



LGIM ESG score

We have developed a proprietary, rules-based approach to scoring companies from an environmental, social and governance (ESG) perspective. Through our transparent scoring methodology, we believe we can drive fundamental change in the market.

Introducing our ESG score

The LGIM ESG score has been created and used for the following purposes:



To improve market standards globally and monitor ESG developments of our entire investment universe* using quantitative measures

- ESG scores help drive the engagement process that we undertake with investee companies to improve their ESG performance
- ESG scores are aligned with LGIM's voting policy and principles. This means that for companies with poor ESG scores, we are more likely to vote against them at their Annual General Meetings (AGM)



To incentivise companies to improve their ESG profile through a transparent methodology

- Allowing companies to understand what the minimum standards in ESG are globally and how they can improve over time
- Publishing our ESG scores and encouraging companies to engage directly with data providers



To create investment solutions

- The scores are used in a range of equity and fixed income index funds at LGIM. The indices are alternatively weighted to give greater weight to companies that have higher ESG scores and less weight to those with lower scores
- The scores can also be used as a data input into the active investment process, combined with further detailed ESG analysis and fundamental research

We will regularly review and refine the ESG scores, as the availability and reliability of data improves over time. The proprietary nature of these scores means that we can adapt our approach as appropriate for different mandates or engagements.

* Investment universe covers over 16,000 companies

Methodology – how we select indicators and themes

The LGIM ESG score combines an **environmental** score, a **social** score and a **governance** score, with adjustments made for a company's overall levels of **transparency** with regards to ESG issues.

Our methodology starts with an assessment of market-wide ESG issues that affect long-term returns and represent a risk if not addressed – such as climate change or the dilution of shareholder rights. Additionally, themes and risks were assessed for their effect on social cohesion – factors that over the long term underpin sustainable economic growth.

This focus on the overall market health differentiates LGIM's ESG score from many others in the market. For example, commonly used option is to apply third-party ESG ratings to pick individual stocks, based on issues which may be material in one sector, but not in another (e.g. data privacy for tech companies, water usage in mining). Whereas, LGIM's ESG score looks across all sectors and regions.



LGIM's ESG scores were created to raise the bar on issues that can affect the entire investment universe. A given issue might not be as important to every company in the short-term, but if collectively neglected may have a significant impact on the market, the economy and often more broadly on society.



Using the scores, we have set out a transparent framework to assess companies, in order to avoid creating an investment 'black box' and enhance the role of investors to reward and penalise companies based on clear and consistent global standards.

Once material risks and opportunities were identified, potential data points were assessed to see if they are:



Available

Are companies in the investable universe reporting this information?



Quantifiable

Is the information available in a numerical format to be included in the scores?



Reliable

Is the data reported regularly to allow for comparison amongst all the relevant companies?

*The number of metrics may increase as appropriate as underlying data improves

The result of this analysis of over 16,000 companies led to the choice of **28 ESG data points*** which are used in creating the LGIM ESG score.

LGIM ESG score construction

The 28 key LGIM ESG metrics to monitor companies

Environment

- 1. Carbon emissions intensity
- 2. Carbon reserve intensity
- 3. Green revenues

Social diversity

- 4. Women on the board
- 5. Women at the executive level
- 6. Women in management
- 7. Women in the workforce

Board composition

- 15. Independent chair
- 16. Independent directors on the board
- 17. Board tenure

Transparency

- 23. ESG reporting standard
- 24. Verification of ESG reporting
- 25. Scope of GHG emissions
- 26. Tax disclosure
- 27. Director disclosure
- 28. Remuneration disclosure

Human capital

- 8. Bribery and corruption policy
- 9. Freedom of association policy
- 10. Discrimination policy
- 11. Supply chain policy
- 12. Employee incidents
- 13. Business ethics incidents
- 14. Social supply chain incidents

Audit oversight

- 18. Non-audit fees paid to auditors
- 19. Audit committee expertise
- 20. Audit opinion

Investor rights

- 21. Free Float
- 22. Equal voting rights

LGIM **E** score
(Environmental)

LGIM **S** score
(Social)

LGIM **G** score
(Governance)

LGIM **T** score
(Transparency)

LGIM ESG score

LGIM **E** score

Theme: Environment

As a global investor, Legal & General Investment Management is committed to addressing climate change. We believe that companies across all sectors must adapt their business models for a sustainable future.

To address the climate crisis, the world has committed to limiting global warming to well below 2°C compared to the pre-industrial era, as part of the international Paris Agreement. This means that emissions of carbon dioxide – which are the leading cause of global warming – must eventually reach net zero over the next few decades. Therefore, it is essential that companies are encouraged to reduce their carbon emissions. Conversely, companies that are not taking action might represent an investment risk, as technological, regulatory and consumer pressures intensify. Our environment theme is comprised of three indicators:

1. Carbon emissions intensity

We consider the carbon dioxide emissions that a company produces directly ('Scope 1') or is indirectly responsible for through its purchased energy ('Scope 2'). The sum of these emissions is divided by the companies' revenue. This provides a measure of the carbon emissions intensity of a company's activities, adjusted by company size and applicable across different sectors. Data on indirect emissions from companies' supply chain and use of sold products ('Scope 3') is not used.

Companies whose carbon emissions intensity is less than the global median will receive a higher score, whereas companies with more carbon-intensive activities will receive a lower score.

Carbon emissions data is provided by Trucost.

2 Carbon reserve intensity

Carbon reserves are reserves of fossil fuels (oil, coal and gas). Companies owning such reserves present investors with two long-term risks. First, if all known fossil fuel reserves were burnt, the associated carbon emissions would lead to a dramatic rise in global temperatures and extreme weather events. This would cause unprecedented disruption for companies' operations and supply chains, in addition to the significant human costs from forced migration, water stress and pressures on global food supply. The second risk, which is partly a reaction to the first, is that the value of fossil fuel assets may significantly reduce, due to the ongoing energy transition accelerated by policy and technological trends.

Companies with very large fossil fuel reserves or with very carbon-intensive reserves (e.g. coal, tar sands) are more at risk from this change.

This metric looks at the embedded carbon in the fossil fuel reserves owned by a company, divided by a company's market capitalisation, to adjust for company size. This represents a carbon reserves intensity score for a company.

Carbon reserves data is provided by Trucost.

3. Green revenues

The transition to a low-carbon economy presents investment opportunities. New technologies are already leading to new revenue streams in sectors from agriculture to infrastructure and energy, with further innovation anticipated as the world develops alternatives to our current approach to energy and natural resources.

Companies who derive revenues from low-carbon services and technologies are assigned a green revenue score, in proportion to the percentage of company revenue derived from 'green' activities. This is applied as a positive uplift to the companies' score.

Companies that may have a lower score due to their exposure to carbon emissions are rewarded if they have revenue exposures to green sources. This is intended to encourage companies to drive innovation and provide solutions to the energy transition.

We follow our data provider's classification of green revenue streams, but exclude carbon trading, gas- and nuclear-related activities.

Currently, many companies' disclosures are not sufficiently granular enough to identify green revenue streams. We encourage companies to improve disclosures in this area.

Green revenues data is provided by HSBC.

LGIM **S** score

Themes: Social diversity and human capital

A well-run company should seek to promote a diverse workplace, where employees are valued and appropriately rewarded.

Social diversity

We believe that companies that are representative of their employees and society, which bring together a diversity of views, backgrounds, values and perspectives, have a better track record of innovation, decision-making and culture.

Having diverse companies also has macroeconomic benefits, as all talent within an economy is effectively utilised.

Gender has been chosen as a proxy for social diversity within a company. Data on gender is globally reported, provides an easily measured way to review total workforce and management levels, and can also serve as an indicator for a company's overall approach, as companies with strong approaches to gender diversity are also likely to have a commitment to other types of diversity.

We recognise that some companies and sectors face challenges in attracting a diverse group of employees. Therefore, by looking at diversity across the different levels within a company, we seek to capture the development of a pipeline of talent. The social diversity theme tracks four indicators, looking at the percentage of:

1. Women on the board
2. Women at executive level
3. Women in management
4. Women in workforce



Across all four indicators, we consider 30% gender diversity as a minimum standard, with companies below this threshold receiving negative scores. We believe this represents a turning point within organisations, creating a critical mass that can influence change and impact the culture and practices of companies.

Having diversity across the workforce is important for the culture of the organisation and an indicator of the future talent pipeline for management. However, our scores that in most sectors and regions, gender representation is higher in the general workforce than it is at more senior levels.

Social diversity data is provided by Refinitiv.



Human capital

People are the most important assets for any company. Attracting and retaining the best talent, motivating them to be innovative, efficient and committed to the goal of the company is key for future success. A number of indicators can allow investors to get a sense of how companies manage the risks and opportunities associated with their workforce. We have chosen to use the strength of companies' social policies, checked against social incident rates, as proxies for how companies value, respect and support their employees and workforce, and how they promote a healthy and engaging work culture.

Policies

We utilise four human capital indicators to capture whether companies have sufficient policies in place with regards to:

1. Discrimination policy

Attracting and supporting a diverse and inclusive workplace is critical to creating a working culture with diversity of thought to support decision-making. A strong policy against discrimination is a key element to achieving this objective.

2. Bribery and corruption policy

Occurrences of bribery and corruption can indicate issues related to culture and employees; we look for reassurance that companies are managing these risks by implementing appropriate policies.

3. Freedom of association policy

The ability of employees to freely form and join unions is a key component of a healthy work culture.

4. Supply chain policy

The strength of the supply chain is critical for most companies and it is a crucial component of applying consistent social standards across the businesses globally. We expect companies to have strong policies for their supplier relationships.

Across each policy category, companies who are deemed to have no formal policies in place receive a negative score. Companies with a formal policy in place receive a neutral score. Finally, companies with adequate to strong policies receive positive scores.

Incidents

We also incorporate incidents into this theme, as a high level of material incidents may indicate that current policies are either of poor quality or insufficiently enforced. As such, we consider:

1. Employee incidents
2. Business ethics incidents
3. Supply chain incidents

A penalty is applied to companies' Human Capital policy score depending on the severity of the incident.

All human capital indicators are provided by Sustainalytics.



LGIM **G** score

Themes: Investor rights, board composition and audit quality

Strong governance practices such as independent boards support the functioning of a well-run company. We have a long history of promoting strong corporate governance on behalf of clients. While recognising that standards vary across markets, we believe there are universal corporate governance best practices to which all companies should adhere.

Investor rights

The ability of shareholders to vote is an important mechanism in the public equity markets, to demonstrate dissent and align the interests of the company and management to that of the owners. In contrast, a diminished ability to hold corporates to account weakens fundamental checks and balances.

Investor rights are therefore assessed based on two data points:

Equal voting rights

LGIM subscribes to the principle of 'one share, one vote', as control of a company should be proportional to the risk being borne by investors. We believe this is both a fundamental right of shareholders and an essential feature of good corporate governance. Without it, investors lack the ability to influence the companies they own and have a say in how their capital is being used.

Companies are tested against three criteria:

1. Does the company have dual-class stocks (e.g. class A/B shares)?
2. Does the company implement a voting cap or ownership restriction?
3. Do you have to own a minimum number of shares in order to vote?

If companies violate any of these three criteria, they are deemed to have unequal voting rights and receive a lower score.

Free float

The greater the number of shares held by dispersed shareholders (free float), the greater the opportunities for shareholders to use their voice for influence and impact. We encourage companies to have a free-float of at least 50%.





Board composition

The board of directors is the primary structure setting corporate strategy and direction, overseeing management's performance and approving the use of investor capital. Having the right composition at the top of a company is an essential element of its success. Maintaining strong corporate governance through a high quality and independent board dilutes the risk of power being concentrated in one or a few people in an organisation and ensures there are appropriate levels of accountability.

This theme is composed of data on three indicators:

Independence of the chair

The chair leads the board, setting agendas for the discussion and ensuring the board has the right people and the right information required to make the best decisions and hold management accountable. As set out in our global voting policy, we therefore expect the chair to be independent upon appointment and throughout their tenure. We assess whether the chair is currently an executive or has been a former executive of the company. A high score is attributed to an independent chair.

Independent directors on the board

An independent board is critical in overseeing the management and capital of a company. We acknowledge that the structure of boards varies between companies and countries. As set out in our global voting policy, we believe that having a minimum of at least 30% independent directors is an essential safeguard for minority shareholders. Companies that fall below this threshold are penalised, whilst companies with a majority of independent directors are rewarded with top scores.

Board tenure

Regular refreshment of the board contributes to a continued independent board with the relevant skillsets. Regular refreshment can also assist in questioning established best practices and avoid 'group think'. However, we equally recognise the value of retaining corporate knowledge within a board, therefore do not wish to see too frequent change. Our methodology reflects our global voting policy in that a lower score is attributed to boards with very high or very low board tenure.



Audit oversight

Having accurate and reliable financial information is the bedrock of investment decision-making and effective corporate governance.

Investors expect companies to demonstrate and explain the established processes and procedures to ensure the independence and robustness of the internal and external audit functions, and the level of oversight from the board.

Audit committee expertise

The audit committee plays a vital role in safeguarding investors' interests. We expect all companies to have at least three independent members on the audit committee, including a "financial expert" as defined by the US Securities and Exchange Commission's rules following the Sarbanes-Oxley Act. Companies who fail to meet this minimum standard are penalised.

Non-audit fees paid to auditors

The extent to which auditors conduct non-audit work (i.e. consulting, IT support, etc.) for an audit client is an important proxy for independence.

Auditors should not audit their own work, and the higher margins available on the non-audit work may affect their willingness to negatively mark the accounts. We do not expect excessive non-audit work to be conducted by the company's external auditors, as this will bring into question the independence of their judgment. In line with our global voting policy, our scoring methodology penalises companies when non-audit fees exceed 50% of the companies' audit-related fees.

Audit opinion of the accounts

An auditor's opinion provides a view into the extent to which a company's financial statements represent a "true and fair" view of a company's financial performance and position. From a score perspective, we only assume that a company is compliant when the opinion is "unqualified" (i.e. a company's financial statements are fairly and appropriately presented, without any exceptions, and in compliance with accounting standards). All other auditor opinions result in a negative score.

All governance indicators are provided by Refinitiv.

LGIM **T** score

Theme: Transparency

In addition to the traditional E, S and G metrics, LGIM also assesses companies on their overall transparency. Without access to comprehensive corporate data, investors are unable to properly assess material risks and opportunities related to their investments.

Our transparency score sets out our expectations with regards to:

ESG reporting standard

Analysing the company's overall reporting on ESG matters and the extent to which it conforms to international standards as well as best practices.

Verification of ESG reporting standards

Assessing whether the company's sustainability report has been externally verified according to a report assurance standard.

Scope of GHG emissions

The extent to which the company reports its greenhouse gas emissions (GHG). Measuring and reporting GHG emissions is essential to a company's ability to manage and limit its contribution to climate change. Companies are scored on the breadth of their GHG emissions reporting in line with the Greenhouse Gas Protocol standards.

Tax disclosure

Assessing whether the company reports taxes paid in each country of operation. The best score requires full country-by-country reporting, a moderate score is given for when some but not all taxes are disclosed, whilst a low score indicates that tax disclosure is happening in only a few or none of the countries of operation.

Director disclosure

Assessing the level of disclosure regarding board directors, including directors' biographies. This information is critical for investors in order to assess the skillsets and relevant experience of director nominees and the overall quality of the board of directors.

Remuneration disclosure

Disclosure of executive pay policy and practices is critical to allow proper analysis of the alignment between pay and performance and to ensure that the quantum of pay is both reasonable and within market standards.

Overall, a company whose disclosure is in line with market best practices will receive higher scores, whereas companies with poor or no disclosure against these measures will receive negative scores.

Assessments on transparency and disclosure are provided by Sustainalytics.



Score calculation

Each of the 28 data points are assessed and scored, creating a sub-score at the theme level.

Individual themes are then aggregated to form the environmental, social, governance and transparency scores.

Companies' final ESG scores are presented between 0 and 100. A high-scoring company will have met most of our criteria for best practice; a company scoring 0 has not met any of our minimum expectations and represents a very significant concern.

Scores are updated twice a year in March and September.



FAQ

How do LGIM's scores account for the different ESG characteristics of companies across industries/sectors?

We recognise the significant variability in the ESG profile of companies depending on their sector and operations. However, our scores focus on the market-wide standards we expect all companies to meet, irrespective of sector.

Why are certain themes or indicators not included?

- **Sector specificity:** some ESG themes and risks are only material to certain sectors. For example, water usage is an important consideration within the industrial sector, but is likely not to be a sufficiently material risk to the telecommunications or information technology sectors.
- **Consistency:** many ESG indicators lack consistent globally accepted definitions. LGIM is supportive of efforts by international standard-setting bodies such as the Task Force on Climate-related Financial Disclosures (TCFD) to address this gap, but recognise that consistency in definitions and measurement approaches remains low for the majority of indicators.
- **Availability:** Although some ESG themes and risks may be both material and relevant to companies around the world, data availability is often poor. For example, employee satisfaction has been linked with improved long-term returns, but data points used to approximate this qualitative factor such as absenteeism rate and employee turnover remain sparse.

Will new indicators be added?

We are committed to regularly review and refine our ESG scores, as data availability and reliability improve over time we will look to add new indicators where relevant. The proprietary nature of these scores means that LGIM can flexibly apply the scores as appropriate for different mandates or engagements.

How can companies amend their score?

We encourage companies to verify the accuracy of the data, which is sourced from third-party data providers as listed. In case of an inaccuracy, we expect companies to first verify their own public disclosures and contact the data providers directly to rectify them. Contact details for our data providers can be found below.

HSBC

research@hsbcib.com

Sustainalytics

+44 (0) 20 3695 3484 or via <https://www.sustainalytics.com/get-in-touch/>

Refinitiv

+44 (0) 800 442 000 or via <https://my.refinitiv.com/content/mytr/en/helpandsupport.html>

Trucost

+44 (0) 20 7160 9800 or via <https://www.trucost.com/contact/>

If you would like to find out more information about LGIM's policies on ESG, please visit the Corporate Governance website: <http://www.lgim.com/uk/en/capabilities/corporate-governance/>

Contact us

For further information about LGIM, please visit lgim.com or contact your usual LGIM representative



Important notice

Please remember the value of your investment and any income from it may fall as well as rise and is not guaranteed. You may get back less than you invest. Recommended investment period: medium to long term, ideally five years or more.

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