applicable worldwide. It is necessary to map ESG scores to the SDGs, for companies to be able to align sustainability practices to SDGs, to measure progress and plan for new solutions, allowing an appropriate level of responsibility and reporting quantitative information on how the SDGs are achieved. However, as Khaled et al. (2021) also noted, these studies are scarce.

Our research is motivated by the low number of studies that analyze the relationship between corporate ESG performance and the UN SDG, as well as the contribution of the company's ESG indicators to its sustainable growth (Dragomir et al., 2022). The research objective is achieved through the results obtained from a case study of two entities, one from the oil and gas sector, and the other from financial services, and the proposed mapping between ESG indicators and SDGs.

The structure of this study is as follows. A brief review of the literature supports the research objective. The methodology is presented, including the data source and the applied research method. The results and discussions contain aspects for each of the two entities part of the case study, with respect to each of the 17 SDGs mapped to ESG indicators, including also a comparison based on the score computed by taking into consideration this mapping. Finally, the last section presents the conclusions.

Literature review

To measure companies' progress in the achievement of the SDGs, Khaled et al. (2021) mentioned the option of determining the impact on the SDGs in relation to ESG scores. However, there is no direct link between ESG scores and SDGs. Additionally, Bennich et al. (2020) noted that there is no general agreement on taking a quantitative approach to SDGs. Also, García-Meca and Martínez-Ferrero (2021) examined whether SDG reporting is symbolic or substantive. Although each SDG is considered of equal significance, the interpretation and prioritization of SDG implementation is up to each individual firm (Ike et al., 2019).

Khaled et al. (2021) applied a mapping process between SDG targets and corporate sustainability practices reflected in ESG scores. Different SDG targets are more relevant to the business sector than others. In their study on 1105 companies from 11 industries, the results show that profitable and larger companies, with lower leverage, are more likely to be characterized by better corporate sustainability performance. In addition, their findings link future results on sustainability performance (micro level) to the achievement of SDGs (macro level), allowing a better understanding of corporate ESG performance within the SDGs (Khaled et al., 2021).

The relationship between early adoption of SDG targets and GRI reporting was analyzed by Rosati and Faria (2019b) on data for 408 organizations worldwide. The results show that early adoption of SDG reporting is linked to a higher commitment to sustainability frameworks and external assurance, a higher level of intangible assets, a younger board of directors and a higher proportion of female directors.

Pizzi et al. (2020) reviewed 266 articles published between 2012 and 2019, on the SDGs and their impact on business organizations. The authors noted the existence of four research themes: technological innovation, firms' contributions in developing countries, non-financial reporting, and education for the SDGs. Also, the authors emphasize the importance of understanding "how" and "to what extent" the SDGs can strengthen business strategy and the measurement of corporate performance. Growing expectations are noted in respect of digitalization and its added value in pursuing the SDGs (Del Río Castro et al., 2021).

Rosati and Faria (2019a) observed that organizations reporting on the SDGs are more likely to be located in countries exposed to higher levels of climate change vulnerability, tertiary education, indulgence and individualism, and lower levels of market coordination, by analyzing 2413 sustainability reports published by companies located in 90 countries. Climate change disrupts global industrial supply chains, reduces labor productivity and causes business operations to shut down (Chen et al., 2022).

Pizzi et al. (2021) conducted an analysis on the non-financial reports of 153 Italian public interest entities, introducing an SDG reporting score as a qualitative proxy representing various determinants, such as the presence of independent directors on the board of directors (governance-level determinant), expertise with non-financial reporting, as well as the length of the final report (report-level determinants). In addition, the results highlighted that the oil and gas sector is the most SDG-oriented, while the healthcare sector is the opposite. Thus, companies that operate in one of the most environmentally sensitive industries are more focused on disclosing information on SDGs. Similarly, García-Meca and Martínez-Ferrero (2021), in a study on 523 firm-year observations for the period between 2015 and 2016, confirmed that SDG reporting has an effect on companies' performance in various controversial sectors, such as gambling, alcohol, tobacco, firearms and environmentally sensitive industries. However, the findings suggested that SDG reporting has more than a symbolic value in those companies in which stakeholders are concerned about environmental and ethical issues (García-Meca & Martínez-Ferrero, 2021). On the other

hand, Bose and Khan (2022) observed that higher SDG reporting is applied in shareholder-oriented countries, rather than stakeholder-oriented ones, in their study on 6942 company-year observations for 30 countries, in the period 2016-2019.

Van der Waal and Thijssens (2020) explained that the lack of meaningful SDG disclosures leads to difficulties for stakeholders when making decisions based on published sustainability reports. In the first stage of analysis, the sustainability reports for 1165 companies for 2017 were reviewed and limited corporate involvement in the SDGs was observed, inspired by a mixture of both legitimacy and institutional motivations. In the second stage of the analysis, the sample was limited to the 30 most extensive SDG reporters, and the results revealed that a company's SDG involvement is rather symbolic than substantive, suggesting that the SDGs are treated as non-committal disclosures that facilitate impression management (van der Waal & Thijssens, 2020).

Methodology

This study is based on data collected from Refinitiv Eikon (formerly Thomson Reuters). This database was chosen because it is used frequently by researchers, being one of the most comprehensive ESG databases available for all industries (Radu & Dragomir, 2022). Refinitiv includes 186 comparable measures of ESG scoring, with more than 630 data points, ratios and analytics, which are grouped in ten categories organized in three pillars. Resource use, emissions and innovation are linked to the environmental pillar, while workforce, human rights, community and product responsibility are included in the social pillar. Management, shareholders and CSR strategy are related to the governance pillar (Refinitiv, 2022). Specifically, the CSR strategy score includes various indicators, of which the data stored for all 17 SDG goals were analyzed in depth.

To ensure that sufficient data are available, we considered in our sample only those Romanian companies that have SDG details reported under the CSR strategy score, marked true in Refinitiv. The financial year 2021 was the most recent year for which such information was disclosed. Thus, in the case of Romania, only two entities were selected, the largest listed companies on the Bucharest Stock Exchange. These are OMV Petrom SA, an oil and gas company, respectively, Banca Transilvania SA, the largest financial institution.

To assess the contribution of a company to the sustainable development goals, the qualitative research method was designed using interpretive analysis of the data reported in Refinitiv. Thus, such an interpretive analysis was applied to our own mapping of sustainability practices reflected through each ESG indicator, in relation to the 17 SDGs. This linkage was also explored by Khaled et al. (2021) in their study which included a sample of 1105 companies analyzed between 2002 and 2018.

Our qualitative research method includes steps similar to the ones detailed by Khaled et al. (2021), as follows: the identification of the SDGs for which data are available, the identification of the SDG targets to which data collected is related to, mapping of such targets to some of the 186 comparable measures to which they might be relevant, considering the descriptive data included in Refinitiv.

We noted that not all SDGs could be mapped to the information disclosed by the selected entities. For such cases, we allocated the score 0, as no values were reported. For the SDGs that could be mapped to different ESG indicators, we assigned the score that represented the number of such indicators that we were able to correlate. Finally, a total score was calculated for each entity to assess the sustainability impact in pursuing the SDGs.

Results and discussions

Our main results are highlighted for both organizations that are part of the case study, for each of the 17 SDGs that were mapped to ESG indicators.

On SDG 1 (no poverty) and SDG 2 (zero hunger), no information reported was noted. Linked to SDG 3 (good health and well-being), *OMV Petrom* discloses that it pursues target 3.9. This target, which includes a substantial reduction in the number of deaths and illnesses from water and soil pollution and contamination, is approached by OMV Petrom through different energy efficiency projects that were implemented in order to reduce greenhouse gas emissions. These projects have improved, replaced or optimized gas processing and transportation infrastructure. Also, the company has a policy on emissions, and measures the water discharged (10,015,000 megalitres in 2021), including the waste recycling ratio which is high at 83% (in 2021).

On SDG 4 (quality education), target 4.7, which regards the acquisition of knowledge and skills needed to promote sustainable development, is pursued by OMV Petrom. The company trains its suppliers through awareness sessions on sustainable procurement, including the carbon footprint of purchased goods and services, and sustainability in acquisitions. Also, the company discloses information on policies regarding skills training and career development. There are different programs available, such as *First time leaders 2.0* designed to build leadership skills, *Leadership essentials* meant to support managers in acquiring people management skills, *Leading remote/hybrid teams* which helps in upskilling current leaders on adapting to various challenges, digital tools, coaching roles, and *Digital skills for leaders* which helps managers in succeeding in uncertain environments. Appropriate oversight actions are in place, as training hours per employee are adequately monitored. OMV Petrom offers a three-year professional development plan to its employees, including mentoring, innovative projects, mixt learning methodologies through team interaction, direct professional experience and special training programs.

Regarding SDG 5 (gender equality), target 5.1 is pursued in terms of ending all forms of discrimination against women. The group's diversity, equity and inclusion strategy is focused on gender equality, including the increase in the share of women in management positions and leadership roles. OMV Petrom discloses that it is on course to reach its 30% target for 2025, with a proportion of women employees of 27.08%.

Linked to SDG 6 (clean water and sanitation), OMV Petrom claims to follow SDG targets 6.1, 6.3 and 6.4. The target related to universal and equitable access to safe and affordable water (6.1) is pursued through close cooperation between the company and its partners, contractors and suppliers. The total weight of water pollutant emissions decreased in 2021, to three tons, compared to 12 tons recorded in 2020. The company pursues the target of improving water quality by reducing pollution and minimizing the release of hazardous chemicals (6.3) through different actions that resulted in 10,015,000 megalitres of water discharged. On the target related to increasing water efficiency, ensuring sustainable withdrawals and freshwater supply to reduce water scarcity (6.4), OMV Petrom recycled 313,206,000 megalitres of water. The company reported 9,419.14 cubic meters/USD million, representing total water withdrawal in cubic meters divided by net sales or revenue in USD million. Around 80% of the priority sites operated by OMV Petrom completed water management plans, while for the remaining ones, such plans are in progress. The water that results from the crude oil extraction process is treated by using an activated carbon filtration system before such water is discharged into the Barcău river. The key goals in respect to water management are to reduce water consumption, utilize water in an efficient manner and treat wastewater appropriately, in line with the water efficiency policy and defined targets on water efficiency.

Regarding SDG 7 (affordable and clean energy), targets 7.2 and 7.3 are disclosed. On the target related to increasing the share of renewable energy in the global energy mix (7.2), the company's carbon efficiency agenda focuses on process optimization and energy efficiency, by using renewable energy, and implementing projects that reduce natural gas venting and flaring. On the target of doubling the global rate of improvement in energy efficiency (7.3), OMV Petrom registered a total energy use of 45,060,000 gigajoules and implemented a policy on energy efficiency, disclosing different corporate initiatives, such as the replacement of classic lighting with LED technology in Petrom City.

In relation to SDG 8 (decent work and economic growth), OMV Petrom claims to follow the progress with respect to the target on the protection of labor rights and the promotion of safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment. The injury rate in 2021 was 0.53, increasing from 0.29, computed as the total number of injuries and fatalities including no-lost-time injuries relative to one million hours worked, while the number of employee accidents decreased from 8 to 7 in 2021, compared to 2020. The company implemented a policy on freedom of association, so that it has in place collective agreements providing specific rights and obligations for employees, their representatives and the employer within a transparent and predictable frame. Also, OMV Petrom's actions are guided by fundamental human rights, recognizing and protecting the dignity of all human beings as a principles-based approach to doing business, in the areas of human rights, labor and community care.

On SDG 9 (industry, innovation and infrastructure), no information reported was noted.

Concerning SDG 10 (reduced inequalities), target 10.3 is pursued in terms of ensuring equal opportunity and reducing inequalities of outcome, by eliminating discriminatory laws, policies and practices and promoting appropriate legislation, policies and action.

Regarding SDG 11 (sustainable cities and communities), OMV Petrom discloses information relevant to the target on reducing the adverse environmental impact of cities, paying special attention to air quality and municipal and other waste management (11.6). In this context, the waste recycling ratio was 83% (in 2021).

In relation to SDG 12 (responsible consumption and production), the target of supporting developing countries in strengthening their scientific and technological capacity (12.A) is pursued by the company. OMV Petrom assumes the responsibility of providing high-quality and safe products. Actions are taken in respect of reducing the environmental impact during the product life cycle, by using technologically advanced solutions, while complying with international requirements and performing risk assessments for all products or hazardous substances contained in products.

In line with SDG 13 (climate action), the target of strengthening resilience and adaptive capacity to climate-related hazards and natural disasters is also pursued (13.1). OMV Petrom seeks to integrate climate change risk management and related risks and opportunities into the enterprise's risk management process, which is designed for the company's three-year financial plan. The expectations in the energy industry with respect to climate-related changes are on a longer time scale, particularly, regarding revenues. Moreover, OMV Petrom discloses the fact that it is the first Romanian company to support the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD).

Regarding SDG 14 (life below water), the company pursues the targets of sustainably managing and protecting marine and coastal ecosystems to avoid significant adverse impacts and takes action for their restoration to achieve healthy and productive oceans (14.2). In relation to SDG 15 (life on land), relevant actions are taken with respect to the target related to taking urgent

and significant action to reduce the degradation of natural habitats (15.5) and the impact on biodiversity. At OMV Petrom, the protection of the environment includes protection of biodiversity. Thus, all activities carried out by the company must be conducted in such a way as to cause minimal disturbance to protected areas and local flora and fauna. In case of significant observed or predicted impacts, OMV Petrom applies the mitigation hierarchy, so that action planning gives priority to avoidance and minimization over restoration and offsetting of the impact.

Regarding SDG 16 (peace, justice, and strong institutions), the company claims to pursue SDG targets 16.3, 16.5 and 16.6. The targets related to the rule of law at the national and international levels (16.3) are achieved by introducing a policy on fair competition related to partners, suppliers and contractors, and provisions related to antitrust law. On the target related to reducing corruption and bribery (16.5), OMV Petrom discloses three relevant policies: the code of business ethics, whistleblower protection and the company's policy on bribery. The code of ethics covers a multitude of aspects related to conflicts of interest, gifts, donations, trade sanctions, embargoes etc. On the topic of corporate governance linked to the development of effective, accountable and transparent institutions at all levels (16.6), OMV Petrom presents its board policies regarding director diversity, independence, background, skills and experience.

In relation to SDG 17 (partnerships for the goals), OMV Petrom refers to the target of enhancing the global partnership for sustainable development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the SDG (17.16). OMV Petrom has different campaigns in partnership with the Romanian Ministry of Environment, Waters and Forests and with six environmental non-governmental organizations, for the protection of the environment. The actions taken by OMV Petrom are guided by the Universal Declaration of Human Rights, United Nations Global Compact Principles and the International Labor Organization and support the protection of fundamental human rights. Lastly, OMV Petrom conducts human rights training for all employees who might be exposed to human rights risks, being fully committed to the OECD guidelines for multinational enterprises.

Table 1. Score of the link between ESG and SDG for OMV Petrom SA

SDG	Targets	ESG Pillars	ESG Indicators	Score
1	-	Community (S) Product responsibility (S)	Product sales at discount to emerging markets Product access low price	0
2	-	Emissions (E) Innovation (E) Product responsibility (S)	Biodiversity impact reduction GMO Products Policy fair trade	0
3	3.9	Emissions (E)	Policy emissions Water discharged Waste recycling ratio	3
4	4.7	Workforce (S)	Supplier ESG training Training and development policy Policy skills training Policy career development	4
5	5.1	Workforce (S)	Policy diversity and opportunity Targets diversity and opportunity Women employees	3

SDG	Targets	ESG Pillars	ESG Indicators	Score
6	6.1	Emissions (E)	Water pollutant emissions	1
	6.3	Emissions (E)	Water discharged	1
	6.4	Resource use (E)	Water recycled Water use Policy water efficiency Targets water efficiency	4
7	7.2	Resource use (E)	Renewable energy use	1
	7.3	Resource use (E)	Energy use Policy energy efficiency	2
8	8.8	Workforce (S) Human rights (S)	Total injury rate Employee accidents Policy freedom of association Fundamental human rights – International Labour Organization – United Nations	4
9	-	Innovation (E)	Total Env R&D / Million in Revenue Environmental R&D Expenditures	0
10	10.3	Workforce (S)	Policy diversity and opportunity Targets diversity and opportunity	2
11	11.6	Emissions (E)	Waste recycling ratio	1
12	12.a	Innovation (E)	Environmental products	1
13	13.1	Emissions (E)	Climate change commercial risks	1
14	14.2	Emissions (E)	Biodiversity impact reduction	1
15	15.5	Emissions (E)	Biodiversity impact reduction	1
16	16.3	Community (S)	Policy fair competition	1
	16.5	Community (S)	Policy bribery and corruption Policy business ethics Improvement tools business ethics Whistleblower protection	4
	16.6	Management (G)	Board structure policy Board background and skills	2
17	17.16	Emissions (E) Human rights (S) Community (S)	Environmental Partnerships Fundamental Human Rights ILO UN OECD Guidelines for Multinational Enterprises	3
Total				**40**

Source: Authors' own research.

Regarding SDG 1 (no poverty), *Banca Transilvania SA* (BT) develops projects aimed at supporting and encouraging Romanian entrepreneurs, also financed by government programmes. The bank had an increase of 8% in the number of active microbusiness clients and, in supporting access to financing, an important role was played by the microfinance subsidiary, BT Microfinance.

On SDG 2 (zero hunger), no disclosed information was noted.

Linked to SDG 3 (good health and well-being), BT discloses that it pursues target 3.9. This target, which includes a substantial reduction in the number of deaths and illnesses from water and soil pollution and contamination, is approached by BT through the implementation of measures to efficiently use energy resources, both in practical and behavioral terms. Examples of energy efficiency measures are the exclusive use of energy-efficient electronic devices with high environmental standards; regular energy audits; sustainable practices used in the design and management of bank premises; optimization, and monitoring actions to reduce total energy consumption; and minimizing greenhouse gas emissions. All these measures are in line with the policy on emissions. Also, the bank measures water discharged (49,000 cubic meters in 2021), and discloses the waste recycling ratio, which is quite low, at a percentage of 7.62% (2021).

On SDG 4 (quality education), BT actively pursues target 4.7, with respect to knowledge and skills acquisition needed to promote sustainable development. The bank discloses information on training and development policy, more specifically on policies regarding skill training and career development. One of the bank's priorities is to ensure that the people who work with BT have all the channels and tools necessary to develop professionally and personally. Continuous professional development is supported by providing employees with internal and external learning programs, in line with trends and best practices in the banking system. Moreover, the program called the *BT Career Plan* was developed to ensure predictability and transparency in promotions and career development opportunities within the bank, and approximately 701 employees participated during 2021.

Regarding SDG 5 (gender equality), target 5.1 is pursued in terms of ending all forms of discrimination against women. BT aims to have a fair and equitable work environment, characterized by diversity, inclusion, and equal opportunities. Within the BT Group, the gender equality and treatment policy is in place, while the behavior expected from all people in the bank's team is outlined in the BT Financial Group's Internal Rules and Code of Ethics and Conduct. Equality of opportunity and treatment between women and men is in place, while women employees are in the percentage of 84.44%.

Linked to SDG 6 (clean water and sanitation), BT pursues SDG targets 6.3 and 6.4. Target 6.3 (improvements in water quality by reducing pollution and minimizing the release of hazardous chemicals) is pursued by the bank through different actions that resulted in 49,000 cubic meters of water discharged. On the target related to the increase in water efficiency, BT upgraded its facilities, which included installing sensor taps in the toilets for both employees and customers.

Regarding SDG 7 (affordable and clean energy), targets 7.2 and 7.3 are identified. On the target related to increasing the share of renewable energy in the global energy mix (7.2), 87% of the electricity consumption of BT comes from renewable sources. Also, according to the Climate Assessment for Financial Institutions, one of four investment loans supported projects for energy efficiency. Thus, 14% of the value of these loans financed purchases of energy efficiency equipment, 7% was directed to energy efficient buildings, 6% to agricultural land purchases, 4% to projects that address social needs, 3% to purchases of eco-friendly cars, and 1% to other businesses with reduced environmental impact through the use of improved technologies and equipment. Moreover, the bank entered a partnership with the European Bank for Reconstruction

and Development, through the ROSEFF (Romania – SME Sustainable Energy Efficiency Financing Facility) program, through which 172 loans were granted for energy optimization, in total amount of RON 129 million, during 2019-2020, while in 2021, six loans still had outstanding balance in amount of RON 3 million. On the target of doubling the global rate of improvement in energy efficiency (target 7.3), the bank continuously implements measures that contribute to reducing energy consumption, in line with the bank's environmental policy. During 2021, 137,183.51 gigajoules were used by the bank. Moreover, BT has a financing portfolio of BREEAM[2]-certified real estate projects with an outstanding balance of RON 358 million.

In relation to SDG 8 (decent work and economic growth), BT monitors the progress with respect to the target of protecting labor rights and promoting safe and secure working environments for all workers (8.8). In 2021, the number of employee accidents decreased from two to one. In terms of the policy on freedom of association, the bank has a collective bargaining agreement with its employees.

On SDG 9 (industry, innovation, and infrastructure) and SDG 10 (reduced inequalities), no information was reported.

With respect to SDG 11 (sustainable cities and communities), BT discloses information relevant for the target on the reduction of the adverse environmental impact of cities, by paying special attention to air quality and municipal waste management (11.6). In this context, however, the waste recycling ratio was 7.62% (in 2021).

In relation to SDG 12 (responsible consumption and production), the bank claims that it pursues the goal of supporting developing countries to strengthen their scientific and technological capacity (12.A). As of 2017, the bank had been in partnership with the European Bank for Reconstruction and Development to provide green loans to private individuals, either for the purchase of energy-efficient residential properties or goods. BT was one of the first banks to join the *Green Economy Financing Facility* program, granting loans amounting to RON 40 million, most of them being used to purchase residential properties.

In line with SDG 13 (climate action), the company pursues the goal of strengthening resilience and the adaptive capacity to climate-related hazards and natural disasters in all countries (13.1). BT assesses and manages the climate change risks and opportunities, as financial institutions are expected to play an important role in the transition to a sustainable economy. The bank considers transition risks in its risk assessment, including changes in consumer behavior and investor demand.

On SDG 14 (life below water) no information was reported.

In relation to SDG 15 (life on land), relevant actions are taken with respect to the target of taking urgent and significant action to reduce the degradation of natural habitats (15.5), through different actions taken as a result of compliance with policy on emissions. Various energy efficiency measures include the exclusive use of energy-efficient electronic devices with high environmental standards, frequent energy audits, sustainable practices used in the design and management of bank's premises, the framework of procedures for the renovation and redesign of territorial units that rely on efficient use of energy resources, optimized energy consumption, and minimizing greenhouse gas emissions. During 2021, the emission reduction target percentage for BT was 20%.

Regarding SDG 16 (peace, justice and strong institutions), the bank pursues SDG targets 16.5 and 16.6. On the target related to reducing corruption and bribery (16.5), BT discloses

[2] https://bregroup.com/products/breeam/

practices for the prevention of corruption and bribery, presenting examples of activities strictly forbidden at the level of BT Financial Group: receiving money or other benefits from clients or third parties to perform their duties, payment or offering a benefit that is not in compliance with domestic laws or regulations, payment or offering a benefit related to "getting" a business. Also, the bank discloses compliance with the independence and ethical requirements of the International Ethics Standards Board for Accountants. In addition, whistleblower protection is in place, and employees have the right to report any treatment that may be considered discriminatory, with the human resources department being informed in due time. On the topic of corporate governance linked to the development of effective, accountable, and transparent institutions at all levels (16.6), BT presents their board policies regarding diversity, experience, backgrounds, skills and experience. In terms of board diversity, criteria such as gender, age, cultural and educational profile, ethnicity, professional experience, skills, knowledge, and work experience are considered.

In relation to SDG 17 (partnerships for the SDG goals), BT refers to the target on enhancing the global partnership for sustainable development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the SDGs (17.16). BT has been in partnership with the European Bank for Reconstruction and Development to provide green loans to private individuals, both for the purchase of energy-efficient residential properties and personal loans for the purchase of energy-efficient goods, such as the purchase of household appliances of a higher energy class.

Table 2. Score of the link between ESG and SDG for Banca Transilvania SA

SDG	Targets	ESG Pillars	ESG Indicators	Score
1	1.4	Product responsibility (S)	Product access low price	1
2	-	Emissions (E) Innovation (E) Product responsibility (S)	Biodiversity impact reduction GMO Products Policy fair trade	0
3	3.9	Emissions (E)	Policy emissions Water discharged Waste recycling ratio	3
4	4.7	Workforce (S)	Training and development policy Policy skills training Policy career development	3
5	5.1	Workforce (S)	Policy diversity and opportunity Women employees	2
6	6.3	Emissions (E)	Water discharged	1
	6.4	Resource use (E)	Total water withdrawal Policy water efficiency	2
7	7.2	Resource use (E) Innovation (E)	Renewable energy use Renewable / Clean energy products	2
	7.3	Resource use (E) Innovation (E)	Energy use Policy energy efficiency Sustainable building products	3

SDG	Targets	ESG Pillars	ESG Indicators	Score
8	8.8	Workforce (S) Human rights (S)	Employee accidents Policy freedom of association	2
9	-	Innovation (E)	Total Environmental R&D / Million in Revenue Environmental R&D Expenditures	0
10	-	Workforce (S)	Policy diversity and opportunity	0
11	11.6	Emissions (E)	Waste recycling ratio	1
12	12.a	Innovation (E)	Environmental products	1
13	13.1	Emissions (E)	Climate change commercial risks opportunities	1
14	-	Emissions (E)	Policy emissions Emission reduction target percentage	0
15	15.5	Emissions (E)	Policy emissions Emission reduction target percentage	2
16	16.5	Community (S)	Policy bribery and corruption Policy business ethics Whistleblower protection	3
	16.6	Management (G)	Board structure policy Board background and skills	2
17	17.16	Emissions (E)	Environmental Partnerships	1
Total				**30**

Source: Authors' own research.

The results show a total score of 40 for OMV Petrom, while for Banca Transilvania the score is lower, 30. Also, in the case of OMV Petrom, information was analyzed for 14 out of 17 SDGs, while for SDG 1 (no poverty), SDG 2 (zero hunger), and SDG 9 (industry, innovation and infrastructure), no information was reported. However, for Banca Transilvania, for four out of the total of 17 SDGs, no values were observed, SDG 2, SDG 9, SDG 10, and SDG 14.

Our findings highlight the fact that, in the case of OMV Petrom, the social pillar contributes the most to the SDGs, in a percentage of 50%, followed by the environmental pillar (45%) and the governance pillar (5%). At a more disaggregated level, in the case of the social pillar, the highest score is recorded by the workforce (12), followed by the community (6) and the human rights (2) dimensions. For the environmental pillar, emissions had the highest score (10), followed by resource use (7) and innovation (1). The governance pillar contributed less to the achievement of the SDGs, where the management dimension obtained a score of 2. For Banca Transilvania, our results show that the environmental pillar contributes the most to the SDGs, in percentage of 57%, followed by the social pillar (37%) and the governance pillar (7%). At a more disaggregated level, in the case of the environmental pillar, the highest score is recorded by emissions (9), followed by resource use (5) and innovation (3). In addition, for the social pillar, the highest score was found for the workforce (6), followed by the community (3), human rights (1) and product responsibility

(1). The results shown for the governance pillar were similar to the ones obtained in the case of OMV Petrom.

Conclusion

Our results show that, in Romania, the largest oil and gas company disclosed more information on ESG indicators and obtained a score (40) higher than the analyzed bank. The highest contribution towards the achievement of the SDGs pertains to the social pillar, especially the workforce and community dimensions. However, the bank obtained a lower score (30), while the most significant contribution in meeting the SDGs is linked to the environmental pillar, specifically emissions. Thus, corporate ESG performance is linked to the SDGs, for entities activating in either financial or non-financial industries, with different importance allocated to each of the three ESG pillars.

Our research may be relevant to different stakeholders, as it provides theoretical and practical implications. The reporting attitudes of managers can be adjusted once they understand the link between corporate ESG performance and the SDGs. Banks and other financing institutions may take into account the contribution of a company towards SDG achievement, before granting loans or during such a process when a more favorable interest may be offered to those companies that contribute more to SDGs. Shareholders are better informed through the integrated reporting framework, allowing them to make more timely investment decisions on investments that are more sustainable and contribute to the SDGs. Lastly, regulators are focused on maximizing social welfare, and may have a less interventionist approach regarding those companies that met relevant SDG targets.

This study has some limitations. First, the sample includes only two companies from Romania because sufficient data was available in Refinitiv only for OMV Petrom SA and Banca Transilvania for the financial year 2021. As such, we presumed that the data is more accurate than self-collected information because Refinitiv Eikon is subject to quality audits performed by database administrators. Finally, the sample included only two sectors, such as oil and gas, respectively financial services, which might not be directly comparable.

Future analyses can focus on more than two industries to observe which contributes the most to the achievement of the SDGs. The results can generate different measures that support relevant investment projects. Furthermore, future research may consider the period after 2021, once data are available, to compare the impact of the latest uncontrollable factors, such as war and inflation, on the achievement of the SDGs. Also, different countries may be included in order to reach a global sample, extending the present case study applied only to Romania.

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