

# MEASURING ENVIRONMENTAL, SOCIAL, AND GOVERNANCE (ESG) PERFORMANCE : KEY METRICS AND INDICATORS

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# Key Takeaways on ESG Performance for Accountants

..... The paper is to enrich the knowledge of the professional Accountants, and equip them with the understanding of ESG performance, its metrics and indicators, as well as the measurements.

Therefore, accountants are encouraged to capture the following points :

- Understand what ESG performance, metrics and indicators are all about ;
- Learn how to practically measure ESG metrics and indicators of a company and;
- Identify a company's commitment in maintaining and controlling its production processes without compromising ESG factors
- Understand the financial and sustainable importance of ESG performance.



# 01 INTRODUCTION

..... **Creation and Purpose:** God created the earth with ingredients for man's comfort: fresh air, plants, animals, soil, rivers, etc.  
Everything was meant to manifest His glory.

## **Negative Impact of Industrialization:**

Man's pursuit of wealth disrupted the natural balance.

Industrialization aimed for economic development but led to negative impacts:

- Polluted air
- Forest degradation
- River adulteration
- Soil damage

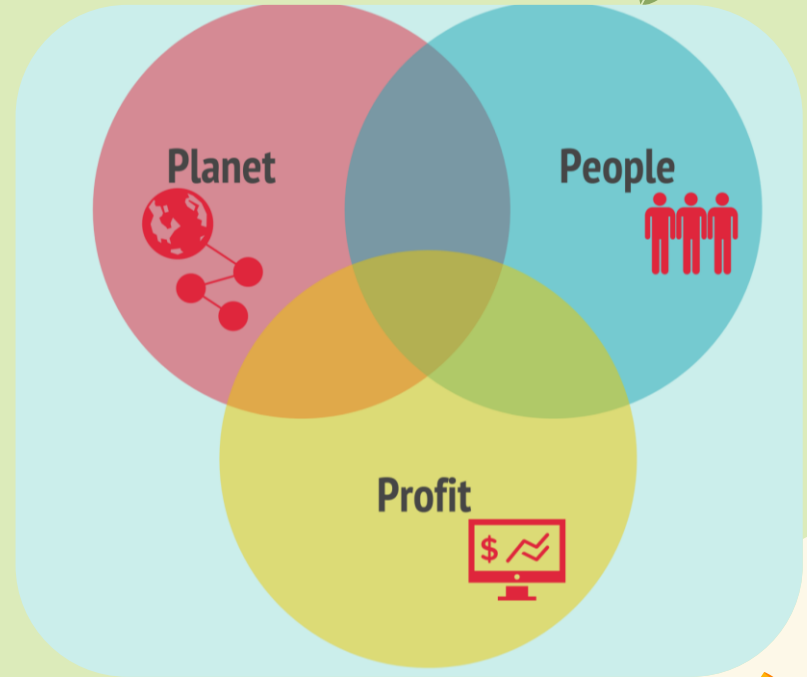
Resulting in environmental destruction.



# INTRODUCTION CONTS.

## ➤ Emergence of Environmental Awareness:

- Need to monitor and control company processes due to environmental damage led to initiatives like John Elkington's "**Triple Bottom Line Concept**" in 1994 aimed at measuring social, environmental, and governance effects over time.



Triple Bottom Line Concept



Rickety Car With Smoke



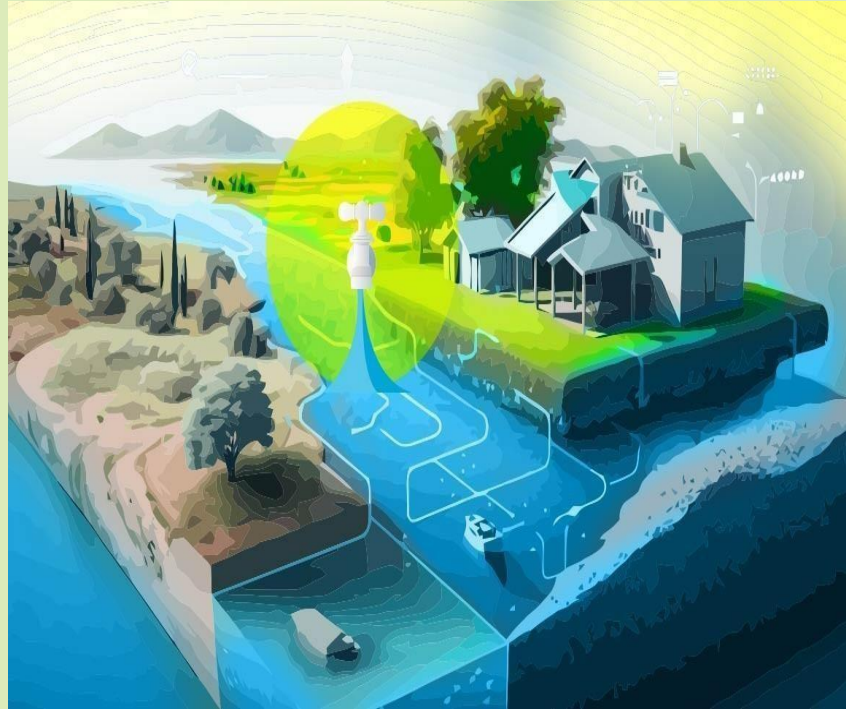
**REFUSE DUMP**



**DEAD FISHES IN THE RIVER**



**Half Dead Tree**



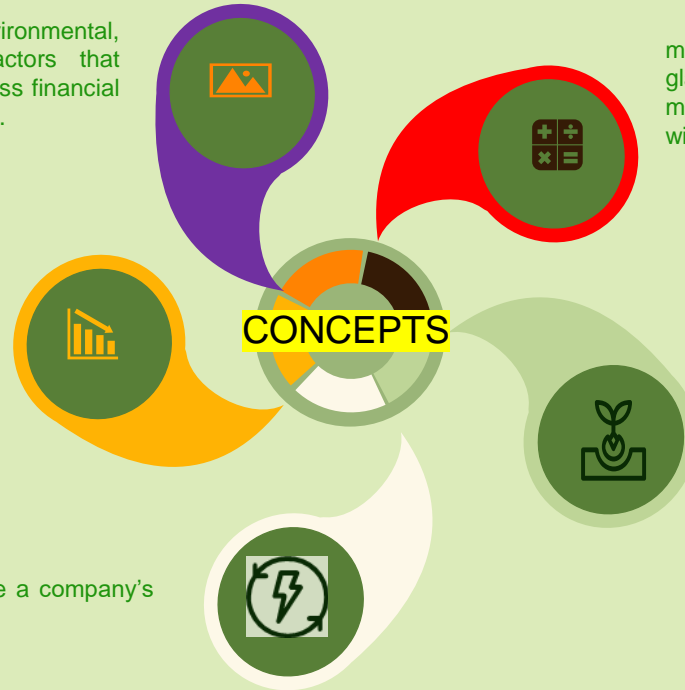
**Smart Irrigation System**

# CONCEPTUALIZATION OF ESG PERFORMANCE

is the collection of environmental, social, and governance factors that can materially affect a business financial and sustainable performance .

Main purpose is to identify ESG-related business risks and opportunities for companies financial performance.

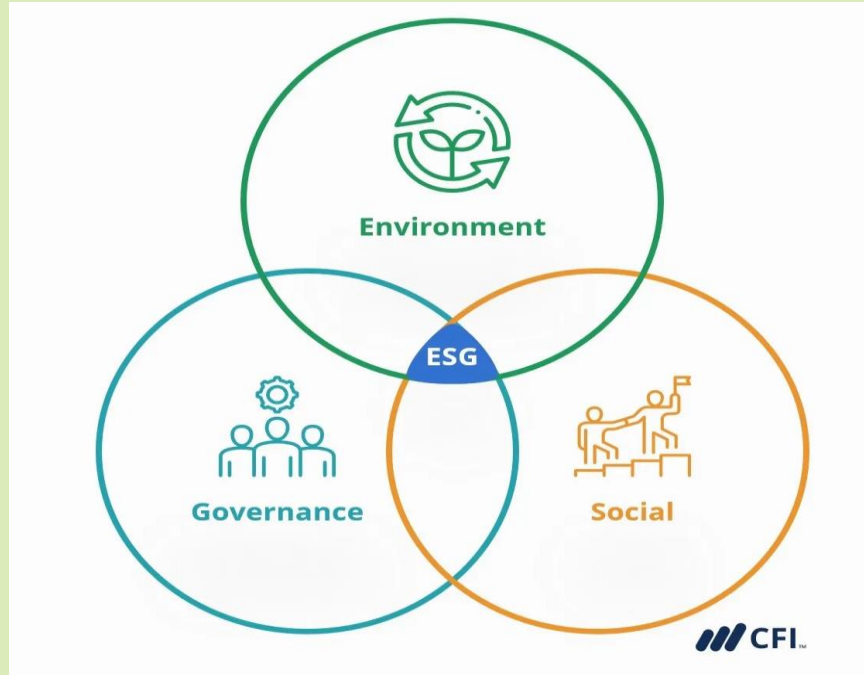
focuses on how best to manage a company's operational processes



measurement is all about disclosure of information that glaringly explains the company commitment in maintaining and controlling their production process, without compromising ESG factors.

is therefore assessed in three dimensions and each dimension of ESG focuses on company's specific operations, and policies, reflecting its commitment to sustainability and ethical practice

## ESG DIMENSIONS



Corporate Finance Institute

The three dimensions represented in a venn diagram are inter-related hence what affects one affects the other. Example, toxic waste affect the environment by emitting polluted air that affects social lives. The negative impacts point accusing finger to governance which has been proved to be sick hence the ethical business practice is lacking.





# ETHICAL BEHAVIOR

**The ethical behavior encompasses the following factors:**

## INTEGRITY

Entails the maintenance of consistency between actions and words

## TRANSPARENCY

The attitude of being clear in the communication of business information and policies.

## RESPECT

It is the art of allowing one's voice to be heard, given opportunity to share opinions, and ideas.

## HONESTY

"Being committed in releasing the truth irrespective of the consequences.

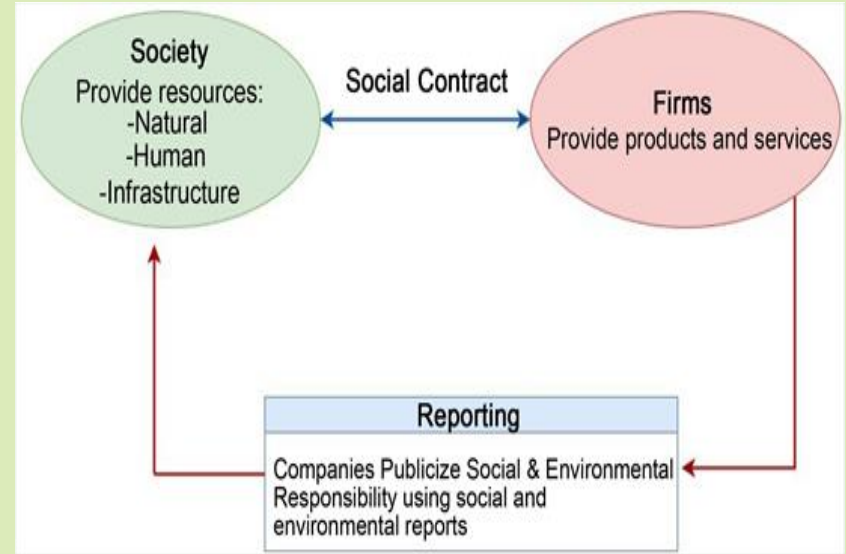


## 03

# THEORETICAL FRAMEWORK

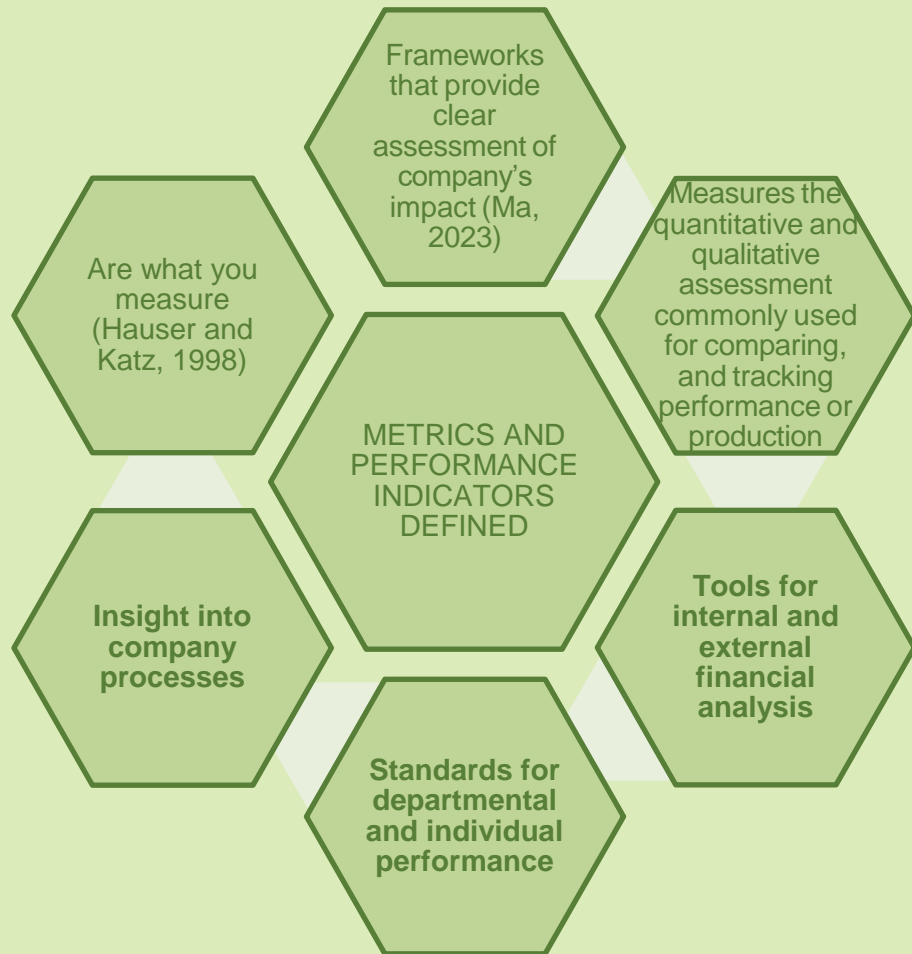
## Legitimacy Theory

This work is based on legitimacy theory, which posits an implied social contract between society and companies. Companies adopt socially oriented behaviors to gain social approval for survival. The theory asserts a mutual exchange: the community provides natural and human resources, and the company delivers goods, services, and waste.



Source: Scientific Research Publishing

Metrics are benchmarks that array strategic plans into action for the achievement of predetermined goals.



# Key Performance Indicator (KPI)

Key Performance Indicators (KPIs) are data that x-ray how best or worst a company has gone in meeting up with its business goals/targets. It defines a company strategy and focus, by indicating the degree of percentage expectation from employees within a specified period.



## 05

# Metrics And Key Performance Indicators Differentiated

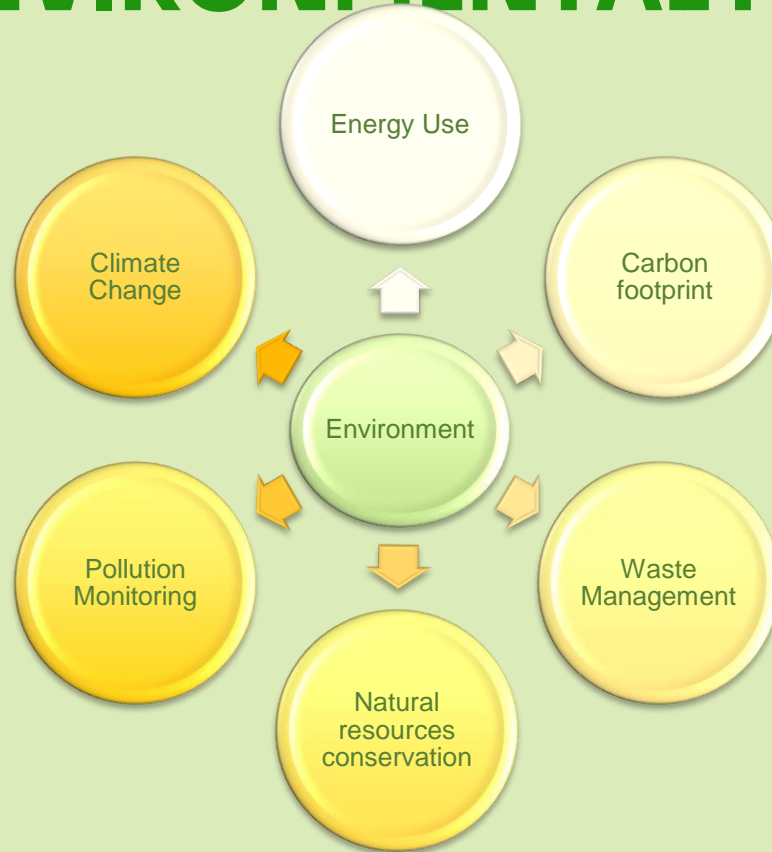
While metrics and KPIs are often used interchangeably, there are clear differences between them. The salient differences are noted below:

METRICS	KPI
Measure performance of Specific business activities or Processes.	Measure progress towards key business goals.
They have a lower-level Perspective	They have a high-level perspective/anticipation
They are relevant for Specific departments or Business areas	They are relevant across different departments/function
Tend to be operational	Used for strategic decision-Or tactical decision making
Represent in a narrative form	Represent mostly in numerical form

# ESSENTIAL ESG PERFORMANCE METRICS AND INDICATORS TO BE CONSIDERED BY ACCOUNTANTS



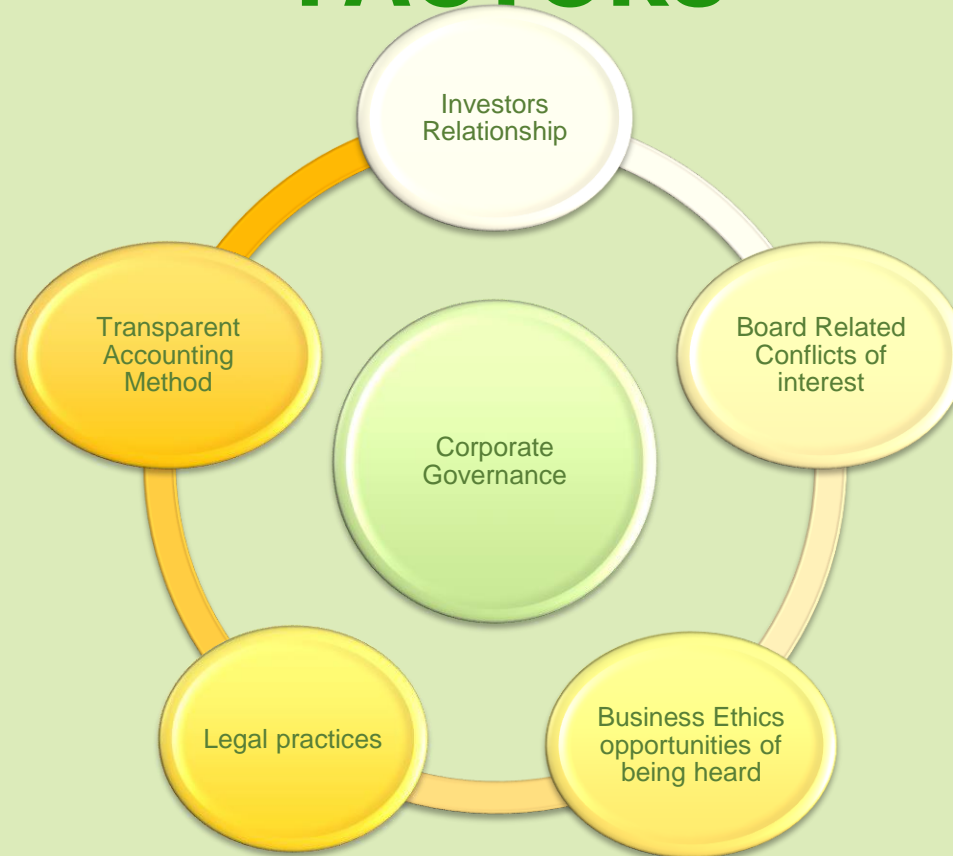
# ESG – ENVIRONMENTAL FACTORS



# ESG – SOCIAL FACTORS



# ESG – CORPORATE GOVERNANCE FACTORS



# MEASURING ESG PERFORMANCE METRICS USING COMPANY'S ANNUAL REPORT

The ESG ratings and measurement are based exclusively on publicly reported data such as structured data e.g company reports, company relevant records, third party research (e.g Ngos), and media (Chvatalova, Šimberova, 2012). The assessment is conducted following a structured framework that anchors on the guidelines of the general ESG frameworks GRI, SASB, SEC etc. The result of the assessment is distributed for verification to companies or sectors involved.

However, the paper uses Moody's ESG Solutions to measure ESG metrics of "Dangote Cement Plc as indicated below:

In line with Moody's measurement style, weight is underpinned based on three aspects: Framework compliance;  
Fundamental, importance, or minor;  
Industry-specific risks - high, moderate, or low risk.

Table 2: DCP ESG PERFORMANCE REPORT		
ENVIRONMENTAL INDICATORS	2021	2022
<b>CO<sup>2</sup> Emissions (absolute)</b>		
Gross absolute direct CO <sub>2</sub> , emissions (million metric tonnes)	17.0	16.0
Net absolute direct CO <sub>2</sub> emissions (million metric tonnes)	16.9	15.9
CO <sub>2</sub> , from on-site power generation (million metric tonnes)	1.8	1.7
<b>Direct CO<sub>2</sub> emissions intensity (scope 1):</b>		
Gross CO <sub>2</sub> per tonne of cementitious product (kg CO <sub>2</sub> /tonne)	609	595
Net CO <sub>2</sub> per tone of cementitious product (kg CO <sub>2</sub> /tones)	606	590
<b>Energy (thermal and electrical)</b>		
SHC clinker production (MJ/tonne clinker)	3,337	3,330
Convectional fossil fuel (% of kiln fuels)	0.979	0.961
Alternative fuel rate (% of kiln fuels)	0.019	0.027
Biomass fuel rate (% of kiln fuels)	0.002	0.012
Total energy consumption (kiln in TJ)	71,118	66,247
Total energy consumption (plant) in TJ)	101,355	95,786

# TABLE 3: DCP ESG PERFORMANCE REPORT

% of total plant energy consumed per source		
Petroleum coke/coal mix	0.6	0
Coal	41	42.6
Natural gas	51.3	48.7
Diesel	3.7	3.2
Petrol	0	0
LPFO	0	0.7
Electricity	1.9	2.1
Alternative fuel (fossil and biomass based)	1.5	2.7
Clinker/cement (equivalent) factor (%)	0.77	0.74
Water management		
Total water withdrawal (million m3)	8.16	6.81
Waste management		
Total waste generated (ktonnes)	16.4	11.1
Total waste recycled/reused (ktonnes)	-	7.6
Total alternative fuel and raw materials (AFR) i.e (plastic, waste rubber, biomass, industrial waste) waste consumed (ktonnes)	89	157
Trees planted		
Total number per annum	511	123

TABLE 4: DCP ESG PERFORMANCE REPORT

SOCIAL INDICATORS		
Employee hire and turnover		
New hires	1,061	1,172
<b>Communities - projects/engagement</b>		
Number of completed community projects	67	71
Community engagement	675	763
<b>General training</b>		
Number of training hours	156,899	313,192
<b>Sustainability training</b>		
Number of employees trained	218	598
Number of training hours	1,188	1,478
<b>HSE/training</b>		
Number of persons trained on HSE (including external stakeholders)	15,392	27,450
<b>Governance indicators</b>	<b>2021</b>	<b>2022</b>
Gender diversity		
Gender diversity – females at senior management level	9%	15%
Gender diversity – females in Executive Management	12%	13%
Females in total workforce (permanent employees)	8%	9%

**Table 5: Measuring DCP ESG PERFORMANCE REPORT - using Moody’s ESG Solution Method**

DIMENSIONS	ASPECT OF GRI	NO GRI	DESCRIPTION OF GRI (matrics)	FRAMEWORK COMPLIANCE 60%	FUNDAMENTAL, IMPORTANCE, OR MINOR 20%	INDUSTRY-SPECIFIC RISKS (high, moderate, or low risks 20%)	PERFORMANCE WEIGHT SCORE (indicators) %
ENVIRONMENTAL	MATERIALS	EN1	materials used by weight or volume	60	10	5	75
		EN2	% materials used that are recycled input materials	60	20	20	100
	ENERGY	EN5	Energy saved due to conservation and efficiency improvement	60	10	20	90
	WATER	EN10	% and total volume of water recycled and reused	60	20	20	100
	BIODIVERSITY	EN11a	BIODIVERSITY	60	20	20	100

***Table 6: Measuring DCP ESG PERFORMANCE REPORT - using Moody's ESG Solution Method***

EMMISSIONS, EFFLUENTS, AND WASTE	EN16	Total direct and indirect greenhouse gas emissions by weight.	60	20	20	100
	EN20	NOx, SOx, and other significant air emissions by type and weight.	60	20	20	100
	EN22	Total weight of waste by type and disposal method.	30	20	20	70
	EN22a	Total weight of hazardous wastes.	60	20	20	100
PRODUCT AND SERVICES	EN27	Percentage of products sold and their packaging materials that are reclaimed by category.	60	20	20	100
COMPLIANCE	EN 28	Monetary value of significant fines and total number of nonmonetary sanctions for non-compliance with environmental laws and regulations.	0	10	10	20

**Table 7: Measuring DCP ESG PERFORMANCE REPORT - using Moody's ESG Solution Method**

	OVERALL	EN 30	Total environmental protection expenditures and investments by type.	60	20	20	100
SOCIAL	Society	SO 1	Nature, scope, and effectiveness of any programs and practices that assess and manage the impacts of operations on communities, including entering, operating, and exiting	60	20	20	100
	Corruption	SO 3	Percentage of employees trained in organization's anticorruption policies and procedures.	60	20	20	100
	Customer health and safety	PR 2	Total number of incidents of non-compliance with regulations and voluntary codes concerning health and safety impacts of products and services, by type of outcomes.	0	20	20	40

**Table 8: Measuring DCP ESG PERFORMANCE REPORT - using Moody's ESG Solution Method**

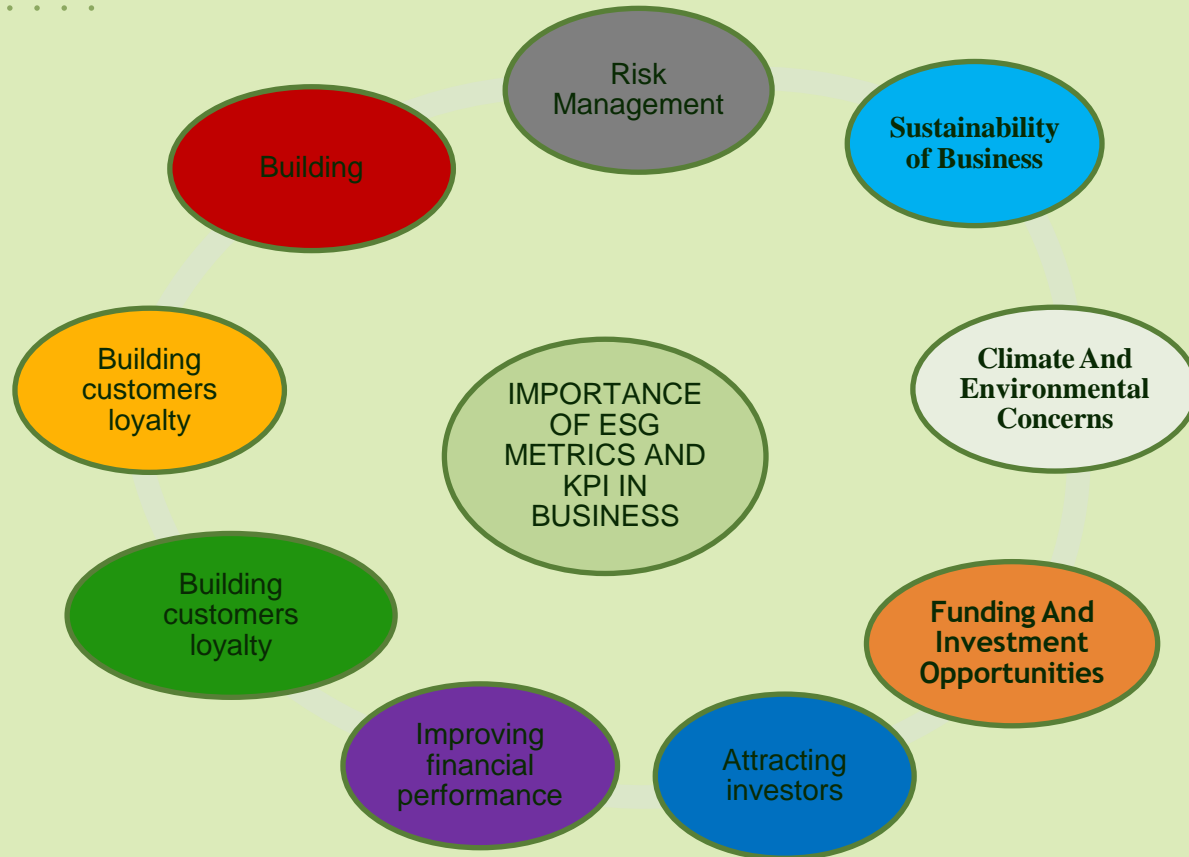
	Employment	LA 2	Total number and rate of new employee hires and employee turnover by age group, gender, and region.	60	20	20	100
	Occupational health and safety		Education, training, counseling, prevention, and risk control programs in place to assist workforce members, their families, or community members regarding serious diseases.	60	20	20	100

**Table 9: Measuring DCP ESG PERFORMANCE REPORT - using Moody's ESG Solution Method**

Corporate Governance	Stakeholder engagement	CG 18	Frequency of the involvement of the stakeholders	0	20	20	40
		CG 20	Methods of the responses to the feedback from the stakeholders.	0	20	20	40
	Conduct, litigation risk corruption	CG 21	Records on the breaching of the regulations and extra costs.	0	20	10	30
		CG 25	Payments to the state and the total value of the financial and subsistence contributions to the political parties, politicians and allied institutions.	0	0	0	0

**Source: compiled by researcher, GRI<sup>4</sup>**

# IMPORTANCE OF ESG METRICS AND KEY PERFORMANCE INDICATORS IN BUSINESS



Summarily, ESG performance indicators are metrics used to evaluate a company's environmental, social, and governance performance. ESG metrics and indicators are concise tools used to measure a company's commitments on various sustainability and ethical issues, as well as measuring business risks and opportunities in those areas.

ESG key metrics and indicators are based on a company's strategies and goals which however vary in line with sectors' specifics. These metrics are very essential as it arrays information on companies' commitments towards maintaining and controlling their negative impacts on the environment.

However, the measurement of ESG using the metrics and indicators, and its integration into the annual report is a viable business tool for performance assessability and risk management for companies. Strategic and operations plans are better placed to identify risks and other drawbacks that threaten the environment, business growth and performance.



# 10

# RECOMMENDATION



A process is not without its difficulties, however, the paper recommend that companies should focus on the business process that would mitigate climate change, business risk, and embrace environmentally friendly technologies, products and services as these would give them good business reputation, enhance performance and avail them access to capital.

Also, The regulatory bodies should enforce the inscription of companies ESG commitments boldly on their products packets. Example:



# **Zest Bar Soap is an Earth friendly choice<sup>†</sup>**

- ✓ Uses less plastic,  
100% recycled  
paperboard and 35%  
post-consumer content
- ✓ Uses less energy and  
water to manufacture
- ✓ Uses more  
efficient  
transportation
- ✓ Paraben and  
phthalate free

<sup>†</sup> As compared to liquid soap.  
To learn more visit [zest.com](http://zest.com)

**THANKS FOR LISTENING.**



**THANK YOU  
FOR  
LISTENING**