

Master in Management FINANCIAL AND ESG REPORTING Class 5

Fall, 2024



**Lisbon School
of Economics
& Management**
Universidade de Lisboa

Individual written test:

Time: 10:00 a.m. to 11:30 a.m. on October 25th (1.5 hours)

Classroom: Auditório 5 at the Quelhas building

Question types:

- Multiple-choice questions
- Short-answer questions
- Calculation questions (financial ratio analysis)

Coverage: Weeks 1-6 (slides, group discussions, group work, in-class exercises)

Individual written test with a minimum grade of **8 points** (60%)

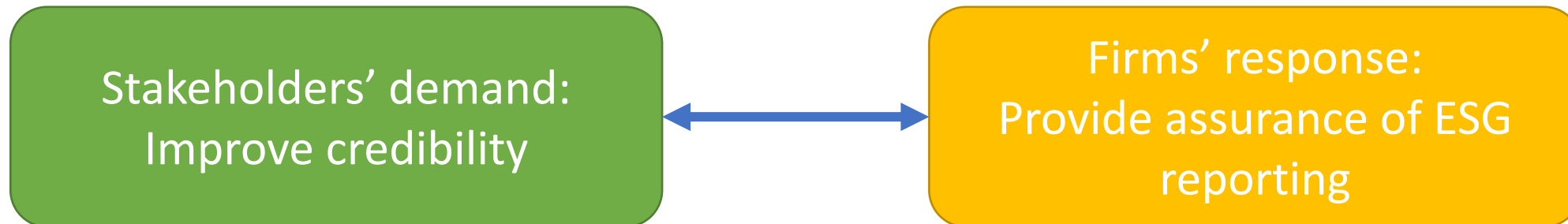
Objective of this class:

1. Sustainability reporting assurance
2. ESG KPIs and metrics
3. ESG investment and principles for responsible investment
4. ESG-scores, ratings and ranking lists

Sustainability reporting assurance

Why we need sustainability assurance?

- Growing importance of sustainability reports
- Because of the usefulness of sustainability reports, stakeholders, have demanded transparency and questioned the reliability of sustainability reporting
- Possibility of greenwashing: Low ESG commitment firms may use ESG reports to “green-wash”/“social-wash” with selective and less verifiable CSR disclosure to manage stakeholder perceptions and to enhance legitimacy



What is sustainability assurance?

‘External assurance or verification can provide both report readers and internal managers with increased confidence in the quality of sustainability performance data, making it more likely that the data will be relied on and used for decision making’ (GRI, 2013).

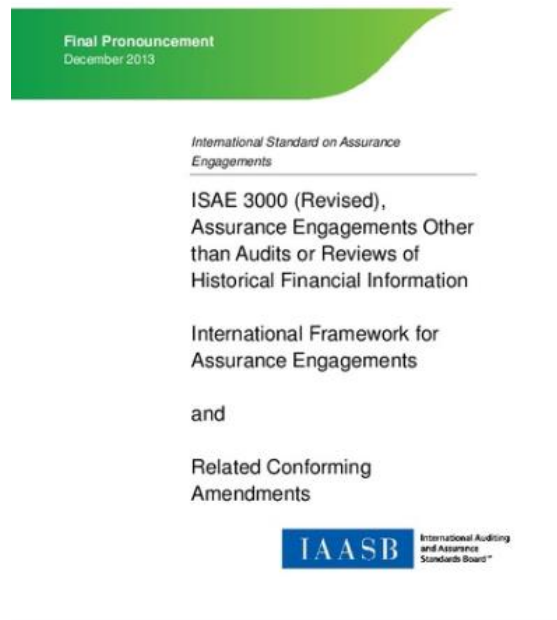


- **Main goal: improve the **credibility** of sustainability reporting**

Assurance standards

Specific guidance on sustainability report assurance is lacking, but there are currently two standards that provide guidance on assurance engagements in general:

- International Standard on Assurance Engagements (ISAE 3000), International Audit Assurance Standards Board (IAASB)
- AA1000 Assurance Standard (AA1000AS), AccountAbility (a UK-based consultancy firm)



Assurance standards

International Standard on Assurance Engagements (ISAE 3000)

- More closely related to the financial accounting and auditing practices.
- The first version was issued in 2003, with a subsequent revision in 2013.

AA1000 Assurance Standard (AA1000AS)

- Originally issued in 2008.
- The latest update, v3, was published in 2020.
- The assurance provider evaluates the nature and extent of the organisation's adherence to four AA1000 AccountAbility Principles, *inclusivity, materiality, responsiveness and impact*.
- The aim is to provide stakeholders information on how the organisation in focus manages its sustainability performance and how this is communicated in the sustainability reporting.

Sustainability assurance vs financial audit

Will be mentioned later

	Legal status	Subject matter	Service provider	Level of assurance provided
Financial statement audit	Mandatory	General purpose financial report	Registered auditor, accounting professional	Reasonable
Sustainability assurance	Mandatory or voluntary	Comprehensive CSR reports, or a specific subject matter area (e.g. greenhouse gas emission)	Professional accountants, Consultants, Internal auditors (no required to be an accounting professional)	Limited or reasonable

Sustainability assurance providers

▪ Professional accountants

- Big-four and other professional audit firms
- Independent, highly reputable experts
- Guaranteeing high quality of the assurance procedures

▪ External CSR consultants

- Possess significant expertise in the subject matter
- May not have standards of professional conduct, procedures, reporting and independence

▪ Internal auditors

- Access to internal information
- Management role
- Lack of independence, may impair the quality of CSRA engagements



Sustainability assurance levels

Reasonable assurance

- **high level of assurance**, but not absolute level of assurance due to limitations of the internal control system and of the assurance process itself.
- provided through a statement in the **positive form** on the accountability matter where the practitioner reports that *‘the information in the environmental and social report conforms in all material respects with the identified criteria’*.

Limited assurance

- a more **moderate or limited** level of assurance.
- the accompanying assurance statement is worded in the **negative form**, where the practitioner reports that *‘nothing has come to their attention to indicate that the information is not presented fairly in accordance with the identified criteria’*.

Sustainability assurance development in EU

CSRD (Corporate Sustainability Reporting Directive)

- The CSRD would include a **mandatory assurance obligation** for all reported sustainability information, including the disclosures required under the EU Taxonomy Regulation.
- The CSRD requirements begin with **limited assurance** and **expand to reasonable assurance** at a later date.

Jan 2024	First tier of companies starts CSRD sustainability reporting
Sep 2024	The IAASB approves International Standard on Sustainability Assurance 5000 (ISSA 5000)
Oct 2026	The European Commission is expected to adopt limited assurance standards
Dec 2026	The ISSA 5000 standards become effective
Oct 2028	Adoption of the reasonable assurance standards (depending on feasibility study)

Special nature of sustainability assurance

1. The existence of a competitive market

- Different types of providers

• 2. The diversity of the subject matter examined

- Different types of subject matters and forms of information

• 3. The lack of analytic rigor that arises in double-entry systems

- Risk of material misstatement

• 4. The relative lack of well-developed criteria

- Appropriate assurance techniques and approaches?

Some examples...

Let's look at some examples from different companies.

What are the similarities and differences among them?

- The report format
- Subject matter (specific reports/comprehensive CSR reports)
- Assurance provider
- Assurance level



Ernst & Young LLP
303 S. Almaden Blvd.
San Jose, CA 95110

Subject matter

Independent Accountants' Review Report

To the Board of Directors and Management of Alphabet Inc.

We have reviewed Alphabet Inc.'s accompanying Schedules of Select Environmental Indicators (the "Subject Matter") included in Appendix A for the year ended December 31, 2020 in accordance with the criteria also set forth in Appendix A (the "Criteria"). Alphabet Inc.'s management is responsible for the Subject Matter included in Appendix A, in accordance with the Criteria. Our responsibility is to express a conclusion on the Subject Matter based on our review.

Our review was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants (AICPA) AT-C section 105, *Concepts Common to All Attestation Engagements*, and AT-C section 210, *Review Engagements*. Those standards require that we plan and perform our review to obtain limited assurance about whether any material modifications should be made to the Subject Matter in order for it to be in accordance with the Criteria. A review consists principally of applying analytical procedures, making inquiries of persons responsible for the Subject Matter, obtaining an understanding of the data management systems and processes used to generate, aggregate and report the Subject Matter and performing such other procedures as we considered necessary in the circumstances. A review is substantially less in scope than an examination, the objective of which is to obtain reasonable assurance about whether the Subject Matter is in accordance with the Criteria, in all material respects, in order to express an opinion. Accordingly, we do not express such an opinion. A review also does not provide assurance that we became aware of all significant matters that would be disclosed in an examination. We believe that our review provides a reasonable basis for our conclusion.

In performing our review, we have also complied with the independence and other ethical requirements set forth in the Code of Professional Conduct and applied the Statements on Quality Control Standards established by the AICPA.

As described in Note A within Appendix A, the Subject Matter is subject to measurement uncertainties resulting from limitations inherent in the nature and the methods used for determining such data. The selection of different but acceptable measurement techniques can result in materially different measurements. The precision of different measurement techniques may also vary.

The information included in the Company's annual Environmental Report and submission to the CDP, formerly the Carbon Disclosure Project, other than the Subject Matter, has not been subjected to the procedures applied in our review and, accordingly, we express no conclusion on it.

Based on our review, we are not aware of any material modifications that should be made to the accompanying Schedules of Select Environmental Indicators included in Appendix A for the year ended December 31, 2020, in order for the schedules to be in accordance with the Criteria.

Ernst & Young LLP

June 25, 2021
San Jose, California

Alphabet 2020 Environmental indicators assurance letter

Appendix A: Schedules of Select Environmental Indicators

Alphabet Inc. ¹ Schedule of Environmental Indicators For the Year Ended December 31, 2020			
Indicator	Reported Value ²	Unit	Criteria
Scope 1 greenhouse gas (GHG) emissions ³	38,694	Metric tonnes of carbon dioxide equivalent (tCO ₂ e)	World Resources Institute (WRI)/World Business Council for Sustainable Development's (WBCSD), The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (GHG Protocol)
Biogenic GHG emissions ⁴	5,417	Metric tonnes of carbon dioxide (tCO ₂)	WRI WBCSD GHG Protocol and Global Reporting Initiative (GRI) Disclosure 305-1c
Scope 2 GHG emissions: location-based-method (LBM) ⁵	5,865,095	tCO ₂ e	WRI WBCSD GHG Protocol Scope 2 Guidance
Scope 2 GHG emissions: market-based-method (MBM) ⁵	911,415	tCO ₂ e	
Scope 3 GHG emissions, Category 6 Business Travel ^{6,7}	111,000	tCO ₂ e	WRI WBCSD GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard
Scope 3 GHG emissions, Category 7 Employee Commuting (excluding Work from Home Emissions) ^{7,8}	46,000	tCO ₂ e	
Scope 3 GHG emissions, Category 7 Employee Commuting - Work From Home ^{7,9}	56,000	tCO ₂ e	WRI WBCSD GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard, supplemented by EcoAct's Homeworking emissions Whitepaper
Total energy consumption ¹⁰	15,439,538	Megawatt-hour (MWh)	Global Reporting Initiative (GRI) Disclosure 302-1e
Electricity consumption - Global ¹¹	15,138,543	MWh	GRI Disclosure 302-1c, I.
Electricity consumption - U.S.	10,789,194	MWh	
Electricity consumption - International	4,349,349	MWh	
Scope 1 + 2 Carbon intensity per unit of revenue	5.21	tCO ₂ e / million \$	GRI Disclosure 305-4
Scope 1 + 2 Carbon intensity per full-time equivalent employee (FTE)	7.49	tCO ₂ e / FTE	
Scope 1 + 2 Carbon intensity per MWh of energy consumed	0.0615	tCO ₂ e / MWh	
Percentage of electricity procured from renewable sources	100	%	Alphabet Inc. calculates the percentage of total global electricity procured from renewable sources as the amount of electricity procured from renewable energy globally, divided by the total electricity consumed by its Global Facilities. Electricity procured from renewable energy globally is calculated as the amount of electricity from renewable energy generation in the grids Alphabet Inc. uses, the amount of on-site renewable energy generation, and the amount sourced through contractual instruments globally. ¹²

The Board of Directors of HSBC France S.A. ("HSBC") engaged us to provide **limited assurance** on the information described below and set out in the HSBC Green Progress Report dated September 2016 for the HSBC France Green Bond (ISIN FR0013064755) as at 30 June 2016 (the "Green Progress Report").

Our conclusion

Based on the procedures we have performed and the evidence we have obtained, nothing has come to our attention that causes us to believe that the Selected Information as at 30 June 2016 has not been prepared, in all material respects, in accordance with the Reporting Criteria.

This conclusion is to be read in the context of what we say in the remainder of our report.

Selected Information

The scope of our work was limited to assurance over the allocation of bond proceeds as stated within the "Use of Proceeds" section of the

Green Progress Report, marked with the symbol **A** (the "Selected Information"). The Reporting Criteria against which it was assessed are described in the section entitled "Reporting criteria for this Green Bond Report" on page 5 of the Green Progress Report.

Our assurance does not extend to information in respect of earlier periods or to any other information included in the Green Progress Report. We have not reviewed and do not provide any assurance over the individual project information reported, including estimates of sustainability benefits.

Professional standards applied and level of assurance

We performed a limited assurance engagement in accordance with International Standard on Assurance Engagements 3000 (Revised) 'Assurance Engagements other than Audits and Reviews of Historical Financial Information', issued by the International Auditing and Assurance Standards Board. A limited assurance engagement is substantially less in scope than a reasonable assurance engagement in relation to both the risk assessment procedures, including an understanding of internal control, and the procedures performed in response to the assessed risks.

Our Independence and Quality Control

We have complied with the independence and other ethical requirements of the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.

Our firm applies International Standard on Quality Control 1 and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Our work was carried out by an independent and multi-disciplinary team with experience in sustainability reporting and assurance.

Understanding reporting and measurement methodologies

The Selected Information needs to be read and understood together with the Reporting Criteria, which HSBC is solely responsible for selecting and applying. The absence of a significant body of established practice on which to draw to evaluate and measure non-financial information allows for different, but acceptable, measurement techniques and can affect comparability between entities and over time. The Reporting Criteria used for the reporting of the Selected Information are as at 7 October 2016.

Work done

We are required to plan and perform our work in order to consider the risk of material misstatement of the Selected Information. In doing so, we:

- made enquiries of HSBC's management, including those with responsibility for green bond governance, management and reporting;
- evaluated the design of the key structures, systems, processes and controls for managing, recording and reporting the Selected Information;
- obtained the internal listing of assets allocated into the green bond, and confirmed that this was consistent with the proposed disclosure of the green bond;
- performed limited substantive testing on a sample basis of the Selected Information at corporate head office to check that the identified assets were in line with the HSBC Green Bond Framework and had been appropriately measured, recorded, collated and reported, including:
 - inspecting a sample of loan agreements to confirm that the use of proceeds of the asset was consistent with one of the categories in the HSBC Green Bond Framework; and
 - inspecting records maintained in HSBC's financial reporting systems to confirm the existence of the asset, and that it was recorded in the green bond listing accurately;
- made enquiries of HSBC's Corporate Sustainability team, and inspected evidence of the review performed of each of the proposed eligible green projects or businesses;
- vouched the exchange rates used to independent, external sources and confirmed the accuracy of foreign exchange translation calculations;
- inspected minutes of the Green Bond Committee to confirm that the allocated projects had been considered and approved; and
- considered the disclosure and presentation of the Selected Information.

HSBC's responsibilities

The Directors of HSBC are responsible for:

- designing, implementing and maintaining internal controls over information relevant to the preparation of the Selected Information

- that is free from material misstatement, whether due to fraud or error;
- establishing objective Reporting Criteria for preparing the Selected Information;
- measuring and reporting the Selected Information based on the Reporting Criteria; and
- the content of the Green Progress Report.

Big-four

Our responsibilities

We are responsible for:

- planning and performing the engagement to obtain limited assurance about whether the Selected Information is free from material misstatement, whether due to fraud or error;
- forming an independent conclusion, based on the procedures we have performed and the evidence we have obtained; and
- reporting our conclusion to the Directors of HSBC.

This report, including our conclusions, has been prepared solely for the Board of Directors of HSBC in accordance with the agreement between us, to assist the Directors in reporting HSBC's green bond performance and activities. We permit this report to be disclosed in the Green Progress Report as at 30 June 2016, to assist the Directors in responding to their governance responsibilities by obtaining an independent assurance report in connection with the Selected Information. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Board of Directors and HSBC for our work or this report except where terms are expressly agreed between us in writing.

PricewaterhouseCoopers Audit

Nicolas Montillot
Partner
7 October 2016

Different structure

Independent Limited Assurance Report to the Directors of HSBC 2016

INDEPENDENT ASSURANCE STATEMENT

Marks and Spencer plc ("M&S") commissioned **DNV GL Business Assurance Services UK Limited** ("DNV GL", "we", or "us") to undertake independent assurance of the 2020 Plan A Report (the "Report") for the 52 weeks ended 28th March 2020.

Without affecting our Assurance Opinion, we also provide the following observations:

STAKEHOLDER INCLUSIVENESS

The participation of stakeholders in developing and achieving an accountable and strategic response to sustainability.

We saw evidence of M&S engagement and partnerships with external stakeholders for the Selected Performance Information we reviewed including Marks & Start, Plastics, Food Waste, Community Donations and the Global Community Programme.

M&S is simplifying Plan A around a new central framework to better reflect its operating model. As the central framework evolves over the next reporting cycle, we recommend the outcome of engagement with priority stakeholders (customers, colleagues, suppliers, investors, Government, regulators and wider civil society) is communicated externally.

MATERIALITY

The process for determining the issues that are most relevant to an organisation and its stakeholders.

For the Selected Performance Information we reviewed, we found that the management approach for issues M&S has reported on for many years was well embedded within the business.

Packaging has always been a material issue for M&S and plastic packaging in particular has become more important to stakeholders. M&S have responded by setting targets and reporting its progress against them. Going forward, M&S will need to focus its management approach to drive the performance improvements needed to meet these targets.

As the governance for the central framework develops, we recommend that the management approach for reporting material topics is formally agreed.

Once finalised, we recommend M&S publish details of the materiality work it has undertaken to help stakeholders understand how material issues have fed into the development of the central framework.

SUSTAINABILITY CONTEXT

The presentation of the organisation's performance in the wider context of sustainability.

M&S continues to align the Report with global standards and map its achievements against the SDGs, in line with reporting good practice. M&S may wish to consider using the SDGs as a framework to raise ambition on its most material topics.

COMPLETENESS

How much of all the information that has been identified as material to the organisation and its stakeholders is reported.

M&S is in the process of simplifying Plan A. As a result, the number of Plan A commitments and Plan A performance updates included in the Report has reduced from 79 to 27. Nevertheless, material topics no longer included in the Report were signposted, for instance the inclusion of People and HR performance information in the Annual Report.

As the central framework develops, we recommend all agreed material topics are included in future Reports.

RELIABILITY AND QUALITY

The accuracy and comparability of information presented in the Report, as well as the quality of underlying data management systems.

During the review of Selected Performance Information, all the material errors we identified were corrected by M&S prior to publication.

For International Energy Efficiency, data for the reporting period was unavailable and so M&S disclosed that it published the previous year's data instead. This will limit the ability of M&S and its stakeholders to meaningfully gauge performance for the reporting period. Consequently, we recommend using actual data for future reporting.

For Refrigeration and the Global Community Programme, M&S relies upon external partners to provide performance data. Because we found material errors in the consolidation of this data, we recommend M&S works with its external partners to monitor the performance and accuracy of data throughout the year, to reduce the risk of future misstatements.

The reliability and quality of performance data and accompanying narrative in the Report should be underpinned by robust data collection processes including periodic reviews, checks against source evidence and formal sign-off. This is applied to several topics, but is not systematically implemented across all. We recommend that these processes form part of the new performance metrics agreed as part of the central framework.

SCOPE AND APPROACH

We performed our work using DNV GL's assurance methodology VeriSustain™, which is based on our professional experience, international assurance best practice including the International Standard on Assurance Engagements 3000 ("ISAE 3000"), and the Global Reporting Initiative ("GRI") Sustainability Reporting Guidelines. We evaluated the Report for adherence to the VeriSustain™ Principles (the "Principles") of stakeholder inclusiveness, materiality, sustainability context, completeness, reliability and quality.

We understand that the reported financial data and information are based on data from M&S Annual Report and Accounts, which are subject to a separate independent audit process. The review of financial data taken from the Annual Report and Accounts is not within the scope of our work.

DATA IN SCOPE

We evaluated the 2020 narrative and performance data for 7 Plan A commitments and 12 Plan A performance updates, annotated with "*" in the Report (together the "Selected Performance Information"), using the reliability principle together with **M&S Basis of Reporting** for how the data is measured, recorded and reported.

BASIS OF OUR OPINION

A multi-disciplinary team of sustainability and assurance specialists were scheduled to perform work at the Waterside Support Centre in London. Due to Covid-19 related travel restrictions, this work was conducted remotely. We undertook the following activities:

- Review of the current sustainability issues that could affect M&S and are of interest to stakeholders;
- Review of the M&S approach to stakeholder engagement and recent outputs;
- Review of information provided to us by M&S on its reporting and management processes relating to the Principles;
- Interviews with selected senior managers responsible for management of sustainability issues, selected in conjunction with DNV GL, and review of selected evidence to support issues discussed;
- Interviews with content and data owners and review of progress made in relation to Selected Performance Information, annotated with "*" in the Report, and review of how related data is measured, recorded and reported using the reliability and quality principle together with M&S data protocols.

These commitments and indicators were selected based on materiality at a consolidated corporate level; and

- Visits to the Waterside Support Centre in London, United Kingdom to review processes and systems for gathering, preparing and consolidating the Selected Performance Information, including sample checking of source data and data consolidation.

For and on behalf of DNV GL Business Assurance Services UK Limited

London, UK
3 June 2020



Gareth Manning
Principal Consultant and
Lead Assuror UK Sustainability,
DNV GL – Business Assurance



Shaun Walden
Principal Consultant and
Reviewer UK Sustainability,
DNV GL – Business Assurance

RESPONSIBILITIES OF THE DIRECTORS OF M&S AND OF THE ASSURANCE PROVIDERS

The Directors of M&S have sole responsibility for the preparation of the Report. In performing our assurance work, our responsibility is to the management of M&S; however, our statement represents our independent opinion and is intended to inform all stakeholders. DNV GL was not involved in the preparation of any statements or data included in the Report except for this Independent Assurance Statement.

DNV GL's assurance engagements are based on the assumption that the data and information provided by the client to us as part of our review have been provided in good faith. DNV GL expressly disclaims any liability or co-responsibility for any decision a person or an entity may make based on this Independent Assurance Statement.

LEVEL OF ASSURANCE

We planned and performed our work to obtain the evidence we considered necessary to provide a basis for our Assurance Opinion. We are providing a 'limited level' of assurance. A 'reasonable level' of assurance would have required additional work at Group and site level to gain further evidence to support the basis of our Assurance Opinion.

INDEPENDENCE

DNV GL's established policies and procedures are designed to ensure that DNV GL, its personnel and, where applicable, others are subject to independence requirements (including personnel of other entities of DNV GL) and maintain independence where required by relevant ethical requirements. This engagement work was carried out by an independent team of sustainability assurance professionals. We have no other contract with M&S.

DNV GL BUSINESS ASSURANCE

DNV GL Business Assurance Services UK Limited is part of DNV GL – Business Assurance, a global provider of certification, verification, assessment and training services, helping customers to build sustainable business performance.
www.dnvgl.co.uk/BetterAssurance

Subject matter: economic, social and environmental information

Non-big-four

INDEPENDENT ASSURANCE STATEMENT for M&S Plan A report 2020

Sustainability assurance issues and challenges



- Can sustainability assurance ensure the **credibility** of sustainability reporting?
 - Firms usually produce voluntarily and which have often shown to be emphasising positive things at the expense of more negative and challenging topics
 - Whether and to what extent the assurance providers aid in ensuring the reliability of the reported information, or whether an assurance statement tells us if the most pertinent issues have been covered in a report.
- The **scope** of the assurance engagements
 - It is up to the reporting firm to decide the scope of the engagement
 - In most cases, the assurance is limited to a relatively minor part of the report
 - A casual reader can easily be left with an impression that the whole report would have been subject to an assurance process, and that the level of said assurance would have been similar to that used in the financial auditing function.

Sustainability assurance issues and challenges

- Assurance provider's **independence**
 - The sustainability assurance providers are primarily responsible to the senior executives of the firm
 - Should the assurance providers come up with a negative report, it could be considered possible that the firm's senior executives would no longer turn to the same providers next year
 - Also provide sustainability consultation service?

Decisions on sustainability assurance

Decisions on sustainability assurance include:

1. Implement sustainability assurance or not?
2. What kind of assurance provider to choose?
3. What level of assurance to choose?

If you were a manager, what would you expect from a sustainability assurance?

→ Compare benefits and costs

Some research findings-Decisions on sustainability assurance



Benefits:

- Enhance the credibility and reliability of CSR information (e.g., Hodge et al., 2009, Ballou et al., 2018)
- Signal the importance of reported CSR information to stakeholders (e.g., Cheng et al., 2015)
- Reduce information asymmetry between firms and shareholders/other stakeholders (e.g., Casey and Grenier 2015, Fuhrmann et al., 2017)
- Increase corporate reputation (e.g., Birkey et al., 2016)

Costs:

- Payment to the assurance providers
- Costs associated with producing the reported information
- Management's time and efforts
- Opportunity costs
- Shareholders and other stakeholders may not value sustainability assurance, because they doubt the its effectiveness in enhancing credibility (e.g., Adams and Evans, 2004; O'Dwyer and Owen, 2005, 2007; Deegan et al., 2006; Cho et al., 2014; Du and Wu, 2019)

Some research findings-Real improvement or misplaced confidence?

- **Does CSRA really improve the credibility? Or the benefits are solely attributable to increased, but perhaps misplaced confidence? (mixed evidence)**
 - Some studies fail to find evidence to support CSRA to enhance credibility (e.g., Cho et al., 2014; Christensen, 2016)
 - The effect of CSRA may depend on the institutional context, such as legal environment (Du and Wu, 2019).
 - The effect of CSRA may depend on the stage of development (Peters and Romi, 2015).

ESG metrics and KPIs

Key Performance Indicators (KPIs) for ESG



- KPIs refer to some measurable values which tell us how an organisation is performing against particular objectives, or indicators, set in advance.
- Quantitative and qualitative
- KPIs are a common way in organisations to assess how targets are being reached on multiple levels.
- KPIs for ESG...
 - help managers to integrate non-financial aspects of performance into their decision making and ensure long-term viability of their companies
 - help investors integrate ESG into their investment process and maximizes their long-term interest...

What are ESG KPIs based on?

- Sustainability strategy, goals
- Materiality assessment and stakeholder expectations
- ESG reporting frameworks and standards (GRI, SASB, TCFD...)
- Industry-specific considerations and peer benchmarking

What makes a good ESG KPI?

- Consistent
- Operational/measurable
- Align with the purpose
- Relevant: useful for decision making
 - Environmental awareness in an organisation
 - KPI: the number of people attending a training event
 - Is this a good KPI?
- Achievable but ambitious
- Time-bound

An example-Unilever

Unilever PLC [+ Add to myFT](#)

Unilever says new laxer environmental targets aim for ‘realism’

Consumer goods giant extends deadlines and reduces the scale on its ESG goals



Chief executive Hein Schumacher admits that Unilever was ‘not ready’ to carry out some of its ESG goals © Vivian Wan/Bloomberg

The chief executive of consumer goods giant Unilever has admitted the company underestimated how hard it would be to meet environmental targets, saying the company’s new laxer ESG goals aimed for “realism” instead.

Unilever announced last week that it was introducing a more “focused” ESG strategy, which included extending deadlines and reducing the scale of environmental targets.

A previous goal to reduce use of virgin plastics by 50 per cent by 2025 was changed to a 30 per cent cut by 2026, while a plan to use 100 per cent reusable, recyclable or compostable plastic packaging by 2025 was also extended to 2030 and beyond.

Madeleine Speed APRIL 25 2024



<https://www.ft.com/content/f5a6b26a-c66c-465d-8751-36b8894d1020>

An example-Unilever

Unilever PLC [+ Add to myFT](#)

Unilever's sustainability rethink cheers investors but unsettles staff

New chief executive Hein Schumacher is reshaping the business and cutting jobs

The new boss is now in the midst of a major restructuring: reshaping the business and its sustainability targets and cutting jobs.

Investors have cheered. After five years with the stock on a downward trend because of worries about financial performance and questions from some about whether [Unilever had become too focused on](#) sustainability, the shares have been in recovery since January as new plans have taken shape.

“If Unilever’s new management team can improve financial performance, then this could re-energise momentum behind the company’s ESG initiatives and its long-term narrative that better sustainability performance supports better profitability,” said Andy Risk, investment director at Abrdn asset management, a Unilever shareholder.

Kate Elliot, head of sustainable research at another shareholder, Rathbone Greenbank Investments said it was supportive of Unilever’s “shorter-term, timebound targets”, as an improvement on “aspirational” targets that can be difficult to measure.

“Unilever’s prior sustainability strategy was very ambitious, with targets that placed it well ahead of its peers,” she said. “There is a danger in criticising companies that shoot for the moon and miss, rather than focusing attention on those that haven’t even got to the launch pad yet.”

Strategy – Goals - KPIs

SUSTAINABLE DEVELOPMENT GOALS



<https://www.un.org/sustainabledevelopment/sustainable-development-goals/>

169 targets and 232 KPIs



Strategy – Goals - KPIs

People

-  **1 NO POVERTY** End poverty in all its forms everywhere.
-  **2 ZERO HUNGER** End hunger, achieve food security and improved nutrition and promote sustainable agriculture.
-  **3 GOOD HEALTH AND WELL-BEING** Ensure healthy lives and promote well-being for all at all ages.
-  **4 QUALITY EDUCATION** Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.
-  **5 GENDER EQUALITY** Achieve gender equality and empower all women and girls.
-  **6 CLEAN WATER AND SANITATION** Ensure availability and sustainable management of water and sanitation for all.

Prosperity

-  **7 AFFORDABLE AND CLEAN ENERGY** Ensure access to affordable, reliable, sustainable and modern energy for all.
-  **8 DECENT WORK AND ECONOMIC GROWTH** Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.
-  **9 INDUSTRY, INNOVATION AND INFRASTRUCTURE** Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation.
-  **10 REDUCE INEQUALITIES** Reduce inequality within and among countries.

Planet

-  **11 SUSTAINABLE CITIES AND COMMUNITIES** Make cities and human settlements inclusive, safe, resilient and sustainable.
-  **12 RESPONSIBLE CONSUMPTION AND PRODUCTION** Ensure sustainable consumption and production patterns.
-  **13 CLIMATE ACTION** Take urgent action to combat climate change and its impacts.
-  **14 LIFE BELOW WATER** Conserve and sustainably use the oceans, seas and marine resources for sustainable development.
-  **15 LIFE ON LAND** Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.

Peace

-  **16 PEACE, JUSTICE AND STRONG INSTITUTIONS** Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.

Partnership

-  **17 PARTNERSHIPS FOR THE GOALS** Strengthen the means of implementation and revitalise the global partnership for sustainable development.

“This Agenda is a plan of action for people, planet and prosperity that also seeks to strengthen universal peace in larger freedom. All countries and all stakeholders, acting in collaborative partnership, will implement this people-centred Agenda. We are resolved to free the human race within

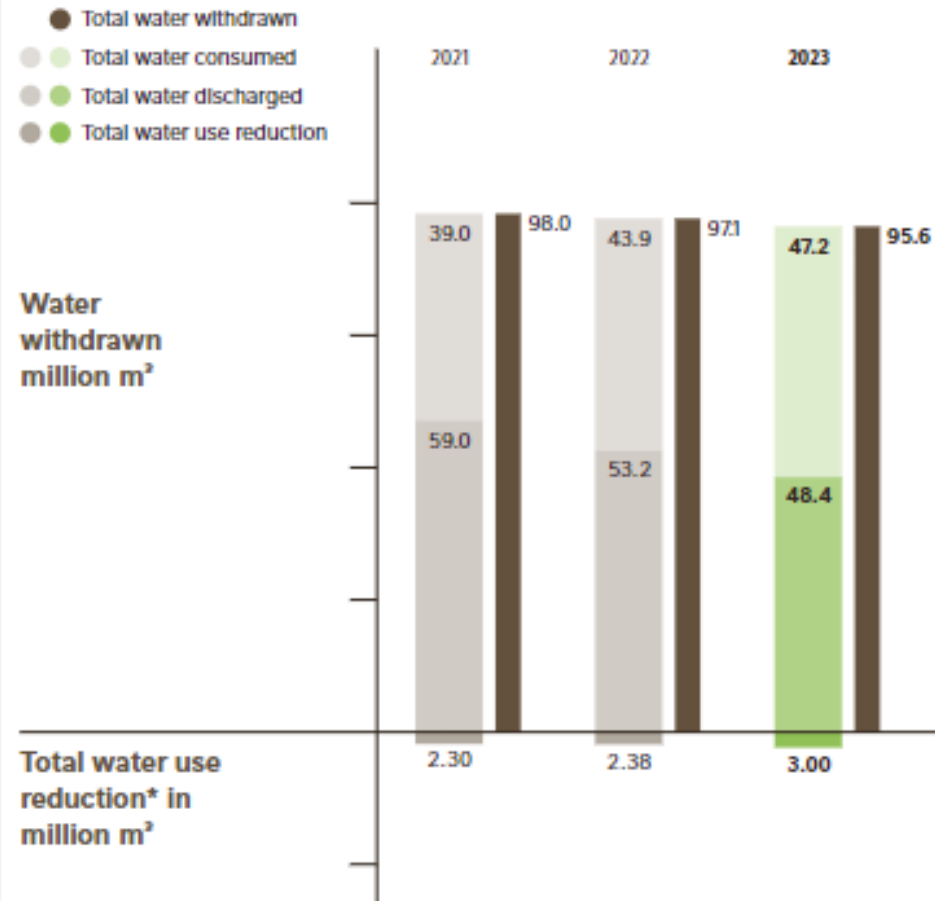
Water stewardship

SDG contributions



To track our progress, we put in place the following KPIs:

To reduce water use in our factories by 6 million m³ between 2021 and 2023 (million m³)

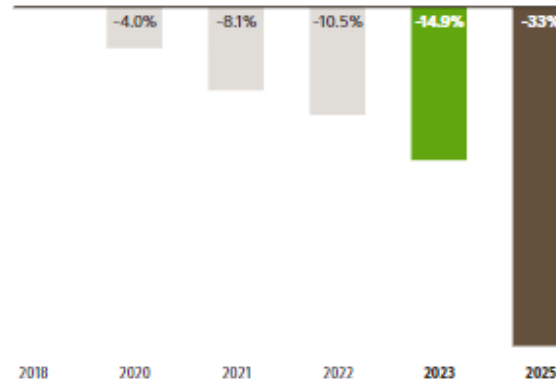


* This corresponds to the sum of water use reductions obtained from improvement projects realized in factories during the year.

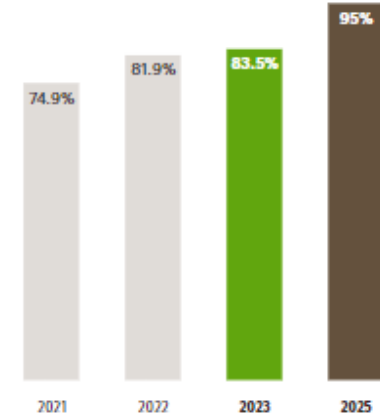
Packaging and circularity

To track our progress, we put in place the following KPIs:

We aim to reduce our use of virgin plastics by one third by 2025 (versus 2018 baseline)

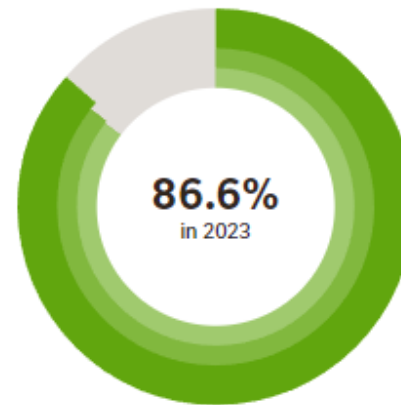


We aim for >95% of our plastic packaging to be designed for recycling by 2025*



Packaging that is reusable, recyclable or compostable*

- 86.6% in 2023
- 85.8% in 2022
- 85.4% in 2021



Packaging pieces placed on the market** (billions)



SDG contributions



Food safety and quality

SDG contributions

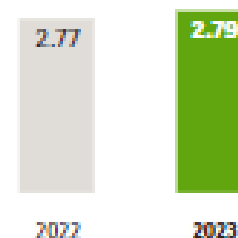


92.9%

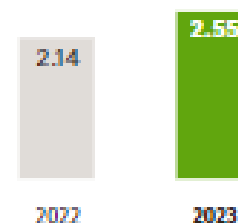
Ingredients sourced from Tier 1 supplier facilities certified to a GFSI-recognized food safety certification program (2022: 91.9%)

GFSI audits in our facilities

Major and minor non-conformance rate



Major non-conformance corrective action rate



Minor non-conformance corrective action rate

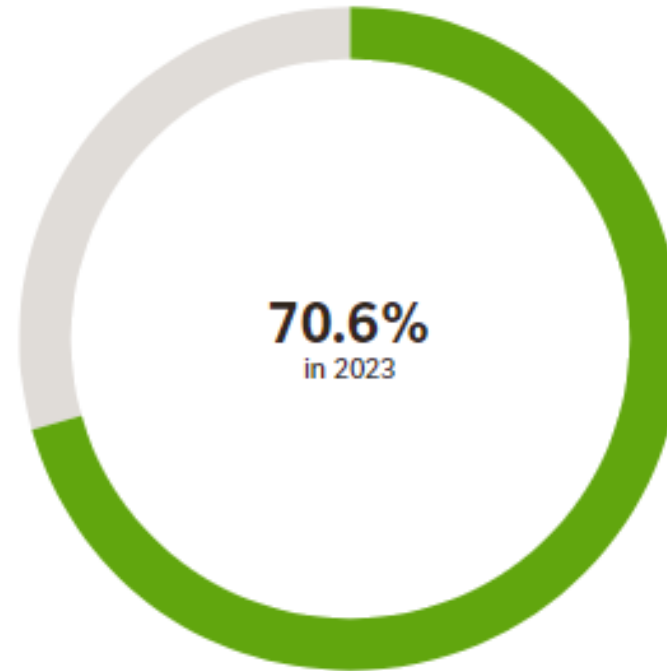


Advancing human rights



To track our progress, we put in place the following KPI:

Volume of cocoa sourced from all countries covered by the CLMRS* or other dedicated due diligence systems, with mass balance** included***



70.6%
in 2023

SDG contributions



* The Child Labor Monitoring and Remediation System (CLMRS).

** Mass balance is 'a sourcing method that allows for certified and non-certified ingredients to become mixed during the shipping and manufacturing processes.' The Rainforest Alliance traceability systems ensure that the volumes of certified ingredients bought for products with their seal were grown on certified farms, see [here](#) for more information.

*** This KPI tracks our progress on our salient human rights issue: child labor and access to education. For more details see our section on [child labor risks](#).

Cocoa's ch

Mars, Nestlé and Hershey pledged ne harvested by children. Yet much of the c

● [Meet Terry Collingsworth: the lawyer taking on Nestlé and ExxonMobil](#)



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Nestlé to pay cocoa farmers to stop using child labour

Maker of Kit Kat to tackle root cause through direct payments to smallholders



In Ivory Coast and Ghana, which account for almost 65 per cent of global cocoa production, 1.56m children are used as labour © Issouf Sanogo/AFP/Getty Images

Emiko Terazono and Judith Evans in London JANUARY 27 2022

No.	KPI/indicator	Code ^a	Method/reference to indicators measures/status/compliance/main components
1	Investment Risk Management	G11	Equator Principle
2	Internal Controls and Monitoring	G12	Internal Controls Report, auditing report
3	Risk Management	G12	Risk Profile and ERM
4	Political risk	G12	Lobbying costs and political donations above us\$10,000, as disclosed by the US Senate Office of Public Record/US \$ EBIT
5	Financial Disclosure and Timeliness	G13	Choice of accounting standards made clear, and details of minority interests, intra-firm and related-party transactions fully disclosed
6	Non-financial information	G13	Disclosure and reporting
7	Disclosure on Board and Committees	G13	Disclosure and reporting
8	Chairman/CEO separation	G21	Disclosure and reporting
9	Board Composition – Board size	G21	Board Size (Average Deviation)
10	Board Composition – Board expertise	G21	Financial and Industry expertise
11	Board Effectiveness – board meeting	G21	# of board meeting
12	Board Effectiveness – committee	G21	# of committee
13	Board Effectiveness – committee meeting	G21	# of committee meeting
14	Board Effectiveness – Board Attendance	G21	% Present

No.	KPI/indicator	Code ^a	Method/reference to indicators measures/status/compliance/main components
38	Social Education & Training	S12	(Total training hours/Annual average workforce) and (Total training expenditures in us\$/Annual average workforce)
39	Social Disclosure	S13	SR, Workplace Safety Reporting, Details of training disclosed
40	Product Safety	S21	Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship, by type of outcomes (G4)
41	Customers	S22	Customer Privacy (Privacy and Data Security)
42	Supply Chain	S22	Supplier Assessment for Labor Practices (Significant actual and potential negative impacts for labor practices in the supply chain and actions taken)
43	Anti-competitive Behavior	S23	Fair trading agreements; Total number of legal actions for anti-competitive behavior
44	Innovation capacity	S23	R&D expenditures in us\$/us\$ EBIT
45	Employees compensation	S31	Total compensation in us\$/Total employees
46	Employee turnover	S31	Employee departures/Annual average workforce
47	Labor Practices	S31	Number of grievances about labor practices filed, addressed, and resolved through formal grievance mechanisms (G4)
48	Employees work-life balance and family	S31	Flexible working arrangements and family benefits
49	Health and safety management	S32	Occupational safety and health (OSH); Occupational Health and Safety Assessment Series (OHSAS); Total injuries/million hours worked; Employee and contractor fatalities/1000 employees; Type of injury and rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender (G4)
50	Employee productivity	S32	US \$ EBIT/Annual average workforce

No.	KPI/indicator	Code ^a	Method/reference to indicators measures/status/compliance/main components
59	Environmental Risk Assessment	E11	Reduction goals; Overall Environmental Impact
60	Environmental Education	E12	Technology and Environmental Opportunities
61	Environmental Reporting	E13	Discloses its environmental policies; water, waste and carbon reporting
62	Climate change and carbon	E21	Climate change mitigation and adaptation; (US\$ sales/Scope 1 & 2 metric tons of co2e emitted); CDP initiative
63	Land Use, environmental protection & Biodiversity	E22	Total environmental protection expenditures and investments by type
64	Waste	E23	Waste Productivity (us\$ sales/Metric tons of hazardous and non-hazardous waste produced) and (Millions of cubic metres of water consumed/us\$ sales); Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the BaselConvention2 Annex I, II, III, and VIII, and percentage of transported waste shipped internationally (G4)
65	Emission and pollution	E23	EP (Scope 1,2); Toxic Emissions; CO ₂ emissions (T CO ₂); NOX, SOX, and other significant air emissions (G4)
66	Environmental Management System (e.g. ISO 14000, ISO 26000)	E31	EMS Adoption (e.g. ISO 14000, ISO 26000); Commitment to use of targets and monitoring; Environmental internal control
67	Energy Efficiency	E32	Energy Productivity (US\$ sales/mw or Joules of energy consumed); Energy consumption; Total energy consumption per occupant (kWh/OCC); use of renewable energies
68	Water Use	E32	Water Stress; water use reduction Amount of water consumed (e.g., cubic meters) by quality/source and percent water usage from recycled sources; Intensity measure: Water consumption per unit of sales

Balanced ScoreCard

What is a Balanced Scorecard (BSC)?

It is a strategic planning and management system, balancing financial and non-financial goals, indicators and targets.

Organizations use BSCs to:

- Communicate and discuss strategy
- Align the day-to-day work with strategy
- Prioritize projects, products and services
- Measure and monitor progress towards strategic targets

- Gives a balanced view of performance - holistic system for managing strategy.
- Framework used to connect the vision and mission of the organization with its strategic goals, the projects and programs that people are working on and the measurements being used to track success (KPIs).

BSC – Perspectives & Strategical Goals

Financial or Stewardship

- Financial Performance
- Effective Resource Use



Customer & Stakeholder

- Customer Value
- Satisfaction and/or Retention



Internal Process

- Efficiency
- Quality



Organizational Capacity or Learning & Growth

- Human Capital
- Infrastructure & Technology
- Culture



Sustainable Balanced ScoreCard

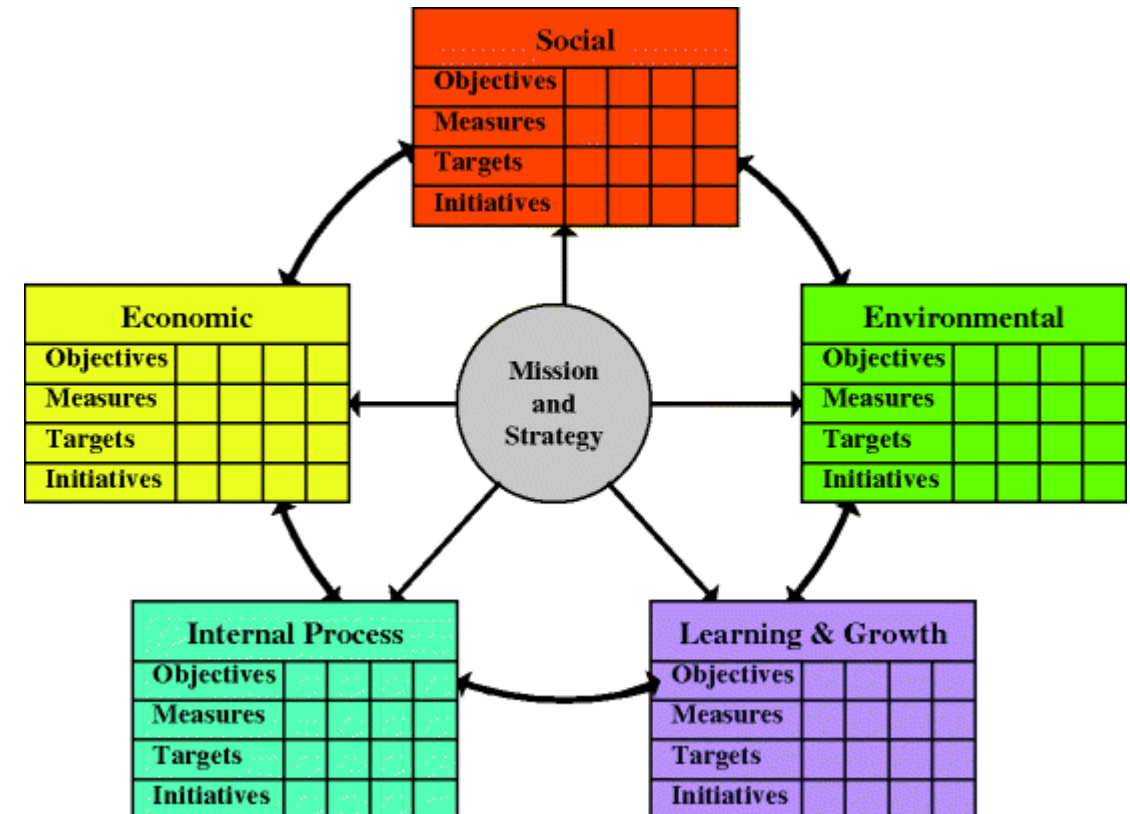
Some sustainable KPIs:

Environmental perspective:

- Resources consumption
- Emission to water, natural environment and air
- Reuse and recycle rate

Social perspective:

- Supplier's sustainability performance
- Job creation
- Employee's benefits
- Health and safety performance



ESG metrics

‘Indicators of sustainable development need to be developed to provide solid bases for decision-making at all levels and to contribute to a self-regulating sustainability of integrated environment and development systems’
(UN, Agenda 21, Chapter 40.4)

ESG metrics



Environmental

Conservation of the natural world

- Climate change and carbon emissions
- Air and water pollution
- Biodiversity
- Deforestation
- Energy efficiency
- Waste management
- Water scarcity



Social

Consideration of people & relationships

- Customer satisfaction
- Data protection and privacy
- Gender and diversity
- Employee engagement
- Community relations
- Human rights
- Labor standards



Governance

Standards for running a company

- Board composition
- Audit committee structure
- Bribery and corruption
- Executive compensation
- Lobbying
- Political contributions
- Whistleblower schemes

Group discussion:

Design two KPIs for your group's chosen company
(one quantitative and one qualitative)

ESG investment and principles for responsible investment

Announcements —

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Global ESG assets predicted to hit \$40 trillion by 2030, despite challenging environment, forecasts Bloomberg Intelligence

February 08, 2024

- Despite geopolitical and macro challenges, the ESG market matures and anchors capital markets - exceeding 25% of projected global assets under management
- Enhanced scrutiny and regulations to bolster the ESG market credibility
- Europe is set to remain the largest in ESG assets with over \$18 trillion in 2030
- Investor appetite remains resilient as asset managers plan to boost ESG AUM

Why ESG investment is becoming increasingly popular?

- In addition to financial resources, organisations and their managers have responsibilities for social and environmental resources and impacts.
- Managers' careful consideration of sustainability can be seen as an investment towards the long-term success of the organisation.
- Investors try to understand and take into account how sustainability will affect the value and future outlook of the various organisations and other investment targets
- Risk and potential returns

Principles for Responsible Investment



- Set of voluntary and aspirational investment principles that offer a menu of possible actions for incorporating ESG issues into investment practice.
- The Principles were developed by investors, for investors.
- In implementing them, signatories contribute to developing a more sustainable global financial system.
- Developed by an international group of institutional investors reflecting the increasing relevance of ESG issues to investment practices.

Principles for Responsible Investment

There is a need to align investors with broader objectives of society because ESG issues can affect the performance of investment portfolios.

[What are the Principles for Responsible Investment? | PRI Web Page | PRI \(unpri.org\)](#)

- **Principle 1:** We will incorporate ESG issues into investment analysis and decision-making processes.
- **Principle 2:** We will be active owners and incorporate ESG issues into our ownership policies and practices.
- **Principle 3:** We will seek appropriate disclosure on ESG issues by the entities in which we invest.
- **Principle 4:** We will promote acceptance and implementation of the Principles within the investment industry.
- **Principle 5:** We will work together to enhance our effectiveness in implementing the Principles.
- **Principle 6:** We will each report on our activities and progress towards implementing the Principles.

[Signatory directory | PRI \(unpri.org\)](#)

ESG-scores, ratings and ranking lists

ESG-scores, ratings and ranking lists

- ESG rating schemes aim to help those interested in taking sustainability into account in their decision-making in the financial markets.
- Different types:
 - Label: if an investment target, be that an organisation or a bond, fulfils particular criteria, it receives a label signalling it
 - Stock market indexes (Dow Jones Sustainability World Index and the FTSE4Good). These indexes include an annually updated list of companies which have been selected on the basis of varying sustainability criteria. Many companies consider these indexes to be important and are keen to highlight their membership as a signal of their commitment and achievements in sustainability
 - Various ranking lists which are based on more complicated scoring systems of organisational activities (CDP's A-list, Global Knights 100 listing)

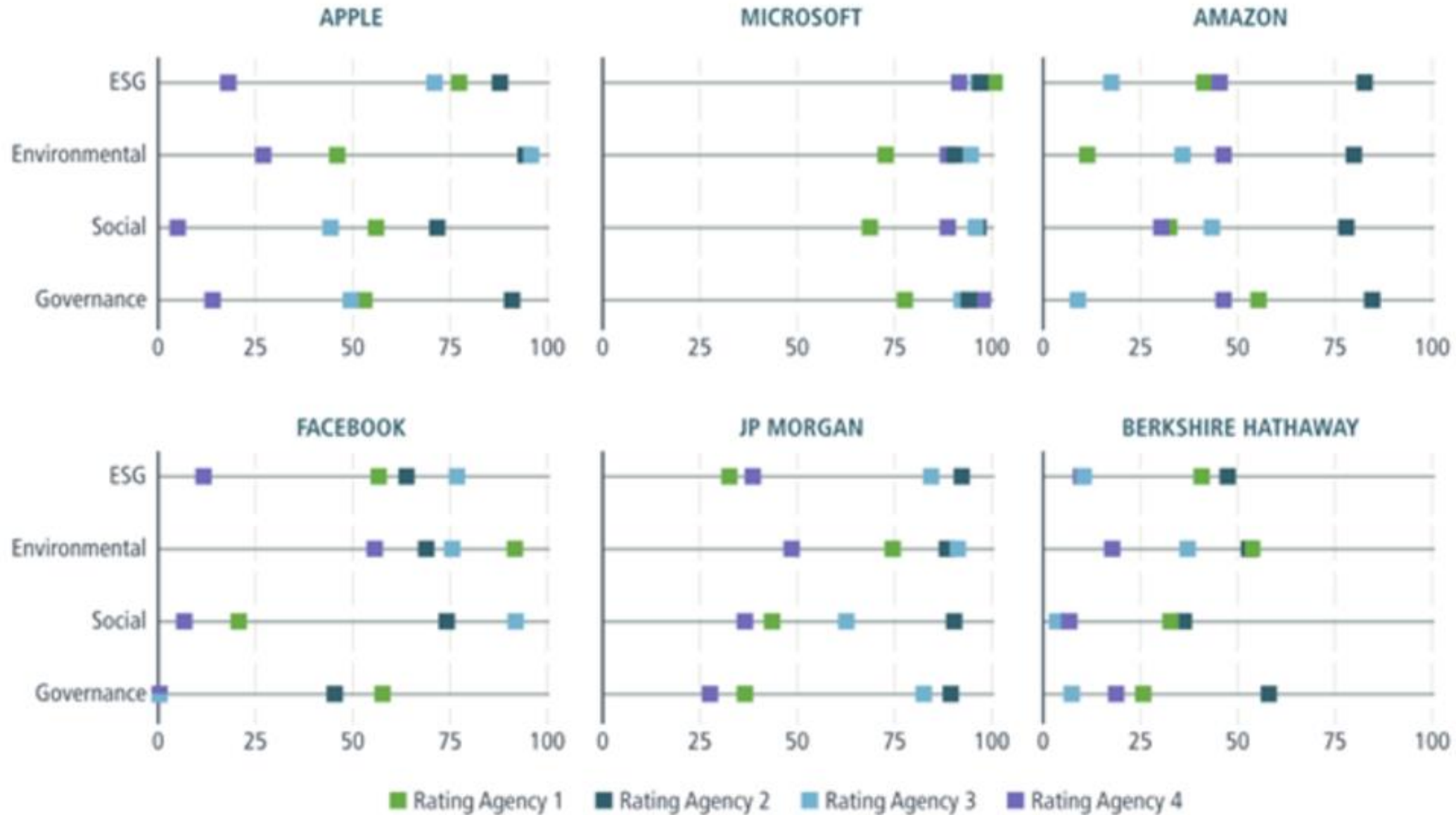
ESG-scores, ratings and ranking lists



Company	Region	Climate	Forests	Water
Beiersdorf AG	Europe	A	A	A
Danone	Europe	A	A	A
HP Inc	North America	A	A	A
KAO Corporation	Asia	A	A	A
Kering	Europe	A	A	A
Klabin S/A	South America	A	A	A
Lenzing AG	Europe	A	A	A
L'Oréal	Europe	A	A	A
Mayr-Melnhof Karton Aktiengesellschaft	Europe	A	A	A
Miquel y Costas	Europe	A	A	A
Philip Morris International	North America	A	A	A
Sekisui House, Ltd.	Asia	A	A	A

Global Knights 100 listing: <https://www.corporateknights.com/rankings/global-100-rankings/2024-global-100-rankings/the-20th-annual-global-100/>

Sustainability rankings



Challenges of ESG rating

- Unclear evaluation criteria: the exact mechanism used to produce the scores is not presented publicly or is only vaguely discussed, even when the rating provider publicly claims to be committed to high transparency
- Such rating schemes can be highly influential in societies (Chelli and Gendron, 2013)
- Unobjective
- ESG rating disagreement
- May lead to the opposite of what was intended

Challenges of ESG rating

“ESG ratings have little to no relation to carbon intensity, even when considering only the environmental pillar of these ratings,” said Felix Goltz, research director at Scientific Beta. “It doesn’t seem that people have actually looked at [the correlations]. They are surprisingly low.”

“It can very well be that a high-emitting firm is very good at governance or employee satisfaction. There is no strong relationship between employee satisfaction or any of these things and carbon intensity,” Goltz argued.

“Even the environmental pillar is pretty unrelated to carbon emissions,” he added, with this rating partly determined by factors such as a company’s use of water resources and waste management practices.

Challenges of ESG rating



https://www.youtube.com/watch?v=f_rrS-_giP8

Challenges of ESG rating

The role of ESG reporting?

Greater ESG disclosure actually leads to greater ESG rating disagreement (Christensen et al., 2022)

Reason: higher disclosure would be associated with higher disagreement, as disclosure expands opportunities for different interpretations of information

Conclusion:

1. Sustainability reporting assurance
2. ESG KPIs and metrics
3. ESG investment and principles for responsible investment
4. ESG-scores, ratings and ranking lists