TCFD ALIGNED CLIMATE REPORT 2023

POSITIVELY DIFFERENT

GUINNESS GLOBAL INVESTORS

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FOREWORD

With a rise in global mean temperatures, 2023 was the warmest year on record.[1] Driven by higher concentrations of atmospheric greenhouse gases including CO_2, climate change has emerged as a material concern for investors worldwide.

The urgency of tackling climate change is underscored by the Intergovernmental Panel on Climate Change (IPCC), which has projected that global mean temperature rise will exceed 1.5°C above pre-industrial levels within the next two decades.[2] This has far-reaching implications for ecosystems, societies, and economies.

Increasing environmental challenges associated with climate change affect businesses and their operations across all sectors. As a long-only active asset manager, we understand the responsibilities we hold to navigate this complex landscape, whilst upholding our fiduciary duty. We recognise both the risks and opportunities inherent to a changing climate for our operations and our investment portfolios.

The TCFD framework punctuates the critical need for clear and comprehensive information on the impacts of climate change on organisations. Both physical and transitional climate risks are considered in this report, including but not limited to rising global temperatures and the regulatory response. Investors like ourselves need to have a firm understanding of how climate change affects our operations and portfolios, and the ramifications of our business operations on climate change in return.

Integrating climate considerations into our operations and risks analysis enables us to identify vulnerabilities, which helps us to mitigate risk exposure to future shocks. Improving transparency around these issues enables us to assess and respond to evolving dynamics and build a future-resilient business model.

[1] *Source: NASA*
[2] *Source: IPCC*

ABOUT THIS REPORT

In accordance with the Task Force on Climate-related Financial Disclosures (TCFD) framework set out in Figure 1, this document – our inaugural TCFD-aligned Climate Report – outlines the approach to managing climate-related risks and opportunities employed by Guinness Global Investors.

It aims to provide our perspective on the four TCFD pillars of **Governance**, **Strategy**, **Risk Management**, and **Metrics and Targets** in relation to climate-related issues. The TCFD sets out a practical way of explaining our approach of integrating climate related risks and opportunities across the firm.

We have been a supporter of the TCFD since 2020 and encourage our portfolio companies to disclose in line with TCFD recommendations. As data evolves, we will continue to improve our disclosures. To that end, we hope you find this report insightful.

Figure 1: Core elements of Recommended Climate-related Financial Disclosure, TCFD Guidance
Source: TCFD

1. Governance - The organisation's governance around climate-related risks and opportunities.

2. Strategy - The impacts of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning.

3. Risk Management - The process of identifying, assessing, and managing climate-related risks.

4. Metrics and Targets - The metrics and targets used to assess and manage climate-related risks and opportunities.

ABOUT GUINNESS GLOBAL INVESTORS

Founded in 2003 by our Chairman Tim Guinness, Guinness Global Investors is an independent active fund manager specialising in long-only equity funds and private equity investments in a selection of asset classes and specialist sectors.

We run concentrated portfolios with low turnover, a value discipline and an equal-weight portfolio approach. At heart, Guinness Global Investors is a value (or growth at reasonable value) investor. We seek to identify good businesses whose long-term profitability, sustained by competitive advantage and capital discipline, is undervalued by the market.

We believe in intelligent solutions for long-term investing in a rapidly changing world. This means having a methodology for building portfolios that is logical, robust, repeatable, while remaining consistent with our core investment beliefs and our duty to invest responsibly.

OUR OPERATIONS

Guinness Global Investors is based in Westminster, London, with 72 employees.[3]
In 2015, Guinness Global Investors introduced its first Carbon Policy and has since been recording its company-level emissions annually. We continue to evolve our methodology year-on-year and continuously review our operational emissions with the aim to avoid and reduce them where possible.

As an asset manager, we understand that our core climate-related risks arise predominantly from the indirect emissions from the investment portfolios that we manage in-house on behalf of our investors. In turn, we focus efforts on recording, managing, and monitoring these emissions, which we explore further during this report.

UK-DOMICILED FUNDS

Guinness Global Investors provides 16 long-only investment strategies in three areas: Global and Developed Markets, Specialist, and Asian and Emerging Markets.

The focus of this report is on the UK-domiciled funds applying these strategies.

As of 31 December 2023, our eight UK-domiciled funds – shown in Figure 2 – accounted for 3% of our total assets under management.

Figure 2: Guinness Global Investors UK-domiciled fund range
Source: Guinness Global Investors

GLOBAL AND DEVELOPED MARKETS	SPECIALIST	ASIAN AND EMERGING MARKETS
WS Guinness Global Equity Income Fund	WS Guinness Global Energy Fund	WS Guinness Asian Equity Income Fund
WS Guinness Sustainable Global Equity Fund	WS Guinness Sustainable Energy Fund	
WS Guinness European Equity Income Fund		
WS Guinness UK Equity Income Fund		
WS Guinness Global Innovators Fund		

For further details on individual funds, please see the relevant pages on our website at guinnessgi.com

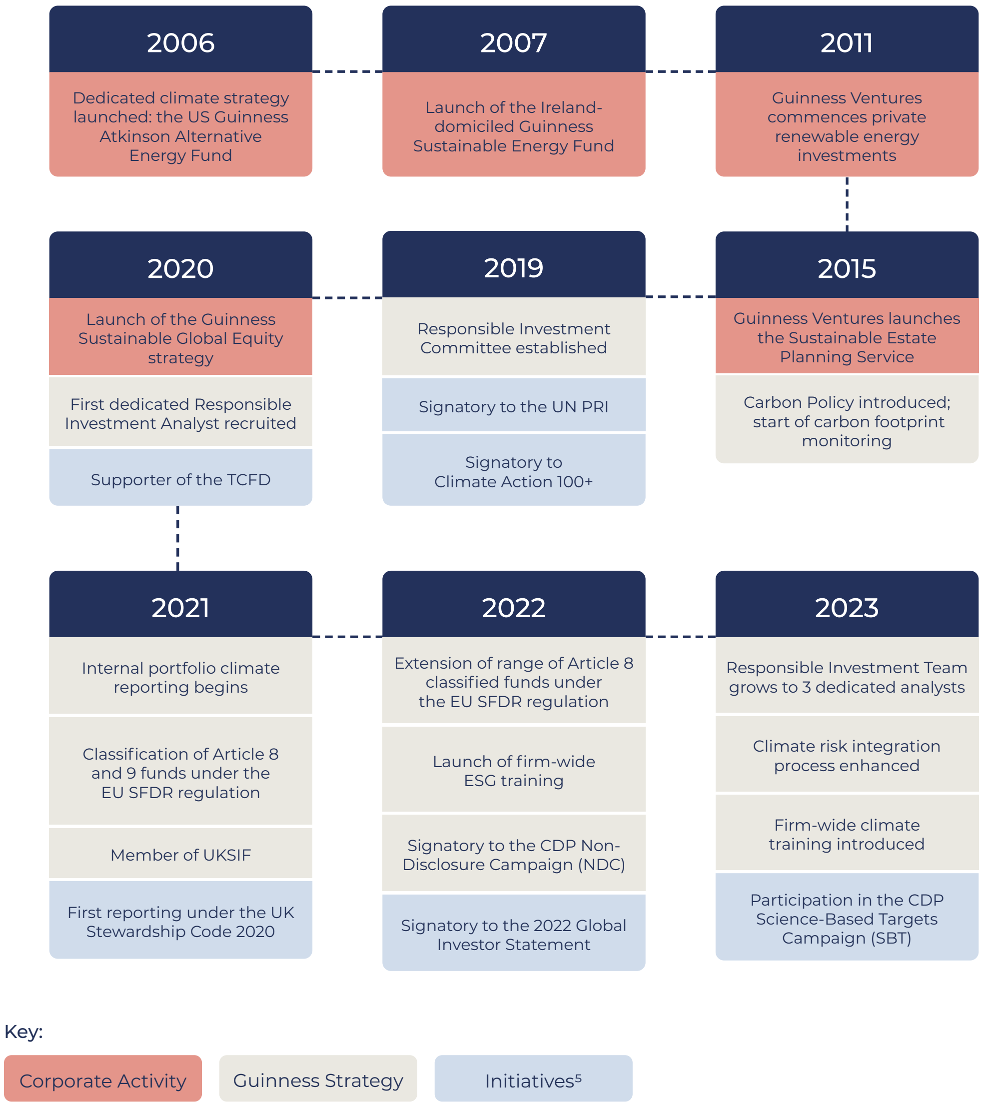
[3]*As of 31 December 2023*

OUR CLIMATE JOURNEY

We have strong heritage of investing across the energy spectrum and are well placed to consider environmental, social, and governance (ESG) including climate-related issues in the investment process. We believe that this is in our clients' interests. We first launched the Sustainable Energy strategy in 2006.

Ever since, we have accelerated our climate-related activity, improved our resources and increased our capacity, including forming a dedicated Responsible Investment Team. Guinness Global Investors is a member or signatory of several initiatives, including the UN Principles for Responsible Investment (UN PRI), UK Stewardship Code, and CDP (formerly known as the Carbon Disclosure Project).

Figure 3: Timeline of climate-related activity[4]
Source: Guinness Global Investors



[4]Please note that Guinness Ventures Limited became a separate entity from Guinness Global Investors in 2023.

[5]More information and descriptions of initiatives and industry groups we are involved with can be found in Appendix 3.

1. GOVERNANCE

TCFD Recommendation: Describe the board's oversight of climate-related risks and opportunities

TCFD Recommendation: Describe management's role in assessing and managing climate-related risks and opportunities

OVERSIGHT OF CLIMATE-RELATED RISKS AND OPPORTUNITIES

At Guinness Global Investors, we have an established governance structure supported by various committees across the business.

Guinness Global Investors is a privately owned company with a flat organisational structure, which enables close collaboration and shared oversight of material issues, including climate change. Accountability and oversight of climate-related risks and opportunities are held at both board and management level.

We are committed to adopting and implementing responsible investment principles in a manner that is consistent with our fiduciary responsibilities to clients. Ownership of these principles lies with the entire Investment Team across all our investment strategies, supported by our dedicated Responsible Investment Team.

In 2021, Guinness Global Investors **Responsible Investment Policy** evolved to integrate climate change issues, in addition to providing details on our climate-related engagement activity. More details can be found in our Responsible Investment Policy and our latest **Responsible Investment Report**. In 2023, our Responsible Investment Team grew to three members to aid the evolution of Responsible Investment at Guinness. The Responsible Investment Team works in tandem with the wider Investment Team, providing support and resources to portfolio managers and analysts. Complementing our firm-level Responsible Investment Policy, a bespoke 'Approach to Responsible Investment and ESG' paper articulates the particular focus in each area in which we invest and can be found on our website. These explore each strategy's approach to Responsible Investment in further detail.

Collaborative meetings of the Investment, Marketing & Sales teams occur weekly for these teams to monitor and discuss market and global macro movements and serves as an important forum to consider topical climate-related matters. Our Marketing & Sales team manage communications with investors, articulating our Responsible Investment approach to clients and key stakeholders. They present investor feedback to portfolio managers and the wider Investment Team regarding climate-related matters to provide oversight of industry movements and investor preferences.

GOVERNANCE STRUCTURE

Guinness Global Investors Board of Directors (the Board) is the most senior body in our corporate governance structure and has complete oversight of the firm's activities, strategy, and objectives, including our approach to climate issues. As Guinness Global Investors has grown, we have evolved our governance structure and oversight of risk by implementing additional committees involving members from across the business with the relevant skillsets and decision-making abilities. All directors, portfolio managers, and key staff from all departments sit on the **Monthly Management Committee**, our main executive decision-making body, providing broad oversight of material matters. We have recently appointed a **Head of Investment Risk** to further develop and strengthen our oversight and risk management functions.

In 2019, the Board established the **Responsible Investment Committee** as a forum to monitor and implement our Responsible Investment approach. This committee discusses climate-related considerations with members across the firm to ensure accurate and adequate flows of information. In addition, our **Compliance (Operations & Risk) Committee** ensures regulatory standards are upheld and communications with investors meet necessary requirements.

Figure 4 (Page 10) depicts the governance structure pertaining to the oversight of climate-related risks and opportunities at Guinness Global Investors.

CLIMATE-RELATED CONSIDERATIONS

At Guinness Global Investors, climate-related considerations are integrated at both an operational and portfolio level.

Aware of growing climate-related scrutiny of companies and growing regulatory requirements, we spend a significant amount of time across the organisation discussing and evaluating developments in this area. This includes how regulations such as the European Sustainable Finance Disclosure Regulation (SFDR) and the UK Sustainability Disclosure Requirements (SDR) are likely to impact our business operations and our portfolios.

We acknowledge that as a small office based in London with fewer than 100 employees, our operational climate-related risks, opportunities, and footprint are negligible in comparison to the portfolios we manage on behalf of our clients. Though we consider our operations throughout, our primary focus within this report are the climate-related risks and opportunities of our investment portfolios.

WITHIN OUR OPERATIONS

Although our investment portfolios form the substance of our climate-related risks and opportunities, we continuously monitor and assess our own operational company-level energy consumption and emissions.

In 2015, Guinness Global Investors developed a Carbon Policy and began measuring its operational carbon emissions. Over time, our reporting has evolved to include more categories from the 15 GHG Protocol Scope 3 emissions accounting framework. In 2020, we added teleworking under Category 7 (Employee Commuting) due to employees working from home during the COVID-19 pandemic, and in 2023 have added additional Scope 3 emissions categories such as hotel stays under Category 6 (Business Travel) to our corporate emissions calculations. We track our emissions year-on-year and aim to include more material Scope 3 categories as our climate reporting develops. Further details can be found within **Section 4. Metrics and Targets**. In addition, we touch on sustainability risks alongside financial risks within our **Remuneration Policy**.

WITHIN OUR PORTFOLIOS

As an asset manager, Guinness Global Investors' fundamental climate-related risk and opportunities exposure lies within our investment portfolios that we manage on behalf of our investors. Therefore, the responsibility of climate-related matters lies with all members of our Investment Team.

Responsible Investment considerations and ESG incorporation through active stewardship are essential components of our investment decisions. Our Investment Team, comprising of analysts and portfolio managers, use fundamental data to carry out rigorous in-house research on their portfolios, supported by additional analysis from our Responsible Investment Team. This includes considering the impact of ESG factors, which has developed over time as more relevant data has become available. This underpins decisions made by portfolio managers who are responsible for implementing our Responsible Investment approach in their day-to-day activities. Our diligent screening of potential investee companies and ongoing research into current portfolio companies provides us with flexibility to incorporate new ESG data as it evolves. Research is shared among our investment strategies, supported by the Responsible Investment Team, who provide company-wide analysis and materials.

To analyse climate-related risks and opportunities in more detail, climate-related risk scorecards are created by the Responsible Investment Team for each strategy and are presented to each investment strategy team to understand potential and material climate-related exposures at a strategy and portfolio company level. This is further discussed in our quarterly Responsible Investment Committee meetings. We believe this is the best way to identify and integrate climate-related risks and opportunities into our investment process and is consistent with our investment philosophy. These scorecards are subject to monitoring by Compliance to ensure that the ESG Integration process has been followed.

Figure 4: Guinness Global Investors climate-related governance structure
Source: Guinness Global Investors

Guinness Global Investors Board of Directors

Frequency of meetings: Quarterly

Chair: Chief Executive Officer (CEO)

Composition: Chief Investment Officer (CIO), Guinness Global Investors' Chairman, two directors

Oversight and responsibilities:

- Overall firm strategy and objectives
- All internal processes and external activities
- Approval of material policies e.g. Responsible Investment Policy, Exclusion Polices, UK Stewardship Code Report
- Oversight of climate-related matters and stewardship

Management Committee

Frequency of meetings: Monthly

Chair: Chief Executive Officer (CEO)

Composition: All portfolio managers and key staff from all departments

Oversight and responsibilities:

- The firm's routine business activities, including those involving climate issues

Responsible Investment Committee

Frequency of meetings: Quarterly

Chair: Chief Executive Officer (CEO)

Composition:

- Representatives of the Board
- Responsible Investment Team
- All Portfolio Managers and Investment Analysts
- Key members of of Marketing, Sales, Compliance and Risk teams
- Representatives of Guinness Ventures

Oversight and responsibilities:

- Highlight climate-related risks and opportunities
- Integrate ESG concerns into our firm-wide processes and decisions
- Review and approve reports and policies relating to Responsible Investment
- Discuss required standards from industry regulators, clients, and wider stakeholders
- Monitor progress of portfolio companies against their climate targets
- Review of ESG and climate-related data and research providers

Compliance Committee

Frequency of meetings: Minimum of six times a year

Chair: Chief Executive Officer (CEO)

Composition: Compliance & Risk, and Operations teams

Oversight and responsibilities:

- Alongside the Responsible Investment Committee, the Compliance Committee observes the development of climate-related regulations, implements regulations and monitors. compliance with the regulations across the firm
- Development and monitoring of policies and procedures to ensure adherence to regulations
- Review and approve marketing material and client communications relating to Responsible Investment
- Completion of monthly and quarterly ESG integration monitoring reports to assess whether the ESG process as described in the relevant fund disclosures has been followed
- Articulates findings with the Board and Investment Team

2. STRATEGY

TCFD Recommendation: Describe the climate-related risks and opportunities the organisation has identified over the short, medium, and long term

CLIMATE-RELATED RISKS AND OPPORTUNITIES OF OUR INVESTMENT STRATEGIES

At Guinness Global Investors, we have long-term investment horizons. Therefore, we are aware of the risks to our operations and portfolios in the short, medium, and long-term and these are embedded into our investment decisions.

We are aware that climate-related risks and opportunities will have an impact across the investments we make and acknowledge that some of our strategies may be more at risk than others due to the breadth of sectors and geographies our portfolios cover.

With an emphasis in our investment philosophy on the quality characteristics of the companies in which we invest, we pay close attention to their activities and exposures. Our concentrated portfolios, constructed with an equal-weight approach, allow our experienced portfolio managers to understand each one of our portfolio companies in rigorous detail, making us well placed to mitigate any potential climate-related risks (Figure 5) and make the most of climate-related opportunities.

Figure 5: Climate-related risks, TCFD Guidance
Source: TCFD

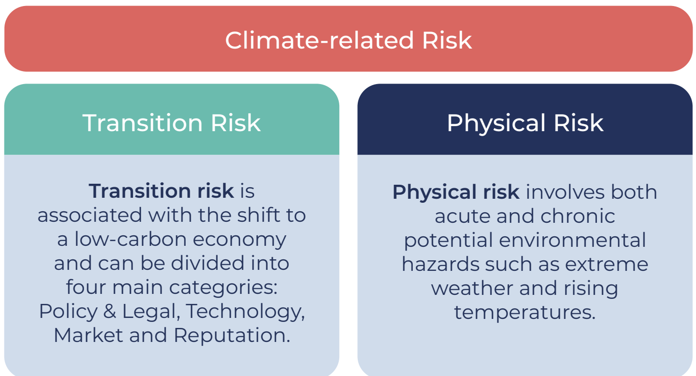


Figure 6 on the following pages depicts the climate-related risks and opportunities identified at Guinness Global Investors. We discuss these potential risks and how these are mitigated in our operations and portfolios.

Details of the risk identification, assessment, and management process at Guinness Global Investors can be found in **Section 3. Risk Management**.

Figure 6: Identified climate-related risks and opportunities at Guinness Global Investors
Source: Guinness Global Investors

Transition Risk - Policy & Legal

Examples *(Source: TCFD)*

- Increased pricing of GHG emissions
- Enhanced emissions-reporting obligations
- Mandates on and regulation of existing products and services
- Exposure to litigation

Operations

Navigating regulatory changes entails costs and risks, including potential non-compliance repercussions and risks associated with greenwashing allegations. Legally, our company faces mounting pressure from the potential for climate change litigation, necessitating diligent emission recording, reduction efforts, and the implementation of environmental policies. We understand the implications these risks may have in the immediate and long term.

To address these challenges, Guinness Global Investors' compliance team is dedicated to ensuring adherence to existing and forthcoming regulations. We actively employ external legal counsel to assist both our compliance and investment teams in understanding and meeting required regulatory standards, recognising that non-compliance poses both near-term and longer-term risks.

Emerging regulations, such as the UK Sustainability Disclosure Regime (SDR), and climate-related directives including the TCFD, are closely monitored and discussed in our Risk and Compliance meetings as well as Monthly Management Meetings and Responsible Investment Committee meetings. Our involvement in industry working groups such as UKSIF and the CFA UK Sustainability Community Champions Group provides forums for us to consult, discuss and stay informed of regulatory updates and best practice.

Portfolio

For the companies in which we invest, heightened scrutiny could lead to litigation, fines, or reputational harm where relevant standards have not been met. In turn, failure to comply with regulations can impact a company's valuation, leading to fines and allegations of greenwashing, which pose immediate risks.

As regulatory frameworks evolve, the disclosure of climate-related information is increasingly becoming compulsory for our portfolio companies. In our climate-related risk scorecards, we use third-party tools to understand the proportion of fund revenues derived from operations located in regions vulnerable to stringent carbon regulatory risk, among other metrics. We complement this with ongoing monitoring of controversies and engagement with our portfolio companies to set absolute emission reduction targets. We believe this helps to reduce the potential impact of these medium and longer-term risks.

Opportunities for our portfolio companies can arise in the form of policies such as the Inflation Reduction Act (IRA) in the US, whereby clean energy investments are incentivised through sustainability-related tax provisions. The Guinness Sustainable Energy strategy is well positioned to benefit from the US Inflation Reduction Act (IRA) in addition to other emerging policies.

Figure 6 (continued): Identified climate-related risks and opportunities at Guinness Global Investors
Source: Guinness Global Investors

Transition Risk - Technology

Examples *(Source: TCFD)*

- Substitution of existing products and services with lower-emission options
- Unsuccessful investment in new technologies
- Costs to transition to lower emissions technologies

Operations

Our London office was refurbished in 2017 and benefits from modern and efficient electrical equipment. Therefore, we believe the technology transition risk to our operations is considered de minimis in the short and medium term.

Portfolio

Our portfolio companies may face adverse effects that stem from changes in consumer demand or technological advancements. This may potentially diminish growth opportunities for companies with exposure to incumbent technologies, thereby reducing profitability. However, some companies may capitalise on these shifts, particularly those involved in green technology innovation. These outcomes may materialise over all time horizons. We believe we are well positioned to hedge our exposure to these risks through our strategies such as the Guinness Sustainable Energy strategy, which aims to benefit from the transition to a low-carbon economy.

Figure 6 (continued): Identified climate-related risks and opportunities at Guinness Global Investors
Source: Guinness Global Investors

Transition Risk - Market

Examples *(Source: TCFD)*

- Changing consumer behaviour
- Uncertainty in market signals
- Increased cost of raw materials

Operations

Rising market costs may influence what we pay for our energy usage, which is considered in all time horizons, due to the potential volatility of power prices. Additionally, we procure agricultural produce to the office on a weekly basis. This may rise in price due to increased costs of consumer goods as a result of climate change. We consider this risk over all time horizons; however, we deem them as negligible in the context of the total costs of our financial statements.

Portfolio

Like our operations, challenges such as increased volatility and rising input prices could impact our portfolio companies and affect their revenue. This could particularly affect equities in the energy, materials, and industrials sectors that are influenced by commodity prices. Further, consumer staples stocks which could be impacted by climate change through the effect on yields and supply chains of raw materials, thus increasing their costs. We view this risk in the medium to long term.

Our two dedicated sustainable strategies, Guinness Sustainable Energy and Guinness Sustainable Global Equity, have distinct approaches to identifying companies that the portfolio managers believe will benefit from changing consumer preferences. The Guinness Sustainable Energy strategy intentionally screens for companies selling the products and services which will help to deliver the transition towards a low-carbon economy. We do not limit ourselves to 'pure plays', opening our universe up to some companies with existing hydrocarbon-based fuel exposure, but this must be aligned with a commitment to transitioning their business models towards sustainable energy sources. The Guinness Sustainable Global Equity strategy employs three broad sustainability themes to identify whether a company's products and services can be deemed sustainable – and to what extent. One of these themes is resource efficiency, with three associated sub-themes: clean energy, energy efficiency, and water management. Further, the multi-themed portfolio of the Guinness Global Innovators strategy includes clean energy and transition to a more sustainable economy as one of its nine core innovation themes used to assemble the broad universe of potential investments. Within this, it includes sub-themes of electric vehicles, the circular economy, and resource efficiency. These multiple themes, which are reviewed annually, act to diversify risk across the portfolio.

Figure 6 (continued): Identified climate-related risks and opportunities at Guinness Global Investors
Source: Guinness Global Investors

Transition Risk - Reputation

Examples *(Source: TCFD)*

- Shifts in consumer preferences
- Stigmatisation of sector
- Increased stakeholder concern or negative stakeholder feedback

Operations

Non-compliance risks, brand value, positioning, greenwashing, and consumer preferences for 'green' credentials are key concerns of Guinness Global Investors both operationally, and of our portfolio companies. This is a risk we consider in the short, medium, and long term. We are conscious that the operation of dedicated sustainable strategies poses additional reputational risks vis-à-vis our other investment product offerings.

Safeguarding our reputation is paramount and evolving consumer preferences require strategic solutions. To enhance transparency, we disclose our operational and portfolio sustainable activities within our Responsible Investment Report, Stewardship Report, and strategy-level papers (including their Approach to Responsible Investment) are available on our website's literature pages.

We ensure compliance with existing regulations such as the EU SFDR and will ensure that we comply with the upcoming UK SDR, rigorously monitoring progress through our quarterly Responsible Investment Committee meetings, Compliance and Risk Committee meetings and weekly team meetings. The Compliance team continuously monitors compliance with regulations and reports findings to the Responsible Investment Committee, the Monthly Management Committee and the Compliance Committee, as well as external parties where required. This enhances oversight of material issues to reduce any potential reputational risks of non-compliance.

Portfolio

All our funds classified as Article 8 or Article 9 products under EU SFDR are required to invest solely in companies which follow good governance practices. As outlined in our Good Governance Policy, in assessing good governance, among other factors, we consider management structures, employee relations, staff remuneration, and tax compliance. Where relevant, good governance practices are encouraged via direct engagement and proxy voting activity.

We have robust monitoring mechanisms in place to ensure alignment with our strategy policies. We routinely screen companies for controversies, undertake ESG reviews, and perform a monthly check for our exclusions criteria to maintain integrity. Access to third-party tools and ratings providers further strengthens our due diligence processes across the Investment Team.

We understand the immediate nature of reputational damage and its long-term implications when considering this transition risk.

Figure 6 (continued): Identified climate-related risks and opportunities at Guinness Global Investors
Source: Guinness Global Investors

Physical Risk - Acute & Chronic

Examples *(Source: TCFD)*

Acute

- Increased severity of extreme weather events such as cyclones and floods

Chronic

- Changes in precipitation patterns and extreme variability in weather patterns
- Rising mean temperatures
- Rising sea levels

Operations

Chronic climate change poses potential operational challenges for companies, including our own. Whilst our office in Westminster, London, is less susceptible to extreme weather hazards such as cyclones, the UK Government Environment Agency Flood Planning Tool identifies our office location as having a high probability of flooding from rivers and the sea due to our proximity to the River Thames. Guinness Global Investors leases the third floor of our office facilities with limited fixed physical assets on site. Therefore, we have the flexibility to relocate if physical climate risks begin to impinge on our direct operations. Moreover, we operate with a flexible working structure, allowing our employees to work from home and avoid being affected by potential flooding of the office building should that risk materialise. We acknowledge the potential financial costs in the short term, and likelihood of this risk increasing in the long term.

Rising global temperatures over an extended period could affect our operations, leading to heightened electricity consumption for amenities like air conditioning and building maintenance, consequently increasing expenditure. In turn, this could amplify emissions and strain power costs, potentially impairing the company's profitability. Additionally, we assess and monitor our own corporate footprint, and aim to reduce our operational emissions and avoid where possible.

We note at present the financial costs of these risks are negligible in relation to our organisational expenditure.

Portfolio

Our investments are not immune to these challenges. Like our own facilities, they may encounter similar consequences from rising mean temperatures and increased likelihood of extreme weather variability.

When conducting ESG analysis on portfolio holdings, we assess the materiality of physical climate risks on a company-by-company basis. We have conducted analysis at a strategy-level to pinpoint material physical risk issues by understanding the proportion of fund revenues derived from operations located in regions vulnerable to physical climate change risk factors.

For example, by mapping locations of core manufacturing sites of a company in relation to areas most exposed to sea level rise, water stresses, and droughts, with the assistance of various third-party providers. Depending on their geographical locations, portfolio companies may be affected at different rates. We view acute physical risk as something that may happen in the near term, but chronic physical risk may increase the frequency and likelihood of acute events in the long term.

We conduct assessments of the carbon footprint for all investee companies and actively engage in the establishment of emission reduction targets. These risks are predominantly viewed through a medium to long-term lens, underscoring the importance of proactive measures to mitigate potential impacts.

TCFD Recommendation: Describe the impact of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning

Although we recognise the operational climate-related risks depicted in Figure 6 (Page 12-16), their materiality and impact are considered minor compared to those influencing our portfolios that we manage on behalf of our clients. This is the primary business activity of Guinness Global Investors and the focus of attention for this report. The following pages discuss the impacts of climate-related risks and opportunities on the investment process of our strategies.

CLIMATE-RELATED IMPACTS OF OUR INVESTMENT STRATEGIES

In our investment areas of Specialist, Global and Developed Markets, and Asian and Emerging Markets we seek long-term investment returns for our clients. Understanding potential climate-related risks and opportunities is important to our ability to fulfil this investment mandate. Risk mitigation and scoping of opportunities is integrated into the investment process for all our strategies. During 2023, we continued to work on developing our analysis of the impact of remuneration, portfolio climate sensitivity, and positive impact analysis. Governance factors such as shareholder rights, committee structures, and overboarding (a director perceived to be sitting on an excessive number of boards, diminishing their ability to serve the organisation effectively) risks are also considered and assessed. Our investment strategies have exposure to different key themes, geographies, and sectors, diversifying the risk of climate-related issues, which will impact regions and industries differently.

We assess corporate management of climate related-risks and opportunities through our climate-related risk scorecards, which are discussed in more detail in **Section 4. Metrics & Targets**, by tracking board oversight and incentivisation of climate-related issues. As the transition to a low-carbon economy unfolds, we anticipate more companies integrating transition planning metrics into their executive incentivisation. Portfolio managers encourage investee companies, where they deem appropriate, to incentivise climate-related metrics. In the Guinness Sustainable Energy strategy, for example, we might ask companies to consider linking pay to sensible ESG targets, or align company pay to sustainable growth (on metrics such as return on invested capital (ROIC)), growing their positive impact (green sales / reducing customer CO_2 emissions) or reducing negative impact (CO_2 emissions reduction). Further case studies of companies within our other strategies can be found in **Section 3. Risk Management**.

Coverage for climate-reporting in our Specialist and Global and Developed Markets strategies is comprehensive across most of the jurisdictions we invest in. For instance, we are encouraged by the level of climate-related disclosures within the Guinness Global Innovators strategy, which has 100% of portfolio companies reporting to CDP[6]. High-quality disclosures enable us to track companies' progress on material climate-related risks and their movement towards emission reduction targets to support themselves through the transition to a low-carbon economy. Despite good reporting practices, these companies are not immune to the challenges of climate change, as previously identified (Figure 6). We continue to engage with companies that do not report to CDP, which is expanded upon in **Section 3. Risk Management**.

Across our strategies we assess whether any past or current controversies could have meaningful investment implications in the future. A key feature of our qualitative ESG assessment involves analysing the carbon transition risk of our portfolio companies. In some instances, where material, we examine portfolio companies' historical emissions and conduct stress tests on key financial metrics such as margins, earnings, return on equity, and net debt-to-equity under varying carbon price scenarios. As part of our carbon intensity review, we also look at the company's initiatives to reduce its carbon footprint and its governance oversight of these issues.

[6] *As of 31 December 2023*

GUINNESS SPECIALIST STRATEGIES

The Guinness Sustainable Energy and Guinness Global Energy strategies lean on over 20 years of energy investing experience. They may face greater climate-related risks and opportunities than our other thematic strategies. The potential impacts of these risks and upsides from climate-related opportunities are acknowledged and worked into our investment processes.

THE GUINNESS SUSTAINABLE ENERGY STRATEGY

The Guinness Sustainable Energy strategy is well positioned to capture opportunities brought forward by the transition to a low-carbon economy. The strategy provides exposure to companies that are associated with the decarbonisation of the global energy system. We do not limit ourselves to 'pure plays', opening our universe up to some companies with existing hydrocarbon-based fuel exposure, but this must be allied with a commitment to transitioning their business models towards sustainable energy sources. Within the strategy, we select companies involved in the generation, storage, efficiency and consumption of sustainable energy sources (such as solar, wind, hydro, geothermal, biofuels and biomass). Further, the strategy applies additional exclusions to Guinness Global Investors' firm-wide exclusions: companies that feature on the Norges Bank Exclusion List and companies whose revenues are derived from fossil fuel extraction.

The strategy invests in around 30 companies selected from a proprietary investment universe. The universe includes companies directly exposed to the following four sub-sectors:

Displacement	Electrification	Installation	Generation
Companies selling products and services which displace energy consumed via improving energy efficiency or providing alternative fuels.	Companies selling products and services which help to enable electrification of transportation and provide energy stationary storage for the grid.	Companies involved in installing low-carbon infrastructure, manufacturing finished products (turbines), key components (solar glass), and services (grid connection).	Utilities and Independent Power Producers (IPPs) with a material proportion of business exposure to low-carbon electricity generation.

THE GUINNESS SUSTAINABLE ENERGY STRATEGY IMPACT OPPORTUNITIES

Since 2019, the investment team has published an **Impact Report** to demonstrate how the companies we invest in are helping to deliver the low-carbon transition. We believe that when companies and consumers buy heat pumps, electric vehicles, or renewable energy, rather than their fossil fuel equivalents, they contribute towards the global effort to combat climate change.

We focus on CO_2 equivalent (CO_2e) greenhouse gas emissions displaced (positive impact) by the products and services of our investee companies. This is increasingly being described in the industry as Scope 4 emissions. In addition, we assess some of the areas of negative impact and controversy within our portfolio, which feeds into our risk identification and assessment.

In 2023, we published the fifth Impact Report. It maps company activities to the Sustainable Development Goals (SDGs), outlines our engagement efforts, and describes our impact methodology. We are mindful that impact measurement and reporting is a developing area and there is room for discussion around the approaches adopted. We continue to improve our methodology and processes to assess the impact of climate-related risks and opportunities.

THE GUINNESS GLOBAL ENERGY STRATEGY

The Guinness Global Energy strategy is designed to provide investors with exposure to growth opportunities in energy equities, such as oil and gas companies. These have inherently higher climate-related risks than companies in other sectors due to high emissions intensities related to fossil fuels. We continuously monitor our portfolio companies for controversies and measure their greenhouse gas exposures year-on-year in our internal climate-related risk scorecards. This enables us to highlight key areas of focus to engage with our investee companies to drive change. As active shareholders, we believe engagement is more beneficial than divestment to mitigate these risks as divestment could lead to high-emitting companies falling into the hands of less responsible owners. Further information on our risk management through active ownership can be found in **Section 3. Risk Management**.

GUINNESS GLOBAL AND DEVELOPED MARKETS STRATEGIES

Guinness Global and Developed Markets strategies include Guinness Global Equity Income, Guinness Global Innovators, Guinness European Equity Income, and Guinness Sustainable Global Equity. The strategies utilise a bottom-up ESG framework, developed in-house, to assess quantitatively the sustainability risk associated with current and potential underlying investments. Using the SASB materiality framework, the strategies employ an internal scorecard that is used to evaluate a company based on various industry-specific ESG criteria. 'Materiality' and 'transparency' are two key components of the scorecard: the materiality component ensures the key risk factors to a company's operations are assessed, and the transparency component informs the team of the drivers of ESG scores at a granular level.

The strategies supplement this with a rigorous qualitative review, which features assessments of material risks and opportunities, good governance, executive remuneration, carbon transition, and exposure to negative externalities. This is complemented by strategy-level climate-related risk scorecards which are discussed in more detail in **Section 4. Metrics and Targets**. The Sustainable Global Equity strategy is one of Guinness's two dedicated sustainable strategies and is discussed in more detail below.

THE GUINNESS SUSTAINABLE GLOBAL EQUITY STRATEGY

The Sustainable Global Equity strategy is designed to provide investors with exposure to companies benefiting from the transition to a more sustainable economy, whose products and services align with at least one of the strategy's three sustainable themes. The strategy has three broad investment themes:

Health & Wellbeing	Productivity & Connectivity	Resource Efficiency

The strategy's portfolio managers believe that over the next 20 years economies will continue to shift towards more sustainable products and services. Businesses which are part of this transition are likely to benefit from a sustained growth in demand, including energy efficient products.

The strategy focuses on companies exposed to these themes that show persistent high return on capital, and where management has strong and improving ESG credentials, including those that consider climate-related risks and opportunities in their operations.

In some instances, assessments are made of a company's capacity to absorb higher ESG-related costs, such as sourcing from sustainable suppliers, and to increase investments in ESG-related initiatives through elevated capital expenditure or research and development efforts, such as adopting more energy-efficient machinery. This type of analysis enables us to gauge a company's exposure to potential carbon-related expenses, through internal investments or external regulatory measures. Further, the strategy has additional exclusion criteria to Guinness Global Investors' firm-wide exclusions which are detailed on the strategy's literature web page.

GUINNESS ASIAN AND EMERGING MARKETS STRATEGIES

We employ climate assessments and monitoring to our Asian and Emerging Markets strategies, such as the Guinness Asian Equity Income strategy. Coverage of climate-related risks and opportunities disclosures is typically lower in these portfolios due to relatively lower regulatory pressures than our other strategies. This makes evaluating the impact of climate-related risks of companies within this strategy more difficult compared to other Guinness Global Investors strategies as portfolio companies are less likely to publicly disclose data and align reporting with global frameworks. Consequently, we emphasise the importance of disclosure to platforms such as CDP. However, we factor deficiencies of public disclosure into our overarching firm strategy by travelling to meet companies face-to-face to build and develop strong stakeholder relationships. This enables us to better understand climate-related risks and opportunities of portfolio companies, discuss their risk mitigation mechanisms currently in place, and encourage disclosures directly. We note that increasing regulations in emerging markets are on the horizon, and we are optimistic of improved climate-related disclosures in the future.

In 2023, the investment team completed trips to East and South-East Asia to discuss a variety of strategic and ESG-related topics with investee companies. We found on building in-person relationships with our companies that they were receptive to the perspectives of foreign shareholders, especially on ESG topics including climate. We recognise effective engagement often takes place over multiple years, and so maintaining an open dialogue is very important. This has impacted our financial planning as we plan more trips in the future to nurture these relationships.

TCFD Recommendation: Describe the resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario

CLIMATE RESILIENCE

We believe in intelligent solutions for long-term investing in a rapidly changing world. Whilst we see our operational strategy as generally stable across potential climate scenarios, we recognise the growing importance of climate-related considerations at a product level for our portfolios.

Climate change is a global issue that poses risks to all companies and sectors to varying extents. It is imperative that as a long-only fund manager we track companies' exposure towards climate-related risks and identify companies well positioned to benefit from the transition to a low-carbon economy (climate-related opportunities).

Responsible investment is integrated throughout our investment process across all strategies. Whilst environmental concerns may not be deemed material for every portfolio company, we view ESG assessments as crucial to understanding material risks and opportunities of a company and how well they are managed. This also allows us to understand a company's contribution to global climate change and financial resilience amid evolving regulations and policies.

We believe that portfolio companies that are aware of their climate exposures and have started to identify their climate-related risks and opportunities are better equipped to deal with the associated challenges and are therefore more resilient. We actively engage with our portfolio companies to improve climate-related disclosures, such as to CDP, and have in turn participated in the two consecutive annual CDP Non-Disclosure Campaigns (NDC).

Alongside disclosure, we monitor portfolio companies' efforts to reduce emissions and advocate target setting with the aim of keeping global temperature rise below 1.5°C. We encourage portfolio companies to set science-based emission reduction targets and register them with the Science Based Targets Initiative (SBTi) to improve future resilience and mitigate transition and physical risks. We engage with portfolio companies both individually and through the CDP Science-Based Targets (SBT) Campaign for target setting. Further details on collaborative engagements are discussed in more detail on page 33.

In addition to disclosure and target setting, we discuss remuneration strategies with our portfolio companies and endorse the use of environmental metrics within their short and long-term incentive plans. Case studies detailing our engagements with portfolio companies regarding these topics can be found on pages 31-33.

IMPLIED TEMPERATURE RISE SCENARIOS

As part of our climate-related risk and opportunity assessments, we utilise available tools such as implied temperature rise estimates from third-party data providers. We use these tools in combination with qualitative analysis to form an independent view.

In our experience, available tools to simulate temperature rise cases for scenario analysis do not give an accurate assessment of transition risks and opportunities for our portfolios. We have found that different methodologies and data providers provide significantly divergent outcomes for the same company. Moreover, some companies well placed to aid the transition to a low-carbon economy, such as solar module producers, perform worse with these metrics compared to traditionally high-emitting companies that derive much of their revenue from 'brown' sources such as fossil fuel generation and extraction. Whilst we challenge the quality of this type of metric, its underlying data and methodologies, we consider this within our climate assessments in the absence of better metrics and continue to seek improved data. We continue to seek other available tools to enable further scenario analysis.

3. RISK MANAGEMENT

TCFD Recommendation: Describe the organisation's processes for identifying and assessing climate-related risks

TCFD Recommendation: Describe the organisation's processes for managing climate-related risks

RISK IDENTIFICATION, ASSESSMENT AND MANAGEMENT

At Guinness Global Investors, we consider climate-related risks and opportunities across our business, both operationally and to our portfolios.

WITHIN OUR OPERATIONS

At an operational level, we identify key potential climate-related risks by understanding our biggest operational exposures, such as business travel and commuting, highlighted in Figure 13 (page 36). We record all business trips and hotel stays through our finance department and survey our employees to understand how they commute to work and how often they work from home.

We calculate and record our company-level scope emissions to determine the activities that contribute the most to our emissions and have the most potential to affect our climate-related risks. We track our progress year-on-year and continuously look at ways we can reduce, and where possible, avoid operational emissions (Figure 7).

Guinness Global Investors encourage greener approaches both through business operations and staff activity. We have several procedures in place to improve the environmental footprint of the company, including recycling initiatives, energy efficient lighting, and electrical vehicle leasing and cycle to work schemes for employees.

Additionally, annual ESG training is delivered firm-wide. This contains:

- Education on what ESG is
- The consideration of ESG factors within the investment process
- Responsible Investment activity
- Stewardship activity
- Corporate responsibility
- Our Carbon Policy
- Operational scope emissions
- Actions on how to improve our carbon footprint such as through electrical vehicle leasing scheme and other internal initiatives

This allows us to ensure all employees are familiar with the Responsible Investment and ESG activity that is conducted across the firm.

In 2023, we also introduced climate training to all employees to provide education around climate change and the impact of climate-related risks and opportunities on our company and our portfolios.

MANAGING OUR OPERATIONAL FOOTPRINT

We believe it is important to apply the high standards we expect of our portfolio holdings to our own activities.

Our office is located on one floor of an office block in London. The building benefits from modern, efficient mechanical and electrical equipment which was installed in 2017 when the entire building was refurbished. Therefore, we believe our operational climate-related risk exposure is minimal in comparison to our portfolios.

Since 2015, Guinness Global Investors has had a Carbon Usage Policy. We calculate and report our carbon emissions to create an annual carbon usage report to monitor our operational carbon emissions. Office energy consumption, business travel, and commuting are the greatest contributors to our operational carbon footprint and remain our key areas of focus. Working with our service providers to understand the opportunities to improve our carbon usage is a priority, and we encourage our employees to reduce the emissions they generate in their working lives.

Figure 7 depicts other measures in place to reduce our operational carbon footprint across electricity usage, water and waste, and travel and commuting.

Figure 7: Guinness Global Investors operational emission reduction measures
Source: Guinness Global Investors

ELECTRICITY USAGE

- Improving operational efficiencies and investing in technological innovation, such as energy-efficient and motion-activated LED lights installed throughout the office.
- The office has an open workspace layout, which requires fewer lights and other appliances than separate cubicles.
- Staff are encouraged to switch off electronic devices overnight.

WATER & WASTE

- We encourage conservation of water and other resources.
- No office waste goes to landfill. We recycle all paper and plastics and have a food and compostable bin in the office. General waste is incinerated.
- Internal documents are printed double-sided whenever possible to save paper and employees are encouraged to avoid unnecessary printing.
- Electronics are usually re-used or recycled.

TRAVEL & COMMUTING

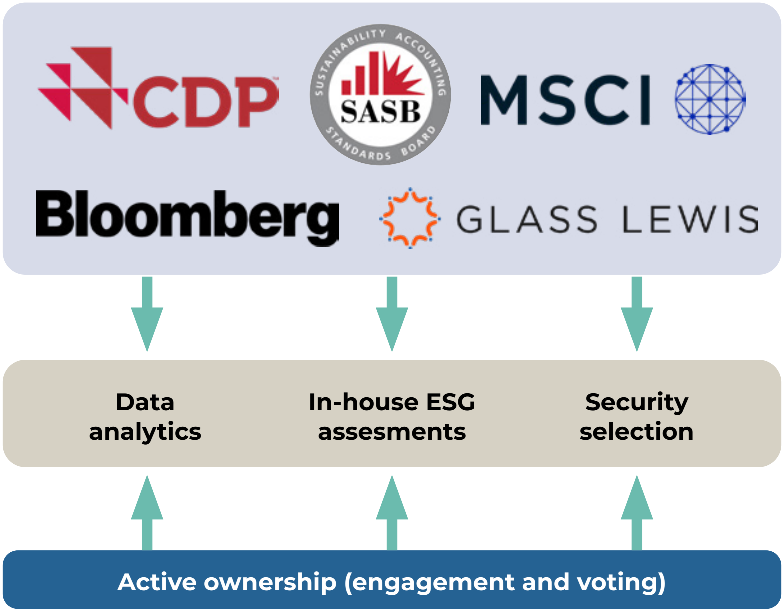
- A 'cycle to work' scheme to encourage employees to use low-carbon transport. The vast majority of our employees use public transport or bicycles to commute to work, which minimises individual employee emissions.
- A salary sacrifice scheme to encourage employees to lease or buy zero-emission vehicles.
- We regularly use video calling to avoid unnecessary travel and associated carbon emissions.
- Staff are encouraged to use public transport when attending external meetings outside of the office premises.

WITHIN OUR PORTFOLIOS

Climate-related risks are predominantly derived from our investment portfolios that we actively manage on behalf of our clients. Our concentrated portfolios allow us to pay close attention to the activities of our individual portfolio companies and track their climate-related risk mitigation and progress to climate goals.

We use several third-party ESG data and research sources (Figure 8). As active managers, we believe that building our own holistic methodology to identify and assess ESG factors, including climate-related risks and opportunities, is better than relying solely on third-party scores or using an exclusionary criterion.

Figure 8: Incorporation process of ESG factors and stewardship activity
Source: Guinness Global Investors



Portfolio managers are empowered to tailor their processes to the geographic and sectoral focus of their strategies. ESG analysis, both qualitative and quantitative, is embedded into our investment process. The consideration of ESG issues, including those relating to climate, is a pragmatic part of our day-to-day activities as investors. It helps to form our understanding of the business model of a company, its potential to create long-term return on capital, and its mitigation of risk.

We use public sources of information, including annual reports, sustainability (or similar) reports, press releases, NGOs, proxy research from Glass Lewis and company presentations in addition to broker research and media sources. ESG research providers also help us determine the material risks and opportunities a company is faced with and how it addresses and reports on them.

Quantitatively, third-party data is integrated into our in-house valuation models and climate-related risk scorecards, which are discussed in more detail in **Section 4. Metrics and Targets**.

Our qualitative reviews involve an in-depth analysis of the material ESG risks of a company – considering what the company itself, third-party ESG data providers (Figure 8), and the SASB materiality framework deem material, along with our own knowledge of the company.

PORTFOLIO CLIMATE-RELATED RISK MANAGEMENT FRAMEWORK

Our framework for identifying, assessing, and managing ESG and climate-related risks is summarised in Figure 9. Across the firm, we have developed our analysis to assess portfolio climate sensitivity considering metrics including, but not limited to, the Weighted Average Carbon Intensity (WACI) of our funds in absolute terms and relative to their benchmarks. This is consolidated into climate-related risk scorecards which are presented to the portfolio managers and investment analysts for each strategy. More information on our climate-related risk scorecards can be found in **Section 4: Metrics & Targets**.

Figure 9: Guinness Global Investors portfolio climate-related risk management framework
Source: Guinness Global Investors

RISK IDENTIFICATION

- Portfolio managers and investment analysts are responsible for identifying potential risks for companies in their investment universe.
- Frameworks such as the SASB materiality standards are used as a starting point to map our portfolio companies to understand our material exposures.
- The Responsible Investment Team supports the wider investment team and conducts weekly controversies screening to identify any reported issues. The Team also track portfolio alignment to Guinness Global Investors' exclusions criteria and monitor portfolio companies' credentials.

RISK ASSESSMENT

- The Investment Team conduct quantitative and qualitative ESG reviews, identifying and assessing the material risks and opportunities of a company, including those relating to climate, which may impact business models and valuations. This allows us to form a complete and meaningful investment decision.
- Climate-related risk scorecards are created by the Responsible Investment Team. This allows us to track companies' carbon exposures including their carbon footprint, their carbon intensity, whether they report to CDP, and if they have set science-based targets (SBT) and registered it with the SBTi. We then aggregate this data at portfolio level to calculate each fund's carbon footprint and weighted average carbon intensity (WACI).

RISK MANAGEMENT

- Consideration of potential climate-related risks is embedded throughout decision making at Guinness Global Investors and they are discussed at committees including the quarterly Responsible Investment Committee meetings.
- Our climate-related risk scorecards are discussed in detail with portfolio managers and analysts for all strategies to highlight potential exposures.
- The Responsible Investment Team performs ongoing exclusion checks to ensure portfolios comply with exclusion policies and ESG score analysis to monitor risks.
- Our ESG reviews support the identification of engagement priorities for portfolio companies on an ongoing basis. Further, they inform voting activities and at their discretion, portfolio managers will escalate issues where they deem it appropriate.
- The Compliance team conducts monthly and quarterly ESG monitoring reviews to assess whether the ESG process as described in the relevant fund disclosures has been followed. The findings are reported to the Responsible Investment Committee, the Monthly Management Committee, the Compliance Committee and external parties where required.

RISK MANAGEMENT IN STOCK SELECTION

Risk management is fully integrated into the investment process performed by portfolio managers. Negative factors (such as oil spills) can cause a sharp correction in a share price once in the public domain, and therefore, lead to a long-term negative reputation for the company. This is in contrast to positive factors (such as improving climate governance or management alignment), which can materialise over long time horizons. It is for this reason that we believe investment managers who actively engage with investee companies to help improve their management of ESG factors, including climate-related risks and opportunities, can leverage a potential competitive advantage over those that do not.

ENERGY INSIGHT: CLIMATE-RELATED RISK AND ESG INTEGRATION

By its nature, the energy industry is one of the most exposed sectors to global climate-related risks and opportunities.

Across our Specialist energy strategies, our analysis uses both a bottom-up and top-down approach. In addition to oil and gas price sensitivities, understanding the key macro drivers of energy markets is integral to our process. This holistic approach allows us to take long-term views on different energy technologies and identifying climate-related risks and opportunities.

Key to our micro analysis and stock selection is the assessment of risk adjusted value in the equity of each company. Good ESG behaviours from our companies (e.g. robust risk management and long-term planning; allocating capital wisely; or integrating well with the communities in which they operate) are important components in defining future return on capital employed and future equity value. However, we will consider owning a company that has some weaker ESG characteristics if, after these considerations, we see an attractive risk adjusted valuation and a positive direction of travel with respect to these issues. Forming part of the due diligence we undertake when selecting investments, this process encompasses a detailed review of a company's strategy, financial and nonfinancial performance and risk, and capital structure.

Top-down factors at play in our global energy transition model include government incentives, subsidies, urban pollution, energy security, as well as carbon pricing and taxation. Many of these are as important as economic factors in forming a view on the winners and losers in the energy transition. For example, we must understand the environmental, social and political drivers behind renewable power generation taking market share from fossil fuel power sources as carbon costs increase.

Using bottom-up analysis, we capture quantifiable effects of these issues on company valuations through our in-house model which enables us to flex various operating and financial assumptions to account for the effect of ESG issues and to assess their impact on valuation.

QUANTITATIVE ANALYSIS INCLUDES:

- Flexing the cost of capital in our discounted cash flow (DCF) models (for example to allow for geopolitical, social and governance risk around emerging market companies).
- Flexing our target multiples (potentially using higher multiples for better 'quality' companies, including those that have better ESG characteristics).
- Flexing carbon costs (or credits) to assess potential impacts on operating costs associated with energy saving or de-carbonising activities (or carbon emissions for companies that have carbon-emitting operations).

TCFD Recommendation: Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organisation's overall risk management

CLIMATE-RELATED RISK INTEGRATION

As responsible investors, we incorporate ESG factors, including climate-related risks, into our investment process. Through ESG integration, we can identify material issues that we attempt to mitigate via active ownership and stewardship, which includes proxy voting and one-to-one or collaborative engagements with our portfolio companies.

The process of exclusions screening helps to identify and remove companies with high embedded climate-related risks from our investible universes. Implementation of exclusion policies is overseen by Operations Team in addition to the Responsible Investment Team and Compliance Team. In 2024, a new Head of Investment Risk role was created to help further systemise our risk management functions and evolve our risk integration processes.

Our ESG reviews and climate-related risk scorecards provide an assessment of risks that are discussed with all members of the Investment Team for their relevant strategies to understand their climate-related exposures and how this may affect their portfolios. Further, climate-related risks are integrated through our governance structures including the **Responsible Investment Committee**, which ensures climate-related risks are a standing item at each quarterly meeting and members are responsible for integrating these considerations in their daily practices.

Managing risk through ESG education, among other topics, ensures all relevant personnel are aware and updated on processes. Moreover, our annual firm-wide ESG and climate training sessions ensures all employees are aware of material issues and the integration of ESG into our operational and investment processes are understood. Guinness Global Investors encourages further training and development, supporting its employees if they wish to undertake further ESG education such as the CFA ESG Certificate, which several members of the Investment Team and wider company have completed.

Active ownership and stewardship, namely through proxy voting and engagement activity, create an open dialogue between us and our portfolio companies, which can help to manage risks we have identified and assessed through our ESG incorporation processes. We engage with investee companies for a number of reasons including influencing investee companies proactively on ESG issues (including those relating to climate), encouraging improved or increased ESG disclosure, and to gain a greater understanding of their ESG strategy. We view proxy voting as an important element of investment management and our voting philosophy reflects our values, our long-term perspective and our focus on sustainable returns.

We outline our processes of exclusions screening, as well as our active ownership and stewardship activity. Case studies of our one-to-one and collaborative engagements can be found on the following pages.

EXCLUSIONS

CORPORATE-LEVEL

An alternative way to address climate and other ESG risks is through the exclusion of specific activities from portfolios. We believe that excluding activities that present the most harm to society and the environment is appropriate when there is no pathway to transition. Accordingly, under the remit of climate, we systematically exclude companies that generate more than 30% of revenues via thermal coal extraction or thermal coal power generation.

Figure 10: Corporate-level exclusions at Guinness Global Investors
Source: Guinness Global Investors

- Thermal Coal Extraction
- Thermal Coal Generation
- Controversial Weapons

STRATEGY-LEVEL

Relevant strategies including Guinness Sustainable Energy, Guinness Sustainable Global Equity, Guinness Global Innovators, and Guinness Global Equity have additional exclusionary criteria to our corporate-level exclusions. More details can be found in each strategy's exclusion policy on our website.

QUANTITATIVE CLIMATE ASSESSMENTS AND PROGRESS MONITORING

We have in-house modelling capability that assesses the carbon footprint, and therefore **carbon-related risk** exposure, of our portfolios. These inform **climate-related risk** scorecards which are produced by the Responsible Investment Team for all strategies, who are a dedicated resource with climate analysis expertise. These are presented to the wider investment team to understand risks at the portfolio and individual company level. Further, our Global and Developed Markets and Specialist investment strategies have in-house methodologies to flex **climate-related assumptions** into the valuation models of companies. We track our portfolio companies' approach to climate issues and net-zero on an ongoing basis. Their disclosures, targets, and incentives are recorded and monitored, which helps to identify engagement priorities.

STEWARDSHIP

We embrace the stewardship responsibilities we assume as investment managers. We produce an annual Stewardship Code Report, in response to the **Stewardship Code 2020**. The Stewardship Code requires investors to be transparent about their investment processes, with a set of 12 'comply and explain' principles for asset managers. We conduct proxy voting and engage with portfolio companies on a wide range of issues, including climate-related matters such as disclosures, target setting, and governance and incentivisation.

PROXY VOTING

Our portfolio managers are empowered to make voting decisions which they believe are in the best interest of our underlying clients, based on their own research informed by (but not delegated to) third-party research providers.

We may decide to vote against the election of directors, remuneration reports and policies, or other management resolutions if we are dissatisfied with a company's approach or addressal of climate-related risks. This forms an integral component of our active stewardship at Guinness Global Investors.

PROXY VOTING CASE STUDY: Canadian Natural Resources

Canadian Natural

Canadian Natural Resources, a portfolio company in the Guinness Global Energy strategy, is a crude oil and natural gas production company, with operations mainly located in Western Canada.

In 2022, the company "did not meet any criteria" on its Climate Action 100+ Net Zero Company Benchmark decarbonisation strategy indicator score. This included providing insufficient disclosure around how it was going to achieve its medium and long-term greenhouse gas reduction targets. After verifying this against company disclosures, we voted against the Chair of the Board, Murray Edwards. In 2023 we continued to vote in this manner.

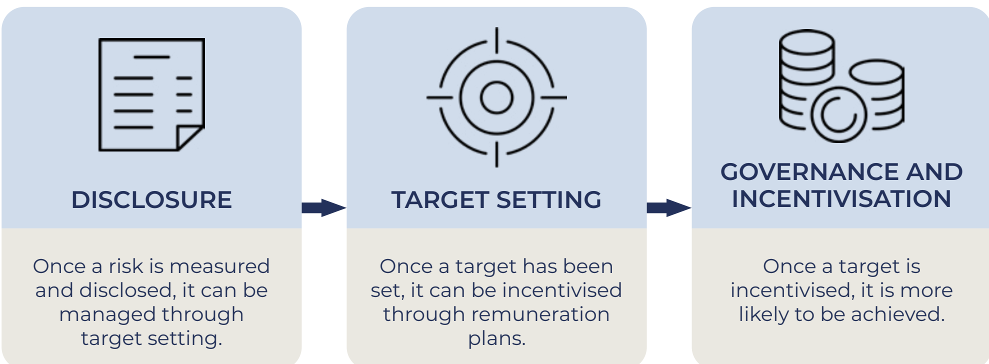
In 2022, we also voted abstain for the Chair of the Audit Committee, Catherine Best. Despite Canadian Natural Resources reporting to CDP, the company had yet to align its sustainability-related reporting with the recommendations of the TCFD. However, in 2023, we were encouraged to see that the company now reports both to CDP and in line with TCFD. In turn, we voted in support of Catherine Best at the 2023 AGM.

ENGAGEMENT

In addition to fundamental analysis, a core approach to managing climate-related risks across our strategies is through engagement. Each investment strategy team at Guinness Global Investors conducts one-to-one engagements on issues material to their respective portfolio companies, including those related to climate change.

Our climate-related engagement framework typically revolves around three pillars, as shown in Figure 11.

Figure 11: Guinness Global Investors' climate-related engagement framework
Source: Guinness Global Investors



Engagement is a two-way conversation, where dialogue and progress often take place over several years. The following pages depict examples from the Investment Teams on their engagement activity regarding emissions **disclosures**, **target setting**, **governance and incentivisation**.

When undertaking climate-related engagements, we commonly ask companies to produce an ESG report, produce TCFD-aligned disclosures, disclose their emissions, complete the CDP climate survey. Where applicable we may also ask them to disclose green product revenues or estimate the carbon emissions avoided through the use of their products by customers.

When we engage on target setting, we often ask companies to set carbon reduction targets and register them with the Science Based Targets initiative (SBTi) where appropriate. Where relevant, we may also ask companies to set targets to phase out fossil fuels from their generation mix or set a target for green product sales. When we engage with companies on incentivisation, we request companies provide transparent disclosure on which metrics they use to incentivise management. Where portfolio managers deem relevant, we encourage climate-linked metrics to be included in the incentive plan.

CASE STUDY: Canadian Solar

CanadianSolar

Strategy: Guinness Sustainable Energy

Engagement topic: Disclosure

Canadian Solar is a leading manufacturer or solar modules, a provider of solar energy and battery storage solutions and a developer of utility-scale solar power and battery storage projects. In 2021, we completed an in-depth ESG review of the company, noting that its disclosures were lagging those of Canadian-incorporated and US-listed peers, which included a failure to complete the annual CDP Climate Change questionnaire.

In May 2022, we engaged with company representatives, asking them to improve disclosures and report to CDP. The company told us that it was considering responding to CDP, but failed to provide sufficient reassurance that this was being taken seriously. As a result, at the June 2022 AGM, we voted against the Chair of the Audit Committee, signalling our dissatisfaction with the company's disclosure levels and engagement response.

In February 2023, we wrote to Canadian Solar's CFO, giving the company notice that we were intending to escalate our voting action to target more directors should the company continue to not complete the CDP climate survey.

In April 2023, we received a response from the company informing us that they planned to submit to the CDP Climate Change Report in 2023, and we were pleased to see them submit later in 2023. We deemed this to be a satisfactory response and chose to support the Chair of the Audit Committee at the 2023 AGM. We are further encouraged by the company's commitment to a net-zero target, which it registered with SBTi in 2023. We will continue to engage with the company on its progress.

CASE STUDY: Hubbell

Strategy: Guinness Sustainable Energy

Engagement topic: Target setting

Hubbell is a diversified electrical product manufacturer and a leading supplier of electrical transmission and distribution equipment. When reviewing the company's ESG credentials in 2021, we noted that the company had a relatively modest target to reduce Scope 1 and 2 emissions by 10% by 2025. Encouraging the company to set a more ambitious target was set as a top engagement priority.

In March 2022, Hubbell published its sustainability report, announcing that it had achieved its 2025 emissions reduction target well ahead of schedule. In June 2022, we wrote to Hubbell, asking it to set a long-term emissions reduction target and register it with the Science Based Targets initiative (SBTi). We met the company in September to reiterate these requests and were told that setting a science-based target was being considered.

In March 2023, the company updated its sustainability report, setting a new goal to reduce its absolute Scope 1 and 2 emissions by 30% by 2030, further claiming that this goal had been developed using "leading science-based methodologies". We were pleased to see the company setting a more ambitious mid-term target but continue to encourage it to set a long-term net zero goal with the SBTi. In August 2023, we encouraged Hubbell to link emissions reduction to remuneration and disclose Scope 3 and 4 emissions. We will continue to engage with the company on achieving this.

CASE STUDY: Roper Technologies

Strategy: Guinness Global Innovators

Engagement topics: Disclosure and target setting

Roper Technologies (Roper) is a diversified technology company that operates through three segments: application software; network software and systems; and technology enabled products. Within our ESG assessment, we identified Roper as a potential laggard compared to peers and the rest of the portfolio companies regarding reporting and disclosure of emissions.

In July 2021, we engaged with Roper to submit data to CDP, as it had not responded to the CDP's requests for disclosure for the previous financial year. In June 2022, Guinness Global Investors co-signed an engagement letter with the CDP Non-Disclosure Campaign to encourage submission of the CDP questionnaire.

In 2022, we were pleased to see that Roper began to report its emissions to CDP and continued to do so in 2023. In December 2023, we wrote to Roper to seek confirmation of its commitment to CDP and to advocate for science-based emission reduction targets by registering its target with SBTi. We are pleased with its progress and the conversation is ongoing.

CASE STUDY: Danone

Strategies: Guinness Global Equity Income, Guinness European Equity Income

Engagement topics: Governance and incentivisation

Danone is a multinational food and beverage producer. Over 2022, we identified companies which we believed had significant aspects of their remuneration policy which they could improve upon.

In November 2022, we reached out to Danone to discuss its remuneration metrics and areas in which we think it could progress in, including the integration of environmental factors in its executive incentive plans.

In February 2023, we met with representatives from Danone, which included a discussion around the Long-Term Incentive Plan (LTIP) component of the CEO's remuneration policy – namely a 25% weighting attached to the company's CDP score. In 2023, Danone introduced new environmental metrics in the CEO's 2023 executive remuneration policy, making the shift from incentivising the quality of disclosures (linked to CDP Climate and Water survey scores) to incentivising climate action by reducing its GHG emissions through targets which are approved by the SBTi.

COLLABORATIVE ENGAGEMENT

Our climate-related risk analysis has fed into our engagement activity and has had an influence on our collaboration with external initiatives. We believe working collaboratively with other investors and investor groups allows us to achieve better outcomes in some instances, both for the market and our individual clients. One collaborative engagement programme in which we participate is Climate Action 100+ (CA100+), a leading engagement group on the issue of greenhouse gas emissions. More details are provided in the following case study.

We regularly engage with our portfolio companies to understand how they manage their relevant risks over time. This feeds into discussions regarding investment decisions and stock selections. As climate-related issues intensify, we appreciate the significance of transparent climate-related disclosures and tangible targets for reducing greenhouse gas emissions. We ask our portfolio companies to report to CDP (formerly known as the Climate Disclosure Project), and participate in the CDP Non-Disclosure Campaign, to enhance transparency of disclosures. We also participate in the CDP Science Based Targets (SBT) campaign to encourage companies to set approved science-aligned targets and register them with the Science Based Targets Initiative (SBTi). We encourage companies that make significant contributions to global greenhouse gas emissions to adapt their business models to align with the transition to a low-carbon economy.

CASE STUDY: Climate Action 100+

Since 2019, we have been members of **Climate Action 100+**, the world's largest-ever investor engagement initiative on climate change. During the reporting period, the initiative transitioned to its second phase. We shifted our engagement focus from Devon Energy to Imperial Oil, an integrated Canadian energy producer, after the former was removed from the initiative's updated focus list of engagement companies.

During our engagement journey with Devon Energy, we engaged with the company across a wide range of topics, such as remuneration and methane reduction. We were pleased with some of the progress Devon made. This included both explicitly splitting out emissions reduction as a key performance indicator that contributed towards the CEO's annual bonus, and joining the Oil & Gas Methane Partnership, widely viewed as the global gold standard for methane emissions measurement and reporting.

In 2023, we joined Imperial Oil's CA100+ engagement group. The discussion so far has focused on understanding and analysing the actions that the company intends to take in order to achieve its medium-term and long-term GHG reduction targets. At a high level, Imperial's current strategy revolves around the deployment of oil production technologies with lower emissions intensity, the growth of its low-carbon opportunities (renewable diesel) business, and the development of carbon capture and storage (CCS) projects, which it plans on undertaking both unilaterally and in collaboration with other members of the Pathways Alliance. Other engagement topics have included requesting board oversight of the company's decarbonisation strategy, and Audit Committee oversight of climate risks and disclosures. We look forward to engaging with the company further in 2024.

CASE STUDY: CDP NDC and SBT Campaigns

We participate in the **CDP Non-Disclosure Campaign (NDC)**, which aims to drive further corporate transparency around climate change, deforestation and water security. In 2023, within the Guinness Global Equity Income strategy, we were the lead signatory for letters sent to Sonic Healthcare (an Australian healthcare provider) and Arthur J Gallagher (an American global insurance brokerage and risk management services firm) as part of the CDP Non-Disclosure Campaign (NDC). We were responsible for managing the correspondence on behalf of both ourselves and a range of other investors involved in the campaign, requesting that the companies disclose to the CDP Climate Change questionnaire. We had previously co-signed letters to Sonic Healthcare & Arthur J Gallagher in 2022, given that they did not submit to the CDP, and were pleased to see both companies submit to CDP in 2023.

In 2023, we also joined the **CDP Science-Based Targets (SBT)** Campaign, to encourage portfolio companies to commit to and set 1.5°C-aligned science-based targets. We co-signed a variety of letters sent to companies by CDP and followed up directly with several relevant portfolio companies in the Global and Developed Markets, Specialist, and Asian and Emerging Markets investment strategies.

4. METRICS & TARGETS

TCFD Recommendation: Disclose the metrics used by the organisation to assess climate-related risks and opportunities in line with its strategy and risk management processes

PORTFOLIO CLIMATE-RELATED METRICS

We are aware that as an asset manager, our principal emissions are derived from the Greenhouse Gas Protocol's Scope 3 'Category 15: Investments', from our portfolios that we manage on behalf of our clients.

Since 2021, we have developed our climate accounting methodology to analyse climate-related metrics at the fund level, allowing us to examine the underlying portfolio companies to understand our climate-related risk and opportunity exposures.

We create climate-related risk scorecards (Figure 12) using company-reported and CDP emissions data where it is available, and emissions estimates from a third-party where it is not, to form a holistic view of our portfolio's climate risks and opportunities and track year-on-year progress. These climate-related risk scorecards are used internally.

Our climate-related risk scorecards assess the portfolio's exposure to these risks and opportunities at a company and aggregated portfolio level, using metrics listed below. We monitor these factors, identify laggards and highlight engagement priorities for portfolio companies including:

- Carbon emissions measures including Total Carbon Footprint and Weighted Average Carbon Intensity (WACI)
- The proportion of fund revenues derived from regions highly vulnerable to carbon regulatory risk and physical climate risks
- Green vs brown revenues
- Board and executives of companies have oversight and incentives related to climate issues
- Companies' targets and timelines in place to reduce their emissions

The carbon metrics listed are in line with those recommended for asset managers by the TCFD. We have calculated our carbon exposures for our UK-domiciled funds (Figure 2), within our strategies of Global and Developed Markets, Specialist, and Asia and Emerging Markets.

Figure 12: Climate-related risk scorecards example

Source: Guinness Global Investors

TCFD Recommendation: Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions and the related risks

TCFD Recommendation: Describe the targets used by the organisation to manage climate-related risks and opportunities and performance against targets

OPERATIONAL CARBON FOOTPRINT

Figure 13: Emissions associated with Guinness Global Investors' operational activities

Source: Guinness Global Investors

2023 Carbon Usage Summary		
Guinness Operational Activities	**Location-based (tCO_2e)**	**Market-based (tCO_2e)**
Scope 1		
Gas Usage	11.9	11.9
Total Scope 1 emissions	**11.9**	**11.9**
Scope 2		
Electricity usage	7.5	3.2
Total Scope 2 emissions	**7.5**	**3.2**
Scope 3		
Business travel	53.1	53.1
Commuting	21.0	21.0
Working from home (teleworking)	24.0	24.0
Total Scope 3 emissions	**98.0**	**98.0**
Total Estimated Carbon Usage (tCO_2e)	**117.4**	**113.1**
Total Estimated Carbon Usage per employee (tCO_2e)*	**1.63**	**1.57**
**Based on 72 employees*		

Please note Figure 13 exhibits Guinness Global Investors' operational footprint only, as of 31 December 2023, and does not depict scope 3 emissions associated with our investment portfolios.

The estimates for Scope 1 and 2 are based on the utility bills provided by our landlord. Our Scope 2 emissions are reported using both location-based and market-based methodologies. The location-based approach uses the average emissions intensity of the UK electricity grid, whereas the market-based method uses the energy mix of the relevant energy providers.

The GHG Protocol defines 15 categories of Scope 3 emissions. In Figure 13, we have calculated estimates of our Scope 3 Category 6 (Business Travel) and Category 7 (Employee Commuting and Teleworking) emissions. In 2023, we have accounted for the emissions associated with hotel stays for the first time (within Category 6: Business Travel).

Increased domestic and international travel by our sales and investment teams accounted for a significant portion of the increase to our operational Scope 3 emissions in 2023 (at present this does not include emissions from Scope 3 Category 15: Investments), compared to respective 2022 figures. The increased business travel arises from investment team trips to East and South-East Asia to meet and engage with investee companies.

During 2023, we updated our Commuting survey for all permanent employees on their commuting patterns and working arrangements. We have a flexible working structure within the organisation, although we have seen an increased number of employees return to the office since the COVID-19 pandemic. Commuting figures (Scope 3) are estimated using the results of the survey, determined by the frequency of office attendance, distance travelled, and modes of transport used.

Please note our carbon usage summary is made on a best-efforts, unaudited basis, using internal estimates derived from the **Government's Greenhouse Gas Reporting: Conversion Factors**. This activity is completed on an annual basis when data becomes available.

We have not yet publicly pledged to an emissions reduction, or a net-zero target. We have recorded our company-level scope emissions for the past nine years and our related reporting is growing. In 2023, we recruited a responsible investment analyst with a climate change focus to support our climate analysis and reporting. We are currently investigating methods to reduce our corporate Scope 1 and Scope 2 emissions and developing our forward-looking strategy. The quantity and type of potential emissions reduction methods we will look to employ to align to a net-zero target, such as carbon offsets, is under consideration.

PORTFOLIO EMISSIONS

We monitor the carbon intensity of portfolio companies and funds relative to their Enterprise Value and Revenue. This involves examining both direct emissions (Scope 1 & 2) and emissions across the value chain (Scope 3). Figure 14 shows the internally calculated emissions and carbon metrics of our UK-domiciled funds. The methodologies behind Figure 14 can be found in Appendix 1.

While companies are increasingly reporting on Scope 1 and 2 emissions, reporting on Scope 3 emissions is still evolving. Many companies either do not disclose any Scope 3 emissions or provide partial disclosures covering only a few of the 15 categories that are relevant to them. Whilst disclosure is slowly improving, incomplete data makes Scope 3 analysis challenging. Data quality is also questionable due to the following:

- Some categories are material but not yet calculated;
- Different companies may use different methodologies for similar categories;
- Different companies rely to different extents on supply chain partner data;
- There can be significant swings in calculations from year to year; and
- Third party estimates can vary materially.

The carbon metrics listed are in line with those recommended for asset managers by the TCFD. We have calculated our carbon exposures for our UK-domiciled funds (Figure 2), within our strategies of Global and Developed Markets, Specialist, and Asia and Emerging Markets.

Figure 14: Guinness Global Investors UK-domiciled fund carbon metrics
Source: Guinness Global Investors, CDP, MSCI
Data as at 31st December 2023

2023 Portfolio Carbon Metrics		Total Carbon Emisisons (tCO_2e)		Carbon Footprint (tCO_2e/US$M invested)	Weighted Average Carbon Intensity (tCO_2e/US$M sales)
	AUM (USD)	Scope 1 & 2	Scope 3	Scope 1 & 2	Scope 1 & 2
WS Guinness Global Equity Income Fund	$179mn	1,623	146,957	9	31
% AUM Coverage		*100%*	*100%*	*100%*	*100%*
WS Guinness Sustainable Global Equity Fund	$0.7mn	4	62	6	18
% AUM Coverage		*100%*	*100%*	*100%*	*100%*
WS Guinness European Equity Income Fund	$0.8mn	11	437	15	17
% AUM Coverage		*100%*	*100%*	*100%*	*100%*
WS Guinness UK Equity Income Fund	$1mn	33	855	27	17
% AUM Coverage		*100%*	*100%*	*100%*	*100%*
WS Guinness Global Innovators Fund	$7mn	47	1,183	6	21
% AUM Coverage		*100%*	*100%*	*100%*	*100%*
WS Guinness Global Energy Fund	$87mn	34,141	299,513	392	284
% AUM Coverage		*100%*	*100%*	*100%*	*100%*
WS Guinness Sustainable Energy Fund	$30mn	2,711	24,909	92	227
% AUM Coverage		*100%*	*100%*	*100%*	*100%*
WS Guinness Asian Equity Income Fund	$0.8mn	16	199	19	43
% AUM Coverage		*98%*	*98%*	*98%*	*98%*

APPENDIX 1

Table 1: TCFD-recommended common carbon footprinting and exposure metrics for the financial sector
Source: Task Force on Climate-related Financial Disclosures

Metric	Supporting Information	
Total Carbon Emissions	*Description*	The absolute greenhouse gas emissions associated with a portfolio, expressed in tons CO2e.
	Formula	$\sum_{n}^{i}\left(\frac{\text{current value of investment}_i}{\text{issuer's market capitalisation}_i} \text{ x issuer's Scope 1 and Scope 2 GHG emissions}\right)$
	Methodology	Scope 1 and Scope 2 GHG emissions are allocated to investors based on an equity ownership approach. Under this approach, if an investor owns 5 percent of a company's total market capitalization, then the investor owns 5 percent of the company as well as 5 percent of the company's GHG (or carbon) emissions. While this metric is generally used for public equities, it can be used for other asset classes by allocating GHG emissions across the total capital structure of the investee (debt and equity).
Carbon Footprint	*Description*	Total carbon emissions for a portfolio normalized by the market value of the portfolio, expressed in tons CO2e/$M invested.
	Formula	$\frac{\sum_{n}^{i}\left(\frac{\text{current value of investment}_i}{\text{issuer's market capitalisation}_i} \text{ x issuer's Scope 1 and Scope 2 GHG emissions}\right)}{\text{current portfolio value (\$M)}}$
	Methodology	Scope 1 and Scope 2 GHG emissions are allocated to investors based on an equity ownership approach as described under methodology for Total Carbon Emissions. The current portfolio value is used to normalize the data.
Weighted Average Carbon Intensity (WACI)	*Description*	Portfolio's exposure to carbon-intensive companies, expressed in tons CO2e/$M revenue.
	Formula	$\sum_{n}^{i}\left(\frac{\text{current value of investment}_i}{\text{issuer's market capitalisation}_i} \text{ x } \frac{\text{issuer's Scope 1 and Scope 2 GHG emissions}}{\text{issuer's \$M revenue}}\right)$
	Methodology	Scope 1 and Scope 2 GHG emissions are allocated based on portfolio weights (the current value of the investment relative to the current portfolio value), rather than the equity ownership approach (as described under methodology for Total Carbon Emissions). Gross values should be used.

APPENDIX 2 - COLLABORATIVE INITIATIVES

We value opportunities to be involved in the development of good practice in responsible investment. We participate in a range of industry groups in order to gain the opportunity to collaborate on, influence, and obtain enhanced knowledge of leading ESG issues and challenges within the industry.

We are a member of **CDP**, which allows us access to environmental data for all companies that report to CDP. Through our membership, we participate in collaborative engagements, such as the CDP non-disclosure campaign (NDC). The NDC aims to drive further corporate transparency around climate change, deforestation and water security by encouraging companies to respond to CDP's disclosure requests. In 2023, we joined the CDP Science-Based Targets (SBT) Campaign, to encourage portfolio companies to commit to and set 1.5°C-aligned science-based targets.

CFA UK's mission is to build a better investment profession serving the public interest by educating investment professionals and by promoting and enforcing ethical and professional standards. A member of the investment team at Guinness is part of the Sustainability Community Champions group.

Since 2019, we have been members of **Climate Action 100+**, the world's largest-ever investor engagement initiative on climate change. We collectively engaged with a US-listed oil & gas producer across a wide range of topics including remuneration and methane reduction.

The **Independent Investment Management Initiative (IIMI)** aims to contribute effective financial regulation and promote client-centred models of investment management. Our CEO Edward Guinness sits on the board of IIMI.

As the trade body for the UK investment management industry, **The Investment Association (IA)** seeks to represent the industry interests, improve the investment landscape through thematic initiatives which highlight topics such as diversity and inclusion, and by improving standards and best practice.

We became signatories to the **PRI** in 2019, which provides external assurance on our stewardship approach broken down by activity.

We are public supporters of the **Task Force on Climate-Related Financial Disclosures (TCFD)**, and we seek to improved climate-related financial disclosure that is consistent, comparable, reliable, and clear to enhance our investment processes.

The **UK Stewardship Code 2020** sets high stewardship standards for those investing money on behalf of UK savers and pensioners. It comprises a set of 12 'comply and explain' principles for asset managers and asset owners to demonstrate their stewardship role and practice.

The **UK Sustainable Investment and Finance Association (UKSIF)** aims to support its members to grow sustainable and responsible finance in the UK. It also seeks to influence policymaking that promotes the growth of sustainable finance. Our Responsible Investment Lead is a member of the Industry Development Committee, and another member of investment team serves on the Membership Committee.

APPENDIX 3 - DEFINITIONS

BROWN REVENUE	Revenue generated from activities with negative environmental consequences including fossil fuel extraction and generation, and heavy industry.
CO2 EQUIVALENT (CO2E)	A unit of measurement that compares different greenhouse gases based on their contribution to global warming and climate change.
EUROPEAN SUSTAINABLE FINANCIAL DISCLOSURE REGULATION (EU SFDR)	A transparency framework that sets out how sustainability information should be disclosed and to allow investors to assess how sustainability risks are integrated into the investment process. *Source:* European Commission
GREENHOUSE GAS (GHG) PROTOCOL	Provides international greenhouse gas accounting standards and a global framework to help countries measure and manage greenhouse gas emissions from both the private and public sector, and track progress towards climate goals. *Source:* Greenhouse Gas Protocol
GLOBAL INVESTOR STATEMENT (GIS) ON CLIMATE CHANGE	An annual letter urging governments to develop and implement policies for a climate-resilient net-zero transition, outlining key actions needed for governments to leverage trillions in private capital towards addressing the climate crisis. The GIS is organised by the Founding Partners of the Investor Agenda (AIGCC, CDP, Ceres, IGCC, IIGCC, PRI, and UNEP FI). *Source:* The Investor Agenda
GREEN REVENUE	Revenue generated from environmentally sustainable activities that contribute to climate change mitigation, pollution prevention, sustainable water management, green building, alternative energy, and sustainable agriculture.
IMPLIED TEMPERATURE RISE	Forward-looking metrics attempting to simulate a global temperature rise associated with a single company's greenhouse gas emissions. *Source:* UN PRI
NET ZERO	The state in which global greenhouse gas emissions from human activity is in equilibrium with emissions reductions. *Source:* World Economic Forum

SASB	The Sustainability Accounting Standards Board provide a set of standards to support companies across 77 industries in identifying sustainability-related risks and opportunities and then disclosing them to investors. *Source: SASB*
SCIENCE-BASED TARGET (SBT)	Science-based targets are those relating to climate or greenhouse gas emissions reduction that has: 1. A clearly-defined emissions reduction pathway 2. A defined baseline amount and year, and a set target goal date 3. Considered the latest science necessary to meet the goals of the Paris Agreement *Source: SBTi*
SCIENCE-BASED TARGET INITIATIVE (SBTI)	The SBTi supports companies and financial institutions by defining best practice and developing tools and guidance to enable companies to set and validate emission reduction and net-zero targets in line with the Paris Agreement *Source: SBTi*
SCOPE 1	Emissions from sources owned or controlled directly by an organisation, such as burning of gas in on-site boilers. *Source: National Grid*
SCOPE 2	Emissions from indirect sources but used or bought by the organisation, such as energy produced elsewhere but used by the organisation's buildings. *Source: National Grid*
SCOPE 3	Emissions from indirect sources upstream and downstream of the value chain of an organisation that it is responsible for, such as product-level emissions or those from business travel. *Source: National Grid*
SCOPE 4	Emissions 'avoided' by an organisation, or a reduction in emissions that "occurs outside of a product's life cycle or value chain but as a result of the use of that product". *Source: World Economic Forum*

TCFD	The Taskforce on Climate-Related Financial Disclosures was developed in 2015 by the Financial Stability Board (FSB) to develop recommendations for disclosures by the financial industry, including investors, to appropriately assess and price climate-related risks. *Source: TCFD*
THE PARIS AGREEMENT	A legally binding international treaty on climate change, adopted by 196 Parties at the UN Climate Change Conference (COP21) in Paris, France, in 2015. The Paris Agreement aims to limit global average temperature rise to well below 2°C above pre-industrial levels, and to pursue efforts of limiting this to 1.5°C. *Source: UNFCCC*
UNITED KINGDOM SUSTAINABLE FINANCIAL DISCLOSURE REGULATION (UK SDR)	A framework to improve the trust and transparency of sustainable investment products and reduce greenwashing. *Source: FCA*

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