

Sustainability measures as key performance indicators in executive remuneration contracts of Johannesburg Stock Exchange listed companies

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ABSTRACT

Purpose of the study: Managerial short-termism is likely to prevent managers from investing in stakeholder initiatives that contribute to long-term value creation beneficial to all stakeholders when sustainability targets are omitted from executive remuneration contracts. Although it is necessary to implement mechanisms to encourage management to align the interests of all stakeholders, it is not clear what sustainability targets are used in executive remuneration contracts of Johannesburg Stock Exchange (JSE) listed companies. This paper investigates which sustainability targets are used in executive remuneration contracts of Johannesburg Stock Exchange (JSE) listed companies.

Design/methodology/approach: A qualitative research design was selected for this research, and content analysis was used. The top 10 companies listed on the JSE, ranked according to the highest Chief Executive Officer (CEO) remuneration in 2022, were included in the sample. The remuneration reports of the top ten companies for the past five years were downloaded from the respective company websites, and the 50 reports were content analysed. Four steps were used in the research process to collect data.

Findings: The results showed that two companies have integrated sustainability indicators in their remuneration reports for all five years, 2018 to 2022. Most companies had only started incorporating sustainability targets in remuneration reports in 2021. Linking climate change to remuneration took place in 2022, whereas it was not used in the remuneration reports of previous years.

Recommendations/value: As sustainability is becoming increasingly important, companies should include some sustainability requirements in their remuneration reports. It is proposed that remuneration reports should include variables relating to climate change strategies, diversity and inclusion initiatives and greenhouse gas emissions.

Managerial implications: It is suggested that companies should not use broad terms such as sustainability to indicate sustainability factors in their remuneration reports. Rather, they should use actual Global Reporting Initiative (GRI) framework terms instead of sustainability jargon.

Keywords: Key performance indicators; JSE listed companies. remuneration contracts; sustainability measures

JEL Classification: M40

1. INTRODUCTION

Corporate sustainable management strategies have been intensified in response to the growing risks of severe climate crises on the environment (Adu *et al.*, 2022). In addition, corporate sustainable management strategies aim to create long-term benefits for several stakeholders, including shareholders, employees, customers and communities (Dyllick & Hockerts, 2002). Sustainability is regarded as a key driver to aligning the interests of all stakeholders (Almici, 2023; Al-Shaer & Zaman, 2019; E-Vahdati *et al.*, 2022; Flammer *et al.*, 2019). Therefore, linking sustainability performance targets to remuneration will lead to a deeper integration of sustainability into corporate management strategies (Grabner *et al.*, 2018).

Researchers, institutional investors and international regulators emphasise the relevance of governing remuneration and including sustainability targets in executive remuneration contracts (Almici, 2023; & Abdel-Kader, 2016; Adu *et al.*, 2022; Cohen *et al.*, 2023; Grabner *et al.*, 2018; Hartikainen *et al.*, 2021; Maas & Rosendal, 2016; UNPRI, 2012; WBCSD, 2010). Various researchers have found that the integration of sustainability measures into executive remuneration policies enhanced sustainability performance (Almici, 2023; Derchi *et al.*, 2020; Nguyen *et al.*, 2023). The King IV Report advocates that remuneration be linked to performance criteria “*across the triple context in which organisation operates and/or all the capitals that the organisation uses or affects*” (IoDSA, 2016:31). In other words, reference to the triple context envisages linking executive remuneration to three performance categories; namely: financial, environmental and social performance criteria. Furthermore, King IV recommends a stakeholder-inclusive approach to sustainability and governance, which encompasses the information needs of various stakeholders (IoDSA, 2016).

The stakeholder-agency theory, which assumes management is likely to act in their own best interest, to the detriment of all stakeholders (Hill & Jones, 1992), is used as the theoretical lens in this paper. Embedding sustainability targets in executive remuneration should facilitate the alignment of all interests (Almici, 2023). Ikram *et al.* (2019) found that sustainability targets used in executive remuneration varied significantly across the variables on which sustainability

was contracted and across industries. Against this background, the objective of this paper is to explore the type and nature of sustainability incentives used in executive remuneration contracts of Johannesburg Stock Exchange (JSE) listed companies.

Integrating sustainability measures into executive remuneration policies enhances a company's governance by incentivising CEO's to adopt a longer time horizon and shift their attention towards stakeholders that seem less salient but contribute to long-term value creation (Flammer *et al.*, 2019). Without sustainability performance criteria in executive remuneration contracts, managerial short-termism is likely to prevent CEO's from investing in stakeholder initiatives that contribute to long-term value creation beneficial to all stakeholders (Flammer *et al.*, 2019).

The concept of stakeholder participation in corporate governance found its place in policy documents such as the OECD's principles of corporate governance, the World Economic Forum (WEF) and the King Code (IoDSA, 2016). As a result, many companies are adopting a more stakeholder-inclusive approach, namely, about *how* their executives' remunerations are set (Joannou & Herbert, 2022). Maas and Rosendal (2016), as well as Grabner *et al.* (2018), also explored the types of sustainability targets in executive remuneration schemes. However, it is not clear what sustainability targets are used in executive remuneration contracts of Johannesburg Stock Exchange (JSE) listed companies. The question can, thus, be posed: what sustainability targets are used in executive remuneration contracts of Johannesburg Stock Exchange (JSE) listed companies?

2. LITERATURE REVIEW

The study's literature review starts with the goals of business using the stakeholder approach, thereafter the definition of remuneration contract, sustainability measures meaning and the integration of sustainability measures into remuneration contracts.

2.1 Business goals – Stakeholder approach

The agency theory initially answered the debate on the question for whom a company exists according to which managers should serve the interests of their shareholders as the suppliers of capital and as principals. Jensen and Meckling (1976) provide a foundational perspective on agency theory. According to these authors, a remuneration contract is a tool used to minimise the agency problem in companies. Incentives in remuneration contracts will align the interests of management with the interests of shareholders, for the benefit of the company (Jensen & Meckling, 1976). In other words, the primary objective of the company was initially to maximise shareholder profit (Kolk & Perago, 2014). However, the stakeholder theory

departed from agency theory and was used to explain why companies have responsibilities to include the interests of all stakeholders (Kolk & Perago, 2014). According to the stakeholder theory, all stakeholders play a role in the survival and development of a company and, therefore, managers should consider the interests of all stakeholders (Keremidchiev, 2021).

However, stakeholders have conflicting interests, and the stakeholder theory offers no solution regarding prioritisation and ranking of stakeholders. Therefore, managers can rank stakeholders and spend company resources based on their own preferences (Kolk & Perago, 2014). Using the agency theory and stakeholder theory as a departure point, Hill and Jones (1992) propose the stakeholder-agency theory, which assumes that management is likely to act in their own best interest, to the detriment of all stakeholders (Almici, 2023). Hill and Jones (1992) offered valuable insights into how the evolution of new incentive structures and institutional mechanisms for monitoring and enforcing the contractual relationships between managers and stakeholders can help mitigate conflicts between various stakeholders. Sustainability is regarded as a key driver to align the interests of all stakeholders (Almici, 2023; Al-Shaer & Zaman, 2019; E-Vahdati *et al.*, 2022; Flammer *et al.*, 2019). The adoption of new incentive structures, such as including sustainability incentives in executive remuneration contracts, is accompanied by improvements in key sustainability outcomes (Cohen *et al.*, 2023) to benefit all stakeholders.

The theoretical framework used in this research was the stakeholder-agency theory (Hill & Jones, 1992). According to the stakeholder-agency theory, it is necessary to implement mechanisms to encourage management to act in a goal-congruent way, in other words, to align the interests of all stakeholders. As sustainability is regarded as a key driver to align the interests of all stakeholders (Almici, 2023; Al-Shaer & Zaman, 2019; E-Vahdati *et al.*, 2022; Flammer *et al.*, 2019), it is argued that companies with a sustainability strategy in place will devote more time to sustainability activities and have fewer conflicts of interest between management and stakeholders, which eventually leads to a lower firm risk (E-Vahdati *et al.*, 2022). Conflict amongst stakeholders may be reduced if companies link executive remuneration to sustainability practices (Abdelmotaal & Abdel-Kader, 2016; Maas & Rosendal, 2016).

2.2 What is a remuneration contract?

In terms of Section 30(6b) of the South African Companies Act No. 71 of 2008, remuneration is defined as “*salary, bonuses and performance related payments*”. Remuneration at the executive level should be linked to performance criteria to motivate executives to act in a goal-congruent way (Greenbury, 1995; Joannou & Herbert, 2022; Mans-Kemp & Viviers, 2017;

Perkins & Shortland, 2023). Executive remuneration is often a tool used to minimise the agency problem in companies by aligning the interests of management to relevant stakeholders (Almici, 2023). Executives need to allocate limited resources to create value for the company and all stakeholders, and, therefore, the targets used to motivate executives to perform should reflect what companies deem to be valuable. In this regard, the selection of economic incentives based on the achievement of social and environmental targets may strengthen a company's sustainability orientation and result in a point of agreement between different stakeholders (Almici, 2023).

According to the King IV code, performance related payments should transcend financial measures as *"financial performance alone can no longer serve as proxy for holistic value creation"* and, therefore, the King IV report recommends performance measures *"across the triple context in which organisation operates and/or all the capitals that the organisation uses or affects"* (IoDSA, 2016:31). In support of the King IV report, the South African Companies Act No. 71 of 2008, Section 7(b)(iii) states that one of the purposes of this Act is to *"encourage transparency and high standards of corporate governance"* within the context of South Africa. Appropriate remuneration schemes are crucial if managers are to be encouraged to undertake sustainability activities that enhance long-term performance (Arjalies & Munday, 2013; Cuguero-Escofet & Rosanas, 2013; Groen *et al.*, 2012; Maas & Rosendal, 2016).

2.3 Sustainability measures

The concept of sustainable development was introduced by the Brundtland Commission Report (1987) and popularised by Elkington (1997) through the concept of triple bottom line. Dyllick and Hockerts (2002) applied the concept of sustainable development at a business level. At the business level, they defined corporate sustainability as *"meeting the needs of a firm's direct and indirect stakeholders without compromising its ability to meet the needs of future stakeholders as well"* (Dyllick & Hockerts, 2002). Almici (2023) refined the corporate sustainability definition as *"a company's ability to optimise at the same time as the economic, social and environmental performance by ensuring the full satisfaction of all stakeholders' expectations"*.

A number of indicator frameworks can measure corporate sustainability (Singh *et al.*, 2012), such as the Global Reporting Initiative (GRI), the United Nations' (UN) Principles for Responsible Investment (PRI), Beyond the Business Case and the Millennial Development Goals (MDGs). The GRI proposed an indicator framework based on three main categories, namely, economic, environmental and social indicators consisting of sub-categories for labour, human rights, society and product responsibility (GRI, 2022). The GRI standards evolved to

meet the emerging global challenges, such as climate change, the development of new technologies, economic inequality and world population, as well as the transition to a sustainable economy (De Villiers *et al.*, 2022; GRI, 2022). These sustainability indicators could be used as a guide to set targets for executive directors and will according to Grabner *et al.* (2018), will signal a strong sustainability orientation.

Responding to the emerging climatic threat, the UN developed 17 broad “Sustainable Development Goals” (SDGs) and issued the Principles for Responsible Investment (PRI) containing environmental performance targets and social elements. Dyllick and Hockerts (2002) proposed the “Beyond the Business Case”, encompassing three cases for sustainability. The *business case* comprises eco-efficiency and socio-efficiency, the *environmental case* consists of eco-effectiveness and sufficiency, and the *societal case* concerns socio-effectiveness and ecological equity (Dyllick & Hockert, 2002). Dyllick and Hockerts (2002) warned that “*sustainability is often equated with eco-efficiency*” and “*such a reduction misses several important criteria that firms have to satisfy if they want to become truly sustainable*”. Dyllick and Hockerts (2002) argued that the Global Reporting Initiative (GRI) provide indicators that are entity-focused and based on relative improvements, not taking absolute thresholds into account. As a result, the companies that follow the Global Reporting Initiative (GRI) focus on the ‘business case’ for sustainability, addressing environmental and social issues from an efficiency (minimum use, maximum benefit) point of view (Dyllick & Hockerts, 2002:135). Efficiency is concerned with slowing down the ecological and social degradation, whereas effectiveness is concerned with doing the right things – in other words, absolute prevention of ecological and social degradation (Dyllick & Hockerts, 2002:137). In other words, disclosure on the minimum levels of water use, energy consumption savings, waste reduction and minimum safety incidents are often reported on in terms of the GRI guidelines may be classified as the Business Case for sustainability. The Millennial Development Goals (MDGs) are also widely accepted in South African governance (StatsSA, 2015) and provide eight sustainability goals as indicated in Table 1.

Furthermore, compliance with the B-BBEE Act is compulsory for all JSE listed companies (Sibia, 2019). Directors of JSE-listed companies have a fiduciary duty to ensure that all legislative requirements are complied with and, therefore, must ensure that the provisions of the Broad-based Black Economic Empowerment Act 53 of 2003 (B-BBEE Act) have been satisfied. The B-BBEE Act provides a framework which promotes black economic empowerment to redress the inequalities of Apartheid in South Africa, which are classified under the social pillar in Table 1.

The indicator frameworks encompassing corporate sustainability are summarised in Table 1.

Table 1: Sustainability indicators

Framework	Economic	Environmental	Social
Global Reporting Initiative (GRI, 2022)	Impacts on the economic circumstances of its stakeholders: “Direct impacts on customers, suppliers, employees, providers of capital, public sector” “Market presence” “Indirect economic impacts” “Procurement practice” “Anti-corruption” “Anti-competitive behaviour” “Tax”	“GHG emissions” “Climate adoption, resilience and transition” “Closure and rehabilitation” “Air emissions” “Biodiversity” “Water and effluents” “Waste” “Materials” “Energy” “Water” “Suppliers” “Products and services” “Compliance” “Transport” “Overall”	Labour practices and decent work: “Employment” “Labour/management relations” “Health and safety” “Training and education” “Diversity and opportunity” Human rights: “Strategy and management” “Non-discrimination” “Freedom of association and collective bargaining” “Child labour” “Forced and compulsory labour” “Disciplinary practices” “Security practices” “Indigenous rights” Society: “Community” “Bribery and corruption” “Political contributions” “Competition and pricing” Product responsibility: “Customer health and safety” “Products and services” “Advertising” “Respect for privacy”
Principles For Responsible Investment (UN PRI, 2012)		“Biodiversity loss” “Greenhouse gas (GHG) emissions” “Climate change impacts” “Renewable energy” “Energy efficiency” “Resource depletion” “Chemical pollution” “Waste management” “Depletion of fresh water” “Ocean acidification” “Stratospheric ozone depletion” “Changes in land use” “Nitrogen and phosphorus cycles”	“Activities in conflict zones” “Distribution of air trade products” “Health and access to medicine” “Workplace health safety and quality” “HIV/AIDS” “Labour standards in the supply chain” “Child labour” “Slavery” “Relations with local communities” “Human capital management” “Employee relations” “Diversity” “Controversial weapons” “Freedom of association”
Beyond the Business Case	Business Case for Sustainability Eco-efficiency:	Natural Case for Sustainability Eco-effectiveness: Fundamental shifts in product/process design	Societal Case for Sustainability Ecological equity:

Framework	Economic	Environmental	Social
	Efficient use of natural capital, example: • Energy efficiency • Water efficiency • Resources efficiency • Waste or pollution intensity <u>Socio-efficiency:</u> Minimising negative social impacts and maximising positive social impacts, example: • Corporate giving • Creation of employment • Work accidents (Safety) • Human rights abuses • Accidents per value added	(e.g. fossil fuel efficiency vs solar power): • Absolute amount of mobility-induced CO₂ emissions worldwide <u>Sufficiency:</u> Individual consumer consumption choices influenced: • Brand jamming • Marketing terror	Distribution of natural capital between current and future generations: • Design long lasting and/or easily recycling products • Remove use from ownership <u>Socio-effectiveness:</u> Absolute positive social impact: • Providing products to poor countries (e.g. medicine)
Millennial Development Goals (MDG)	<i>(viii) "develop global partnership for the development"</i>	<i>(vii) "to ensure environmental sustainability"</i>	<i>(i) "to eradicate extreme poverty and hunger"</i> <i>(ii) "to promote universal primary education"</i> <i>(iii) "to promote gender equality and empower women"</i> <i>(iv) "to reduce child mortality"</i> <i>(v) "to improve maternal health"</i> <i>(vi) "to combat HIV/AIDS, malaria and other diseases"</i>
B-BBEE ACT 53 of 2003			<i>"Framework which promotes black economic empowerment to redress the inequalities of Apartheid in South Africa"</i>

Table 1 shows detailed measures, according to indicator frameworks, namely, the Global Reporting Initiative (GRI), the UN Principles for Responsible Investment (PRI), Beyond the Business Case and the Millennial Development Goals (MDGs) and the B-BBEE Act. Table 1 also shows that there is overlap between the indicators for the Business Case for sustainability as suggested by Dyllick and Hockerts (2002) and the environmental indicators, as well as social indicators, as suggested by the Global Reporting Initiative (GRI) and Principles for Responsible Investment (PRI). In addition to the environmental and social issues from an efficiency point of view (minimum use, maximum benefit), Table 1 shows that both the GRI and the UN PRI specify climate change and greenhouse gas as important sustainability measures.

Literature echoes that sustainability targets, particularly those relating to climate change, greenhouse gas (GHG) emissions and diversity, have been intensified (GRI, 2022; Haque & Ntim, 2020; Lu & Herremans, 2019; Nuber & Velte, 2021; Sovacool *et al.*, 2021). Furthermore, the GRI (2022) recognises the development of new technologies as a challenge to the

transition to a sustainable economy (De Villiers *et al.*, 2022). Artificial Intelligence (AI) is viewed as the most important and disruptive new technology for large companies (NewVantage, 2019).

2.4 Company integration of sustainability measures in remuneration contracts

The integration of sustainability performance targets in executive remuneration contracts provides additional insight about managerial effort (Almici, 2023). The GRI (2022) “Disclosure 2-19 Remuneration policies” requires disclosure on *“how the remuneration policies for members of the highest governance body and senior executives relate to their objectives and performance in relation to the management of the organization’s impacts on the economy, environment, and people”* (Global Reporting Initiative, 2022), in other words, disclosure of incentives to meet triple bottom line targets.

However, few companies integrate all the pillars of sustainability into the individual bonus targets of executives (Crutzen, 2011; Hartikainen *et al.*, 2021; Maas & Rosendal, 2016). Rather, companies use broad terms such as value creation or sustainable growth to indicate sustainability factors in their remuneration reports (Joannou & Herbert, 2022). In addition, sustainability jargon instead of the actual GRI framework is often used (Flower, 2015; Hartikainen *et al.*, 2021; Joannou & Herbert, 2022). Hartikainen *et al.* (2021) found that companies do not set concrete targets for sustainability in remuneration reports and furthermore that the *“core meaning of sustainability for companies seems to vary according to national guidelines, locally and across industry sectors”*. Entity-focused targets, which are easy to measure, such as water savings and electricity savings, are often used as incentives. Environmental and social issues from an efficiency (minimum use, maximum benefit) point of view are easy to quantify (Dyllick & Hockert, 2002).

Climate change has risen to the board-level of corporate agendas since the 2021 Glasgow Climate Pack agreement (COP26) (Ritz, 2020). Stakeholder groups urge companies to implement initiatives aimed at addressing climate change and carbon reduction (Adu *et al.*, 2022; Cades & Czerny, 2016; Paul *et al.*, 2017; Winshcel, 2020). Executive compensation linked to climate change is an aspect that emerged as a corporate response to climate agreements (Ritz, 2020). Winshcel’s (2020) study found that the growing pressure from stakeholder groups resulted in large, listed EU companies adjusting their strategy and Chief Executive Officer (CEO) compensation to accommodate climate change policies and carbon targets. Similarly, Carbon Disclosure Project (CDP, 2019) found that 47% of Europe’s largest firms linked executive pay to climate change (Nguyen *et al.*, 2023). Albitar *et al.* (2023) found

that climate incentives at board level are positively associated with corporate commitment to climate change.

Climate change initiatives are also referred to as climate mitigation and climate neutrality, which includes the reduction of greenhouse gas (GHG) emissions (Nguyen *et al.*, 2023; Winshcel, 2020). According to Nguyen *et al.* (2023), climate neutrality means “*that by reducing emissions, investing in green technologies, and protecting the natural environment, EU countries will achieve net zero greenhouse gas emissions by 2050*”. There is a strong momentum for firms to reward executives for meeting GHG emission targets (Haque & Ntim, 2022; UN PRI, 2012). Corporate sustainable management strategies, particularly those involving greenhouse gas (GHG) emission abatement initiatives, have been intensified (Adu *et al.*, 2022).

The importance of board diversity was first introduced in 2010 by the UK Corporate Governance Code and, thereafter, reinforced by codified corporate governance in 2018 and 2020 (Perkins & Shortland, 2023). In 2022, the FRC (2022) review welcomed remuneration metrics linked to diversity targets and encouraged companies to consider board diversity, taking account of its benefits (Perkins & Shortland, 2023). Diversity, the opposite of similarity, is defined as immutable differences such as ethnicity and gender (Jehn *et al.*, 1999). Adopting diversity of gender, social and ethnic backgrounds leads to nuanced thinking, avoiding narrowness and adopting diverse viewpoints among executive decision makers (Liu *et al.*, 2014). Perkins and Shortland (2023) found that the inclusion of minorities as board members was positive and could help moderate the lack of diverse viewpoints.

Artificial Intelligence (AI) technologies will have a positive impact on company growth and profitability (McKinsey & Company, 2018; NewVantage, 2019; Deloitte, 2020). Executives initially focused on using AI technologies to automate repetitive workflow processes. However, companies have ventured into new domains of AI application such as machine learning, deep learning and natural language processing (Benbya *et al.*, Pachidi, 2020). Table 2 provides brief descriptions of the AI technology applications on which executives should focus.

Table 2: AI technologies and domains of application

Technology	Brief Description	Example Application
Machine learning - Reinforcement learning - Supervised learning - Unsupervised learning	“Learns from experience” “Learns from a set of training data” “Detects patterns in data that are not labelled and for which the result is not known”	“Highly granular marketing analyses on big data”

Technology	Brief Description	Example Application
Deep learning	<i>"A class of machine learning that learns without human supervision, drawing from data that is both labelled and unlabelled."</i>	<i>"Image and voice recognition, self-driving cars"</i>
Neural networks	<i>"Algorithms that endeavour to recognise underlying relationships in a set of data through a process that mimics the way the human brain operates."</i>	<i>"Credit and loan application evaluation, weather prediction"</i>
Natural language processing	<i>"A computer programme able to understand human language as it is written or spoken."</i>	<i>"Speech recognition, text analysis, translation, generation"</i>
Rule-based expert systems	<i>"A set of logical rules derived from human experts."</i>	<i>"Insurance underwriting, credit approval"</i>
Robotic process automation	<i>"Systems that automate structured digital tasks and interfaces."</i>	<i>"Credit card replacement, validating online credentials"</i>
Robots	<i>"Automatically operated machines that automate physical activity, manipulate and pick up objects."</i>	<i>"Factory and warehouse tasks"</i>

Source: Benbya *et al.* (2020)

Table 2 shows the domains of AI applications that will have a positive impact on company growth, profitability and sustainability.

The development of scientific knowledge related to sustainability-related executive remuneration incentives is slow (Hartikainen, 2021). Against this background there is momentum to link executive compensation to six sustainability categories that emerged, namely: (i) climate change, (ii) greenhouse gas emissions, (iii) diversity and inclusion, (iv) artificial intelligence/machine learning, (v) sustainability as an overarching term to encompass Environment, Social, and Governance (ESG), (vi) Business Case for sustainability (minimum use, maximum benefit) encompassing indicators such as water usage, energy consumption, renewable energy, waste and safety incidents

The main research question is whether these six sustainability categories are indeed sufficient to analyse executive compensation incentives. The focus of this study will thus be on that.

3. OBJECTIVES OF THE RESEARCH

As little is known about the use of sustainability targets in executive remuneration in South Africa, the primary objective of this paper is to explore the integration of sustainability targets in executive remuneration contracts of Johannesburg Stock Exchange (JSE) listed companies to provide greater insights into its implications for interpretation and adoption. To achieve this objective, the following secondary objectives were formulated:

- To understand how JSE-listed companies integrate sustainability measures in executive remuneration contracts.

- To identify the sustainability variables used as key performance indicators in the remuneration contracts of executive directors.
- To propose sustainability variables that should be part of the remuneration contracts of executive directors.

4. METHODOLOGY AND RESEARCH PLAN

A qualitative research design was selected for this research, and, in particular, content analysis was used. The population included all companies listed on the Johannesburg Stock Exchange (JSE). The research design for this study is discussed in Sections 4.1 to 4.5.

4.1 Sample, sample size, sampling technique

The top 10 companies listed on the JSE, ranked according to the highest CEO remuneration in 2022, were included in the sample. It was expected that CEOs who were in the top remuneration brackets would also include some form of sustainability measure reporting. As the remuneration reports of all ten companies are in the public domain and openly accessible, their reports (50 reports in total, 10 x 5 years) were downloaded from the respective company websites, and the content was analysed.

4.2 Measuring instrument

A schedule for content analysis was used to obtain the data from the integrated reports of the ten selected companies for five years. Content analysis of remuneration reports (within each integrated report) was conducted to identify sustainability performance measures mentioned in the CEO's remuneration package. The schedule for content analysis consisted of two GRI sustainability pillars (environmental and social) as well as the MDG and B-BEE Act (classified according to the two pillars, environment and social). According to Grabner *et al.* (2018), it is difficult to classify the economic category, and therefore, the economic category was not used as an indicator of sustainability. GRI indicators were chosen because the indicators can be considered "*the most credible sources for the extraction of CSR indicators*" developed through a multi-stakeholder process (Rahdari & Rostamy, 2015:760). For each pillar, certain words or groups of words were extracted. The number of categories included was measured rather than the number of sustainability performance measures used. The categories covered included: (i) Climate change, (ii) Greenhouse gas emissions, (iii) Diversity and inclusion, (iv) AI/Machine learning, (v) Sustainability as an overarching term to encompass Environment, Social, and Governance (ESG) and (vi) Business Case for sustainability involving the disclosure of minimum water use, energy consumption savings/ renewable energy, waste reduction and minimum safety incidents.

4.3 Data collection

Integrated reports for the ten companies for five years (50 reports in total) were downloaded from the respective company websites for the financial year-end 2018-2022. The integrated reports contained the remuneration reports. Sustainability performance measures (KPIs) were collected from each company's remuneration report for the financial year-end 2018-2022 using software such as Atlas TI. Table 3 summarises the research steps that were used in this study.

Table 3: Research steps

Research Step	Description
Step 1: Download ten reports for five years	Download the integrated reports of the ten companies with the highest-paid CEOs for 2018-2022. Integrated reports would contain the remuneration reports.
Step 2: Extract sustainability measures (KPIs) from the remuneration reports	Remuneration reports should indicate the CEO's salary, bonus, share-based compensation and descriptive information regarding performance metrics for performance-based compensation, which could be classified as short- or long-term.
Step 3: Identify performance measures (KPI) that are linked to sustainability categories: • Climate change • Greenhouse gas emissions • Diversity and inclusion • AI/Machine learning • Sustainability as an overarching term • Business Case (minimum use, maximum benefit)	The number of sustainability categories covered was counted rather than the number of performance measures (KPI) used, as the measures used could be concentrated in one category.
Step 4: Determine the category scope	The scope of the categories (how many) and the industry were captured for further analysis.

4.4 Data analysis

Remuneration reports provided information regarding the CEO's salary, bonus, share-based compensation, as well as descriptive information regarding performance metrics for performance-based compensation, which could be classified as short- or long-term. In other words, a specific sustainability category would be equal to one if the company used performance measures related to that specific category (climate change, GHG emissions, diversity and inclusion, AI/machine learning, sustainability as an overarching term, business case) and would be zero if not. The scope of the categories (how many), time horizons

indicated in the remuneration report (long-term target vs short-term target) and the industry were captured in the database for further analysis.

4.5 Ethical considerations

This research analysed the integrated reports of ten companies listed on the Johannesburg Stock Exchange for five years. The integrated reports are in the public domain and were only analysed to confirm theoretical constructs, such as which sustainability performance measures were incorporated in the directors' remuneration packages. As per the code of conduct for researchers at Nelson Mandela University, this research was carried out in a scientifically responsible manner at all times. The researchers accept responsibility for the design, methodology and execution of the research, planned the study in such a way as to optimise the validity of the findings, report the limitations of the findings, and indicate, where applicable, possible alternative interpretations.

5. RESULTS OF THE STUDY

The top ten companies per remuneration of their CEOs are provided in Table 4 and were used in the study.

Table 4: Top 10 CEO remuneration

No.	Remuneration per annum in Rands	CEO	Name of Company
1	251 525 501	"Mike Henry"	"BHP Group"
2	232 233 808	"Bob van Dijk"	"Prosus"
3	229 000 000	"Bob van Dijk"	"Naspers"
4	169 841 741	"Michel Doukeris"	"AB InBev"
5	129 381 699	"Jerome Lambert"	"Compagnie Financiere Richemont"
6	128 456 672	"Jack Bowles"	"British American Tobacco"
7	108 505 000	"Nico Muller"	"Impala Platinum Holdings"
8	92 770 000	"Gerrie Fourie"	"Capitec Bank Holdings"
9	84 209 000	"Ralph Mupita"	"MTN Group"
10	70 627 013	"Andrew King"	"Mondi"

Source: BusinessTech (September 2022)

Table 5 provides the content analysis of the remuneration reports for the top ten paid CEO companies over five years.

Table 5: Content analysis results of the CEO remuneration reports

Sustainability targets identified in the CEO remuneration report						
Industry	Company Name	2022	2021	2020	2019	2018
Basic materials: Mining	BHP Group	Climate change, social value	Safety and sustainability	Sustainability (i.t.o. brand, reputation)	Sustainability (i.t.o. brand, reputation)	Sustainability (i.t.o. brand, reputation)
Technology	Prosus	Sustainability: Diversity and inclusion, climate sustainability	Business Sustainability: Machine learning and artificial intelligence, diversity and inclusion, data privacy and security	Business Sustainability: Machine learning and artificial intelligence, diversity and inclusion, data privacy and security	Machine learning and artificial intelligence	0
Technology	Naspers	Sustainability: Diversity and inclusion, climate sustainability	Business Sustainability: Machine learning and artificial intelligence, diversity and inclusion, data privacy and security	Business Sustainability: Machine learning and artificial intelligence, diversity and inclusion, data privacy and security	Machine learning and artificial intelligence	0
Consumer goods	AB InBev	Sustainability goals	Sustainability and other elements of corporate social responsibility, corporate reputation and compliance/ethics.	0	0	0
Consumer goods	Compagnie Financiere Richemont	Climate & environment	Driving initiatives on ESG (environmental, social and governance)	0	0	0
Consumer goods	British American Tobacco	0	0	0	0	0
Basic materials: Mining	Impala Platinum Holdings	ESG: Integrate renewable energy sources into the business	ESG: Integrate renewable energy sources into the business	0	0	0
Financial	Capitec Bank Holdings	ESG performance (B-BBEE transformation, strengthening diversity, equity and inclusion, succession plans for executive roles and reducing	0	0	0	0

Sustainability targets identified in the CEO remuneration report						
Industry	Company Name	2022	2021	2020	2019	2018
		environmental footprint)				
Telecommunication	MTN Group	ESG: broadband coverage, diversity and inclusion, and Net Zero emissions	ESG: emissions; broadband coverage, and diversity and inclusion	0	0	0
Basic materials: Forestry & Paper	Mondi	Sustainability scorecard: Safety, reduction in greenhouse gas emissions, elimination of waste to landfill	Sustainability scorecard: Safety, reduction in greenhouse gas emissions, elimination of waste to landfill	Sustainability	Safety (zero harm)	Safety (zero harm)

From the results in Table 5, it is evident that:

- The remuneration of the highest-paid CEO, Mike Henry from the BHP Group, was linked to sustainability targets for all 5 years (2018 – 2022). Sustainability as a catch-all phrase was used as an incentive in years 2018 to 2021. In 2022, the remuneration report specified Climate change and social value as incentives for the first time.
- The remuneration of the second-highest-paid CEO, Bob van Dyk from Prosus, was linked to sustainability targets for 4 years (2019 – 2022). Machine learning and AI targets were linked to his salary for 3 years (2019 —2021). Climate sustainability was specified as an incentive in 2022. CEO, Bob van Dyk, also ranked third-highest salary per annum working for Naspers. Machine learning and AI targets were linked to his salary for 3 years (2019 —2021). Climate sustainability was specified as an incentive in 2022.
- Climate Change as an incentive for CEO remuneration was used for the first time in 2022 by four companies, namely: BHP Group, Prosus, Naspers and Compagnie Financier Richemont. BHP Group operates in the Basic material industry, Prosus and Naspers operate in the Technology industry, and Compagnie Financier Richemont belong to the consumer goods industry.
- Specific targets related to Greenhouse gas emissions were used by two companies (MTN and Mondi, ranked number nine and ten, respectively).
- Only two companies linked sustainability targets to their CEO remuneration for all five years (2018-2022), namely BHP Group (ranked number 1 based on CEO salary) and Mondi ranked number 10 based on CEO salary).
- One company had not included any sustainability targets in the remuneration report for the past five years, namely British American Tobacco.

- Most companies started incorporating sustainability targets in remuneration reports from 2021 onwards.

Most remuneration reports analysed were from the basic materials industry (n=3) and consumer goods industry (n=3), followed by the technology industry (n=2), financial industry (n=1) and telecommunication industry (n=1). Ikram *et al.* (2019) noted that sustainability targets used in executive remuneration varied significantly across industries.

The use of climate change as a target for remuneration was the highest in the technology industry (n=2) in 2022. Only one company in the Basic material industry included Climate change as a target for CEO remuneration. Only the basic material industry, used remuneration targets addressing environmental and social issues from an efficiency (minimum use, maximum benefit) point of view were used (renewable energy and elimination of waste). Greenhouse gas emission incentives were used in the telecommunication industry (n=1) as well as the basic material (forestry and paper) industry (n=1).

The use of machine learning/AI as a target for remuneration was used in the technology industry only. Diversity incentives for CEO remuneration were used in three industries: namely, the Technology, the Financial and the Telecommunication industries.

The findings in Table 5 are classified according to the emerging sustainability performance measure categories as presented in Table 6.

Table 6: Emerging sustainable performance measure categories in remuneration reports

	REMUNERATION REPORTS				
Sustainability category	2022	2021	2020	2019	2018
Climate change	4	0	0	0	0
Greenhouse gas emissions	2	2	0	0	0
Diversity and inclusion	4	3	1	0	0
Artificial Intelligence	0	2	2	2	0
Sustainability as an overarching term	4	4	2	1	1
Business Case (minimum use, maximum benefit)	3	3	1	1	1

From Table 6, it is evident that specific targets related to climate change were included in 2022, whereas it was not used in the remuneration reports of previous years. Furthermore, targets for greenhouse gas emissions were used in 2022 and 2021, whereas it was not used in remuneration reports of previous years. Diversity and inclusion were also important, as more remuneration reports included them in 2022. From 2019 to 2021, artificial intelligence was also included in the remuneration reports. Sustainability as an overarching category for ESG

targets was used in all 5 years. Remuneration targets addressing environmental and social issues from an efficiency (minimum use, maximum benefit) point of view, in other words, the Business Case, were used in all 5 years. Incentives related to only two categories, namely Sustainability and the Business Case, were used in all 5 years.

6. DISCUSSION OF KEY FINDINGS

It was noted that, as sustainability is becoming increasingly important, and therefore companies are including some sustainability incentives in their remuneration reports. Firstly, it was found that most companies incorporated executive remuneration incentives, and only one company did not link sustainability incentives to executive remuneration for the five-year period under review. From a theoretical point of view, these results support the stakeholder-agency theory. The interests of different stakeholder groups may conflict. Therefore, sustainability incentives linked to executive remuneration are used to monitor and enforce the contractual relationships between managers and stakeholders to help mitigate conflicts between various stakeholders. Including sustainability performance targets in remuneration contracts is likely to shift CEOs' attention towards longer-term goals that could be to the benefit of all stakeholders (E-Vahdati *et al.*, 2022; Flammer *et al.*, 2019; Joannou & Herbert, 2022).

Secondly, a delayed adoption of sustainability remuneration incentives was noted, as most companies only started incorporating sustainability targets in remuneration reports from 2021 onwards. The delayed adoption in South Africa could be because of the abstract nature of sustainability (Dyllick and Hockerts, 2002), the lack of good examples (Hartikainen *et al.*, 2021) and complex stakeholder interests involved (Almici, 2023).

Lastly, it was observed that in South Africa, the King IV report brings remuneration reporting closer to the GRI. South African JSE listed companies are required in terms of the King IV report to disclose performance measures "*across the triple context in which organisation operates and/or all the capitals that the organisation uses or affects*" (IoDSA, 2016:31). Detailed guidance on sustainability remuneration incentives is provided by the GRI (2022) "Disclosure 2-19 Remuneration policies".

7. RECOMMENDATIONS

Based on the discussion of key findings, it is proposed that the actual GRI framework terms be used as remuneration targets rather than broad terms such as sustainable growth to indicate sustainability targets in the remuneration report. Furthermore, it is recommended that companies get beyond the business case for sustainability when setting executive remuneration targets. In other words, the environmental and social issues from an efficiency point of view (minimum use, maximum benefit) should be supplemented with remuneration

targets that address the *environmental case* for sustainability (consisting of eco-effectiveness and sufficiency targets), and the *societal case* for sustainability (which concerns socio-effectiveness and ecological equity targets) (Dyllick & Hockert, 2002).

Furthermore, it is proposed that sustainability categories for climate change, diversity and inclusion, greenhouse gas emissions and the use of artificial intelligence be used to supplement the GRI reporting requirements. In support of these stakeholder-inclusive categories, a substantial amount of long-term executive compensation, instead of cash compensation, should be linked to the achievement of the categories.

8. MANAGERIAL IMPLICATIONS

Based on the discussion of key findings, it is proposed that the actual GRI framework terms be used as remuneration targets rather than broad terms such as sustainable growth to indicate sustainability targets in the remuneration report. Furthermore, it is recommended that companies get beyond the business case for sustainability when setting executive remuneration targets. In other words, the environmental and social issues from an efficiency point of view (minimum use, maximum benefit) should be supplemented with remuneration targets that address the *environmental case* for sustainability (consisting of eco-effectiveness and sufficiency targets), and the *societal case* for sustainability (which concerns socio-effectiveness and ecological equity targets) (Dyllick & Hockert, 2002).

Furthermore, it is proposed that sustainability categories for climate change, diversity and inclusion, greenhouse gas emissions and the use of artificial intelligence be used to supplement the GRI reporting requirements. In support of these stakeholder-inclusive categories, a substantial amount of long-term executive compensation, instead of cash compensation, should be linked to the achievement of the categories.

9. CONCLUSIONS

The aim of this study was to explore the use of sustainability performance criteria in executive remuneration contracts of Johannesburg Stock Exchange (JSE) listed companies to provide greater insights into its implications for use and interpretation. The findings revealed that linking climate change to remuneration took place in 2022, whereas it was not used in the remuneration reports of previous years. Most companies started incorporating GHG and diversity and inclusion targets in remuneration reports in 2021. Broad, catch-all sustainability phrases and the Business Case for sustainability were used in all 5 years. It is envisaged that the adoption of the recommendations that emanate from this study will lead to a deeper integration of sustainability into corporate management strategies.

The study's limitations arise from its exclusive focus on the top ten paid CEO companies. The restricted number of companies and lack of diversity limit the findings of the study.

Future research should build on this qualitative study by using a larger and more diverse sample to enhance the practical implications and recommendations. Future research should focus on the transparency of remuneration reporting. Sustainability remuneration transparency will make it possible to compare, benchmark and rate different executive remuneration incentives.

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