GUINNESS ASSET MANAGEMENT

Sustainable Energy Fund

OUR APPROACH TO RESPONSIBLE INVESTING & ESG

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INTRODUCTION TO RESPONSIBLE INVESTING & ESG

Responsible Investing

The UN PRI defines Responsible Investment (RI) as "a strategy and practice to incorporate environmental, social and governance (ESG) factors in investment decisions and active ownership."

There are several approaches to responsible investing, which the PRI summarises as follows:

CONSIDERING ESG ISSUES WHEN BUILDING A PORTFOLIO (ESG Incorporation)			IMPROVING INVESTEES' ESG PERFORMANCE (active ownership)	
ESG issues can be incorporated into existing investment practices using a combination of three approaches: integration, screening and thematic.			Investors can encourage the companies that are already invested in to improve their ESG risk management.	
Integration	**Screening**	**Thematic**	**Engagement**	**Proxy voting**
Explicitly and systematically including ESG issues in investment analysis and decisions, to better manage risks and improve returns.	Applying filters to lists of potential investments to rule companies in or out of contention for investment, based on investor's preferences, values or ethics.	Seeking to combine attractive risk-return profiles with an intention to contribute to a specific environmental or social outcome. Includes impact investing.	Discussing ESG issues with companies to improve their handling, including disclosure, of such issues. Can be done individually, or in collaboration with other investors.	Formally expressing approval or disapproval through voting on resolutions and proposing shareholder resolutions on specific ESG issues.

This paper outlines our approach to responsible investing when managing the Guinness Sustainable Energy Fund. It defines what ESG is, our ESG methodology and how ESG is incorporated into our investment process for the fund (ESG integration). It also discusses how we engage with companies on ESG issues (active ownership).

We also discuss our designation of the Sustainable Energy Fund as an impact fund, given that it seeks to combine capital appreciation with a positive environmental outcome: in particular, the reduction of carbon emissions globally.

ESG

Fundamental data and rigorous research have always been the cornerstones of our investment process at Guinness Asset Management. Whilst ESG factors have inherently been integral in our company analyses, the emergence and evolution of new data sources has allowed us to establish a more defined score-based framework and thus harness additional investment insights.

This paper outlines what ESG is, our ESG methodology and how ESG is incorporated into our investment process. It also discusses how we engage with companies on ESG issues.

ESG refers to measuring and assessing the potential risk and opportunities from environmental, social and governance factors. Environmental criteria consider how a company performs as a steward of nature; Social criteria examine how it manages relationships with employees, suppliers, customers, and the communities where it operates; and Governance deals with a company's leadership, executive pay, audits, internal controls, and shareholder rights.

Environmental concerns are growing and forcing regulators to take notice and take action. For example, the impact of BP's Deepwater Horizon explosion and oil spill on the Gulf Coast in 2010 reportedly cost the company $62 billion. More recently, the diesel emissions scandal is set to reportedly cost Volkswagen upwards of $46 billion in the US alone. These negative factors have clearly affected the financial results of these (and other) firms.

Similarly, the social impact of a company's behaviour is increasingly being felt on the bottom line. Sexual harassment and gender discrimination accusations have roiled the shares of several household names, with senior leaders or key talent having to step down to address claims of impropriety. Multiple claims of this type can appear to be indicative of a company's culture, which in turn can hamper both its brand and share price.

Governance is a critical aspect of the analysis of any company. The effectiveness of a board and executive management team to set the strategic direction and the culture of the organisation are crucial to a firm's future success. Good governance reduces the principal-agent problem, in that management's incentives are aligned with those of shareholders and stakeholders.

In the asset management industry, interest in ESG has soared since the launch of the United Nations sponsored Principles for Responsible Investments (PRI) in 2006. As proud signatories of the United Nations PRI ourselves, we are committed to adopting and implementing responsible investment principles in a manner that is consistent with our fiduciary responsibilities to clients. We do this by integrating ESG analysis into our investment process and engaging with investee companies on ESG issues.

OUR INVESTMENT PHILOSOPHY

We believe that active investment management, when coupled with the discipline and intellectual integrity of a good, rigorous investment process, will deliver superior performance for investors.

We believe that inefficiencies exist in all markets as a result of:

1. The behaviour of market participants
2. The flow and types of information being open to multiple interpretations

By adopting an approach in which the key absolute and comparative characteristics of all investments are intelligently analysed and measured, we consider ourselves better able to manage and use the mass of information available.

Our investment philosophy leads us to place importance on the following activities:

1. Understanding key macro drivers
2. Intelligent screening of a large group of relevant equities
3. Understanding what we own via interaction and diligent detailed analysis
4. Generating our own ideas rather than relying on investment ideas from third parties
5. Maintaining a structural sell discipline

We believe that ESG analysis is embedded within these a number of these activities. Specifically:

- **Understanding the key macro drivers** of Sustainable Energy markets requires us to form a view on the winners and losers in the energy transition, from an environmental and social perspective. For example, we must understand the environmental drivers behind wind and solar power generation taking market share from fossil fuel power sources, as carbon costs increase.

- Our **intelligent screening of a large group of relevant equities** includes ESG scoring to identify poorer performers.

- **Understanding what we own** involves discussion with investee companies around ESG concerns, whilst our company modelling captures any quantifiable effects of ESG factors.

Simply speaking, we believe that considering ESG issues is a pragmatic part of our day-to-day activities as investors, helping to form our understanding of the business model of a company, its long-term return on capital potential and its mitigation of risk.

1. ESG INTEGRATION

The PRI defines ESG integration as "the explicit and systematic inclusion of financially material ESG information in investment analysis and investment decisions". As long-term investors seeking to identify good 'quality' companies across our portfolios, we believe that ethical and ESG considerations play a direct role in managing company specific risks, and thus can have the potential to have a meaningful impact on long-term returns.

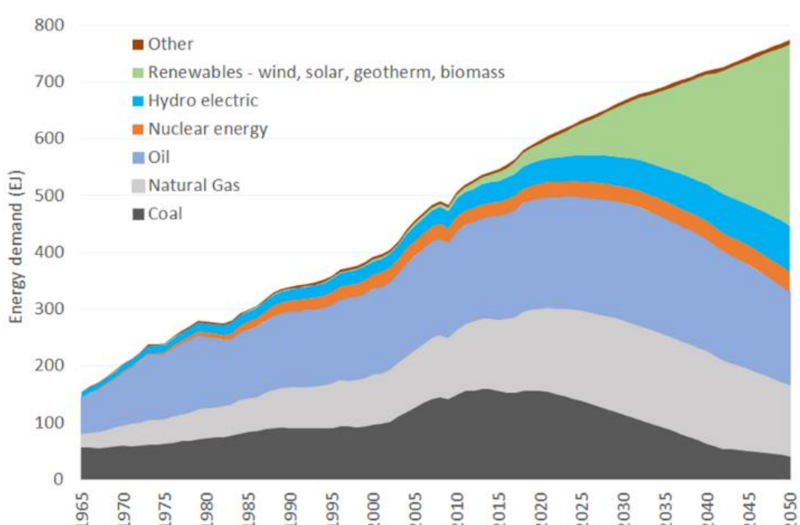
We consider ESG factors to impact both our 'top-down' and 'bottom-up' investment process for the Sustainable Energy Fund:

ESG factors in our 'top-down' analysis

We think of 'top-down' ESG as the various short and long-term trends associated with the global energy transition. Which sustainable energy technologies will have their adoption accelerated owing to their positive environmental credentials? Which technologies will struggle to gain the appropriate social license to expand?

Here we lean on our twenty-two years of energy investing experience, and have developed an in-house global energy transition model which analyses how the world likely moves away from hydrocarbon-based fuels in the coming 50 years. 'top-down' ESG factors at play in the model include issues such as government incentives and subsidies; urban pollution; energy security; and carbon taxation. Many of these will be as important as economic factors – i.e. the falling costs of sustainable energy technologies – in determining the outcome.

Guinness Global Energy Transition Model



This analysis therefore contributes to the identification of which sustainable energy subsectors we think are likely to win through and achieve sustainable growth in the years to come. These subsectors become areas of focus in the portfolio.

ESG factors in our 'bottom-up' analysis

Our 'bottom-up' ESG framework – also developed in-house – focuses more on the ESG factors at a company-by-company level. It begins with a quantitative review based on:

(a) the guidelines specified by the Global Reporting Initiative (GRI) Sustainability Reporting Standards, and

(b) the ESG metrics identified as material by the World Federation of Exchanges (WFE).

The GRI is an independent, international organisation that has developed a widely used sustainability reporting framework for companies to communicate their ESG performance.

The WFE – a global industry group representing over 250 exchanges and central counterparties – publishes a host of reference ESG indicators for exchanges to encourage members to report on. The aim is to improve both disclosure and comparability of ethical reporting.

Using both sources we have developed a scorecard that is used to evaluate a company based on various sector, industry and company-specific ESG criteria. Factors that are considered can be broadly categorised as follows:

Environmental	Social	Governance	
Climate Risk	Human Capital Management	Remuneration	Board Diversity
Resource Efficiency	Health and Safety	Independent Board	Entrenchment
Emission Intensity	Supply Chain	Over-boarding	Audit
		Shareholder Rights	

A key component of the scorecard is 'materiality', by which certain criteria can be weighted according to their importance and likely effect on corporate performance. In practical terms, this means that each scorecard can be tailored to the ESG factors that are most relevant to the sector and industry that a company operates in. We believe this is a superior way to assess the impact of ESG metrics on a company compared to using a generic, one-size-fits-all framework.

We also believe – as active managers – that building our own methodology to assess ESG factors is better than relying solely on third-party scores or using an exclusionary criterion. With an increasing number of investors taking an interest in responsible investing, the largest ESG rating agencies have an ever-growing following. With this comes a greater likelihood of herd behaviour; for example, investing only in companies that are scored highly by a rating agency could result in the company's share price being bid up, thus lowering its future return.

Following a similar logic, our methodology is not based on simply excluding sectors or industries based on third-party recommendations, and our use of exclusion lists is limited. If widely adopted, an exclusion approach could result in pushing down the share price of screened-out companies or industries, thus increasing their expected future return.

The illustration below provides an overview of the process undertaken by us; the approach is best categorised as a 'best-in-class' methodology, whereby each company is given overall percentile ranks relative to other companies within the same industry group and within the wider market.

Guinness ESG scorecard methodology

Identify the relevant ESG metrics material to the industry group in which the company operates.

For example, energy-intensity-per-sales may be deemed highly material for an aircraft manufacturer but not so relevant for a software company.

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Assign weights to the metrics and identify how each metric is scored.

For example, a higher **value** (combined with an improving rate of change) of independent directors is better; having a climate change **policy** is better than not having one.

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Each ESG metric for the company is scored as a percentile vs its industry group peers. Lack of disclosure is penalised with a score of 0.

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Each of the overall scores for **value, deviation** and **policy** is a weighted average of the percentiles from each ESG metric. The weights are customisable.

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Each of the Environmental, Social and Governance scores is a weighted average of their respective **value**, **deviation** and **policy** scores (weighted by # of metrics).

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The overall ESG score is the weighted average of the E, S and G scores.

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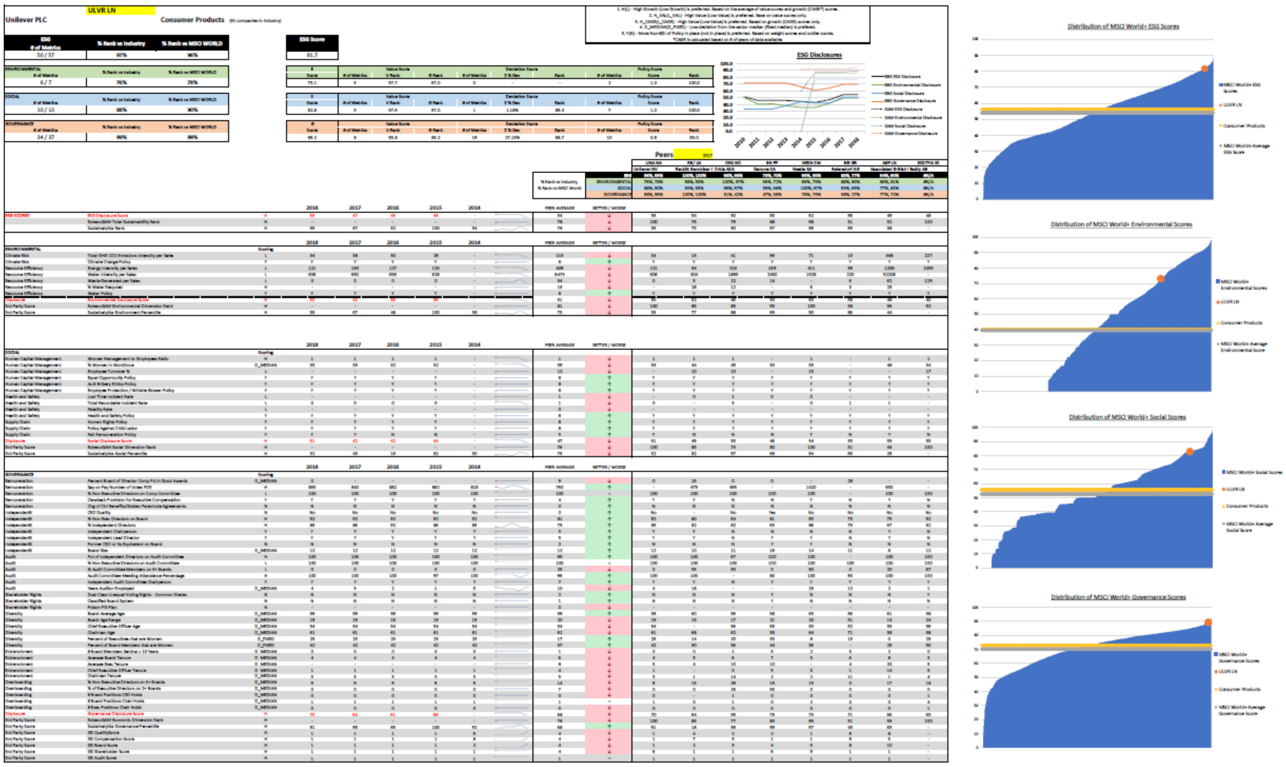
The ESG score is converted into a percentile vs its industry peer group, and vs the overall universe.

Example Guinness ESG scorecard



The scorecard ultimately informs us whether a company's disclosure is improving or worsening, how well the company ranks versus its peers, and how each measure compares to the company's history and its peer group.

We must be aware of the several drawbacks from existing data, and there are of course many issues around disclosure, quality of self-reporting, consistency and frequency. Data deficiencies mean there is a need to go beyond headline scores for ESG insights. To fully understand the ESG risks and opportunities, therefore, we must complement the quantitative analysis with a rigorous qualitative assessment. This involves a thorough review of the company's sustainability report and other contemporary company-specific issues so that we can form more complete and meaningful investment conclusions.

Our 'bottom-up' ESG analysis ultimately helps us assess the risk-adjusted value in the equity of each company. Good ESG behaviours from our companies (for example minimising environmental risks; allocating capital wisely; and integrating well with the communities in which they operate) are important components in defining future return on capital employed and their valuation. However, we will consider owning a company that has poor ESG characteristics if, after our assessment, we see attractive risk-adjusted valuation potential and a positive direction of travel with respect to ESG issues. An example of this would be our ownership of power utilities or independent power producers which have legacy fossil fuel power generation assets. If the company has reached a tipping point towards new renewable assets and the direction of travel is clear, we will consider owning that stock. And rather than divesting, we believe it is more effective to engage with such companies and support management teams that are de-carbonising or making their operations more energy efficient.

It would be remiss of us not to point out that incorporating ESG factors into investment decision-making is in its infancy compared to traditional financial analysis. While negative factors (such as oil spills or harassment) can cause a short and sharp correction in a share price once in the public domain, positive factors (such as improving governance or management alignment) can take years to play out. It is precisely for this reason that we believe investment managers who have already established their ESG credentials, and who are actively engaging with the companies they invest in to help improve their ESG footprint over time, can leverage a potential competitive advantage over those that do not.

2. SCREENING

A second approach to ESG Incorporation, according to the UN PRI, is the application of screening. The PRI defines this as “applying filters to lists of potential investments to rule companies in or out of contention for investment, based on investor’s preferences, values or ethics.”

The Guinness Sustainable Energy fund is focussed on the transition to a low carbon energy economy, but it is not screened for “carbon-free” companies and therefore it is not a “carbon-free” fund. Indeed, we believe that it is contradictory to designate any fund as “carbon-free” since every company has a carbon footprint from either its Scope 1, 2 or 3 emissions. Furthermore, we are content to own companies that may have some legacy carbon emissions, as long as we are confident that the companies are embracing the shift away from hydrocarbons. With these types of companies, we engage with them to ensure that they are aware of climate risks and are positioning their businesses for the transition to a lower carbon world.

With regard to negative screening, the Guinness Sustainable Energy Fund complies with the exclusion list of companies prepared by Norges Bank. The Norges Bank Exclusion list is based on recommendations from the Norwegian Council on Ethics (appointed by the Norwegian Ministry of Finance) and currently contains around 130 companies.

Companies might be placed on the list as a result of serious violations of norms or as a result of what they do (for example, nuclear weapons, cluster munitions or the production of tobacco). Particularly relevant for the Guinness Sustainable Energy Fund is that exclusions cover any power producer or mining company that derives 30 per cent or more of its income from thermal coal or has 30% or more of its operations based around thermal coal.

3. THEMATIC INVESTING

A third approach to ESG incorporation, according to the UN PRI, is the application of thematic investing. The PRI defines this as "seeking to combine attractive risk-return profiles with an intention to contribute to a specific environmental or social outcome. Includes impact investing."

We view the Guinness Sustainable Energy fund as an impact fund in that it seeks to combine capital appreciation with a positive environmental outcome: in particular, the reduction of carbon emissions globally.

The transition towards a low carbon economy is underway, that much is certain. As is the fact that there will be winners and loser from the transition. Companies which sell products and services which displace, sequester, or reduce carbon emissions are set to capture a disproportionate share of future investment whilst helping to contribute towards mitigating climate change: doing well while doing good.

These are the companies which the Guinness Sustainable Energy Fund aims to own. Owning our fund will facilitate global decarbonisation, providing positive environmental impact for investor's portfolios, which we believe permits it the designation of an impact fund.

Each year, the positive impact of our fund is measured by estimating the net carbon emission savings from the activities of of our investee companies. This data is aggregated to provide a portfolio level view of total carbon emissions saved by an investment in the Fund.

We also map our portfolio each year to the UN's 17 sustainable development goals and 169 sustainable development targets, to help us and investors understand the breadth of impact the portfolio is having.

The fund is aligned to the World Bank's nine principles of impact investing and further details are available in our latest "Sustainable Energy Fund: Impact Reporting" document.

ACTIVE OWNERSHIP

As active, long-term investors, we seek to encourage the companies in which we invest to adopt best-in-class ESG practices. We choose to engage with companies around ESG issues via three main approaches:

i) ESG engagement

Guinness adopted a corporate ESG Policy in 2014, which includes the screening of all its investee funds for companies that have poor environmental, social and governance scores. At the corporate level, this screening is carried out using an ESG scorecard taken directly from Bloomberg. We engage annually with companies that score poorly versus their peers, requesting improved ESG disclosure, and that deficiencies in specific aspects of ESG low scoring are addressed.

Direct ESG engagement is also carried out by the Sustainable Energy investment team when meeting the management of our investee, and potential investee, companies. Communication can involve debating 'top-down' ESG themes with management, questioning management on poor 'bottom-up' ESG scores (from our scorecard) or encouraging disclosure on material ESG metrics.

ii) Proxy voting

Guinness has a policy of voting on shareholder resolutions, many of which touch on ESG issues. Proxy voting for companies in the Sustainable Energy portfolio is carried out by the portfolio managers of the fund.

iii) Collaborative action

At Guinness, we also believe in collaborative action around ESG issues: focused programmes of engagement where the sum of the parts is significantly more effective than if each participant attempted to engage across the whole sector.

The most relevant example of this to our energy strategies would be Guinness' membership of Climate Action 100+, which is widely regarded as the world's leading engagement group on the issue of greenhouse gas emissions.

CA100+ investors have committed to engage with the world's largest corporate greenhouse gas emitters to improve their climate performance and ensure transparent disclosure of emissions. As a signatory of the CA100+ initiative, Guinness Asset Management as signed up to a common engagement agenda that seeks commitments from boards and senior management to bolster governance around the energy transition; take action to reduce emissions; and improve disclosure.

IMPORTANT INFORMATION

The Guinness Sustainable Energy Fund is an equity fund. Investors should be willing and able to assume the risks of equity investing. Investment in the Funds carries with it a degree of risk and investors should read the risk factors section in the prospectus before investing.

Past performance is not a guide to the future. The value of this investment and any income arising from it can fall as well as rise. This will be as a result of market, currency and exchange rate fluctuations as well as other factors both directly and indirectly related to the stocks in which it is invested.

Shareholders should note that all or part of the fees and expenses will be charged to the capital of the Fund. This will have the effect of lowering the capital value of your investment.

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The full Fund documentation contains more complete and detailed information of risk, fees, charges and expenses that are to be borne by an investor. The documentation should be read carefully before investing. The full documentation needed to make an investment, including the Prospectus, the KIID and the Application Form are available, free of charge, from the Manager: Link Fund Manager Solutions (Ireland) Ltd, 2 Grand Canal Square, Grand Canal Harbour, Dublin 2, Ireland or the Promoter and Investment Manager: Guinness Asset Management Ltd, 14 Queen Anne's Gate, London SW1H 9AA. **Documentation is also available from the website guinnessfunds.com.**

THIS INVESTMENT IS NOT FOR SALE TO U.S. PERSONS.

The Guinness Sustainable Energy Fund is a sub-fund of Guinness Asset Management Funds PLC (the "Company"), an open-ended umbrella-type investment company, incorporated in Ireland and authorised and supervised by the Central Bank of Ireland. The Funds has been approved by the Financial Conduct Authority for sale in the UK. The Company and the Fund have been recognised in the UK by the FCA pursuant to section 264 of the FSMA. Guinness Asset Management Ltd is authorised and regulated by the Financial Conduct Authority.

The prospectus for Switzerland, the KIID for Switzerland, the articles of association, the annual and semi-annual reports, as well as the list of the buying and selling transactions can be obtained free of charge from the representative in Switzerland, Carnegie Fund Services S.A., 11, rue du Général-Dufour, 1204 Geneva, Switzerland, Tel. +41 22 705 11 77, Fax: + 41 22 705 11 79, www.carnegie-fund-services.ch. The paying agent is Banque Cantonale de Genève, 17 Quai de l'Ile, 1204 Geneva, Switzerland

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