

**SCOTTISH
MORTGAGE**
INVESTMENT TRUST

Climate Report

Prepared using the Task Force on Climate-related Financial Disclosures (TCFD) recommendations

MANAGED BY



Introduction

Scottish Mortgage Investment Trust PLC (Scottish Mortgage) is an investment trust listed on the London Stock Exchange. Our aim is to invest in companies that enjoy sustainable competitive advantages in their industries, and which are capable of growing earnings and cash flows at a faster rate than the market average. This is based on our belief that share prices ultimately follow earnings and that a concentrated portfolio of companies capable of above average growth will, over time, deliver above average investment returns.

Baillie Gifford & Co Limited (Baillie Gifford) are appointed by Scottish Mortgage as investment managers and secretaries to the company. Under TCFD the obligation for reporting product-specific disclosures falls to Baillie Gifford & Co Limited as the trust's UK AIFM.

This report explains Scottish Mortgage's approach to addressing climate-related risks and opportunities through our investment process and describes a view of how they may impact the portfolio. It also includes data and metrics to provide additional information. Baillie Gifford produced the report using the recommendations of the Taskforce on Climate-related Financial Disclosures (TCFD), and we expect the content, format, and data to evolve in future versions.

More information on the Scottish Mortgage investment philosophy, process, performance, and other insights can be found on the Scottish Mortgage website www.scottishmortgage.com.

Governance of climate-related risks and opportunities

Details of Baillie Gifford's oversight and management of climate-related risks and opportunities across the firm can be found in the entity-level TCFD-aligned Climate Report on the Baillie Gifford website. At the portfolio level, the assessment and management of such risks and opportunities is the responsibility of the individual investment team.

Implications of climate change for strategy

Scottish Mortgage does not seek specific climate outcomes as part of its investment objective. However, we believe the need to create a more sustainable world represents a huge upside opportunity for companies on the front foot of the transition, and a material downside risk for those who are not. Given our investment time horizon of at least five years, we need to consider the possibility that environmental externalities will become internalised by market forces and regulation and could therefore influence the returns we generate for shareholders.

At Scottish Mortgage we don't believe that carbon foot-printing in isolation is especially helpful. We view carbon footprints as a function of industry exposures rather than a company's ambition around decarbonisation. Some of the companies that are most important to the decarbonisation of the economy will have the highest footprints, for example Tesla or Northvolt. For this reason, we do not believe that the environmental scores assigned by rating providers tell the whole story, and we are prepared to challenge them.

Global efforts to address the emissions responsible for climate change and its physical impacts pose potential 'transitional' and 'physical' risks and opportunities for every portfolio company. Transitional factors include the introduction of new policies, regulations or technologies, while physical factors stem from chronic changes to climate patterns, sea level rise, or more acute severe weather events. The managers believe climate change could materially influence the returns generated for clients. However, assessing the significance and scale of this influence versus other factors over different timeframes is challenging. The managers expect their views to evolve as they gain better insight and understanding.

Below is a current assessment of the climate-related risks and opportunities the portfolio may face over the short, medium and long term under different climate scenarios. This assessment is based on Baillie Gifford's qualitative analysis of the Network for Greening the Financial System's (NGFS) 'orderly', 'disorderly' and 'hothouse world' scenarios.

'Orderly transition' scenarios assume climate policies are introduced early and become gradually more stringent, reaching global net zero emissions around 2050 and likely limiting global warming to below 1.5-2 degrees Celsius on pre-industrial averages.

'Disorderly transition' scenarios assume climate policies are delayed or divergent, requiring sharper emissions reductions achieved at a higher cost in order to limit temperature rise to below 1.5-2 degrees Celsius on pre-industrial averages.

'Hothouse world' scenarios assume only currently implemented policies are preserved, current commitments are not met and emissions continue to rise, with high physical risks and severe social and economic disruption and failure to limit temperature rise.

Short-term risks and opportunities (0-3 years)

Over the next few years, we think climate-related risks for most portfolio holdings are more likely to be transitional than physical. Although evidence shows climate change is already making weather events more erratic and severe, we believe it is unlikely this will reach a systemic level of impact across the portfolio within a five-year timeframe, even under a hothouse world scenario. That said, direct impacts could be significant for some companies.

However, this timeframe is much more significant for the trends in technology, policy and markets shaping the transition. Under both orderly and disorderly transition scenarios, we expect significant opportunities for holdings that are helping to drive the decarbonisation of the economy through technologies like electric vehicles and battery materials for example Tesla, NIO, Northvolt, Climeworks and Redwood Materials. Companies in the portfolio showing leadership in emissions reduction and delivering other climate-positive impacts such as Kering, Upside Foods and Netflix should also benefit. They may avoid regulatory penalties, gain access to advantaged technologies and reinforce their brands.

Conversely, we think that both orderly and disorderly scenarios increase the transitional risks for holdings with significant emissions from their direct operations or value chains. These include holdings such as Wayfair and Amazon which may face higher costs to operate or other restrictions as emissions regulations tighten and the costs of carbon increases.

Under hothouse world scenarios, with a less supportive policy environment and a slower pace of technological progress, the risks and opportunities noted above may not accrue over this time horizon. Indeed, there may be comparative cost penalties to climate leadership. That might allow high emitters and those with carbon-intensive value chains to defer investment or diversification and benefit from near-term cashflows and returns.

Medium-term risks and opportunities (3-10 years)

Over the medium term, which overlaps the typical period that the managers expect to hold new portfolio additions (5-10 years), the impact of an orderly versus disorderly transition may become more divergent. Under an orderly transition, we expect significant opportunities for companies providing climate solutions and those that can reduce their emissions substantially this decade. However, under a more disorderly transition, we expect these opportunities to be more muted as regional diversity in climate policy introduces additional complexity. Smaller, regional companies will face different challenges from those seeking to operate globally. Some may be able to continue to earn returns from high-emitting activities for longer. Others will need to accelerate to low carbon.

Over this timeframe, we also expect the physical impacts of climate change to become more systemic, albeit with little variance between the scenarios until the 2030s. The geographical and sectorial diversity of holdings across the portfolio may provide some resilience to regional climate impacts. However, the portfolio holds some businesses with higher levels of potentially significant geographic concentration such as HDFC, and others reliant on complex international supply chains such as NVIDIA.

Long-term risks and opportunities (10+ years)

Assessing risks and opportunities to the portfolio over these timeframes becomes particularly

challenging due to the increased uncertainties involved. However, we are reasonably confident that under a hothouse world scenario, the impact of physical climate impacts on holdings in the portfolio becomes the chief climate-related risk to returns. This view draws on climate models that show a significantly increased incidence of floods, droughts, wildfires and other climate impacts over the 10+ year timeframe under high-emission scenarios. Even sea level rise could become a significant factor as we approach the mid-century if ice sheet stability decreases markedly. Under these scenarios, the impact on policy, populations and overall economic activity - and thus shareholder returns - is likely to be portfolio-wide and systemic, with very few holdings unaffected. Some companies may face a significant loss of markets and supply chains. However, some companies providing solutions to the climate crisis, such as Climeworks, Northvolt, Redwood, or Upside Foods have the potential to become materially more valuable.

Under orderly or disorderly transition scenarios, we would expect to see the impacts on the portfolio observed in the medium term become further extended and entrenched. Risks and opportunities associated with technologies and markets may become even more significant as the winning forces of the transition emerge, causing the old to fall away. Under a disorderly scenario, we might expect to see regions of the world that were delayed in their transition play 'catch up', offering new opportunities for transition-aligned companies. However, the sheer rapidity of the transition may result in greater policy dislocation and abrupt asset retirement that could transcend individual companies to pose systemic risks to the portfolio.

Approach to climate risk management

Baillie Gifford, the managers of Scottish Mortgage, aim to assess all holdings in the portfolio at least annually as part of their 'climate audit' process. This helps inform their view of climate-related risks and opportunities across the portfolio. The results are shown in the metrics section of this report. Holdings are assessed on two main criteria:

- Their emissions reduction goals and performance. Holdings are categorised as 'leading', 'preparing', or 'lagging' based on an assessment of their ambition and related strategies to reach net zero emissions by 2050 or before.
- Their potential transition role. Holdings are categorised as 'solutions innovators', 'carbon-light potential influencers', 'potential evolvers' or 'materially challenged' based on an assessment of their strategic positioning relative to the net zero transition.

In addition to the climate audit process, the managers conduct more in-depth research into specific holdings where they feel climate-related risks could be particularly material. This research utilises a variety of information sources and is supported by Baillie Gifford's central climate team. The insights can be discussed at portfolio discussions and are shared among the investment team and colleagues across Baillie Gifford through the research library. Portfolio Managers, Tom Slater and Lawrence Burns, are ultimately responsible for this process and all decision making in managing the Scottish Mortgage portfolio.

To help manage and mitigate risks identified, the managers undertake direct engagement with some holdings where they seek to understand their approach. They encourage steps to minimise risks and maximise opportunities where they believe it is material to the success of the company.

From 2023 onwards, as part of the integration of climate-related risks into Baillie Gifford's overall risk management framework, the climate metrics used in this report will be incorporated into the existing Investment Risk Reports that are provided to the portfolio managers by Baillie Gifford's Investment Risk team. To help provide additional oversight, three core metrics (the Weighted Average Carbon Intensity, fossil fuel exposure and the percentage of holdings not assessed under our 'climate audit' process) will also be reported to Baillie Gifford's ESG Regulatory Sub-Group and either the Equity or Multi Asset and Fixed Income Investment Risk Committees.

Key metrics (as at end December 2022)

The following metrics are used as part of the managers' assessment of climate-related risks and opportunities across the portfolio and they believe they are useful to stakeholders. The metrics include but are not limited to the Carbon Footprint, Weighted Average Carbon Intensity and Total Emissions of the portfolio as required by the UK Financial Conduct Authority's product-level climate disclosure rules. These rules also require Baillie Gifford to determine if a portfolio has concentrated exposures or high exposures to carbon intensive sectors¹ and if so to include quantitative scenario analysis metrics. In such cases, the managers therefore also include climate value-at-risk metrics in this section if they can obtain data for at least 70% of the portfolio (by AUM) from their data supplier. However, unless specifically required, Baillie Gifford has chosen not to provide climate value-at-risk metrics or implied temperature rise metrics for all portfolios as they believe current methodologies do not render them practicable for widespread use and potentially could lead to inaccurate or misleading disclosures particularly when there are significant gaps in the underlying data. More explanation on the metrics used in this section can be found in the footnotes. Any climate targets or objectives set by the portfolio are detailed in the earlier sections of this report.

Note on data availability and benchmarks

Data for some holdings – in particular those not listed on a stock exchange - is currently unavailable from the managers' data supplier. The metrics presented in this section may therefore not cover the entire portfolio. You can find details of the percentage of the portfolio for which data is reported, estimated or unavailable in the 'Emissions data availability and disclosure from holdings' table below. The disclosure of metrics associated with the managers' own assessments of holdings' transition role and targets is intended to help address gaps in data from external data suppliers, and they will continue to explore additional solutions to this in future as the climate data landscape continues to evolve. Cash and derivatives are presently excluded.

Benchmark metrics have been provided for comparison purposes only and relate to the financial benchmark used by the portfolio. The benchmark used for this portfolio is the FTSE All World.

Emissions metrics

Total carbon emissions ² from assets held by the portfolio	Portfolio	Benchmark
Total Scope 1&2 emissions (tCO ₂ e)	32,662	N/A
Total Scope 1,2 & material ³ Scope 3 emissions (tCO ₂ e)	33,775	N/A
Total Scope 3 emissions (tCO ₂ e)	728,567	N/A
Total Scope 1,2&3 emissions (tCO ₂ e)	761,229	N/A

Source: Baillie Gifford, MSCI, FactSet

¹ We define portfolios with 'concentrated exposures or high exposures to carbon intensive sectors' as those with either 1) a weighted average carbon intensity (on a Scope 1,2 & material Scope 3 basis) above that of their respective financial performance benchmark index or the MSCI ACWI index, or 2) a higher level of exposure to holdings generating more than 5% revenues from oil, gas or thermal coal activities than their respective financial performance benchmark index or the MSCI ACWI index.

² The total emissions of the portfolio represent the absolute greenhouse gas emissions from assets held, allocated on an ownership basis. This means a portfolio holding 1% of a company's enterprise value would be attributed 1% of the company's emissions.

³ We define material Scope 3 emissions using the original definition provided by the Partnership for Carbon Accounting Financials (PCAF), mapped to GICS sub-industries. This means that our version of material Scope 3 emissions are those produced by holdings classified as oil & gas or mining companies. We acknowledge the updated timeline to also include Scope 3 emissions from those classified as transportation, construction, buildings, materials and industrial companies has changed from 2024 to 2023 and are working to update systems accordingly. (p51, [The Global GHG Accounting and Reporting Standard for the Financial Industry](https://www.carbonaccountingfinancials.com) ([carbonaccountingfinancials.com](https://www.carbonaccountingfinancials.com)))

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Carbon footprint ⁴ of the portfolio	Portfolio	Benchmark
Scope 1&2 emissions (tCO ₂ e) per \$M invested	2	60
Scope 1,2 & material Scope 3 emissions (tCO ₂ e) per \$M invested	2	249
Scope 1,2&3 emissions (tCO ₂ e) per \$M invested	49	418

Source: Baillie Gifford, MSCI, FactSet

Weighted average carbon intensity (WACI) ⁵ of the portfolio	Portfolio	Benchmark
Scope 1&2 emissions (tCO ₂ e) per \$M revenue	18	150
Scope 1,2 & material Scope 3 emissions (tCO ₂ e) per \$M revenue	21	468
Scope 1,2&3 emissions (tCO ₂ e) per \$M revenue	426	901

Source: Baillie Gifford, MSCI, FactSet

Emissions data availability and disclosure from holdings in the portfolio ⁶	Portfolio	Benchmark
% of total AUM invested in holdings where reported Scope 1&2 emissions data is available from our data provider	43	85
% of total AUM invested in holdings where estimated Scope 1&2 emissions data is available from our data provider	23	15
% of total AUM invested in holdings where Scope 1&2 emissions data is not available from our data provider	34	1
% of total AUM invested in holdings where reported Scope 3 emissions data is available from our data provider ⁷	34	46
% of total AUM invested in holdings where estimated Scope 3 emissions data is available from our data provider	66	99
% of total AUM invested in holdings where Scope 3 emissions data is not available from our data provider	34	1
% of total AUM invested in holdings disclosing to CDP annually	29	81

Source: Baillie Gifford, MSCI, CDP, FactSet

Metrics providing additional insights into climate-related risks and opportunities

Exposure to 'climate material' sectors ⁸	Portfolio	Benchmark
% of total AUM invested in companies in 'climate material' sectors	19	34

Source: Baillie Gifford, FactSet

⁴ The carbon footprint of the portfolio represents the aggregated GHG emissions per million £/\$ invested and allows for comparisons of the carbon intensity of different portfolios.

⁵ The WACI of the portfolio represents the aggregated carbon intensities of the companies in a portfolio, scaled by size of holding. The WACI metric therefore helps measure a portfolio's exposure to high carbon intensity companies.

⁶ These metrics provide a guide to the level of reported vs. estimated vs. unavailable data in all emissions metrics for the portfolio. Further explanation of our use of metrics, their quality and coverage, is available in the [Baillie Gifford & Co Climate Report](#).

⁷ In many cases, companies only report part of their Scope 3 emissions (for example business travel). This means that whilst there is some reported data, it does not always equate to full reported Scope 3 emissions across all Scope 3 categories covered by the GHG Protocol. Where all Scope 3 data is estimated by our data provider, it does include emissions across all Scope 3 categories. For consistency, only estimated Scope 3 data is included in carbon calculations.

⁸ Our definition of 'climate-material sectors' uses the TCFD 'carbon related assets' definition, i.e., any company operating in the Energy, Transportation, Buildings and Materials, Agriculture, or Food and Forests sectors, mapped by GICS sub-industry.

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Exposure to fossil fuels	Portfolio	Benchmark
% of total AUM invested in companies with > 5% revenues from oil and/or gas activities ⁹	0	9
% of total AUM invested in companies with > 5% revenues thermal coal mining and sale ¹⁰	0	0
% of total AUM invested in companies with > 5% revenues from thermal coal power generation	0	1

Source: Baillie Gifford, MSCI, FactSet

Metrics providing insights into net zero alignment of holdings

Our assessment of holdings' net zero targets ¹¹	Portfolio
% of total AUM with targets assessed as 'leading'	27
% of total AUM with targets assessed as 'preparing'	23
% of total AUM with targets assessed as 'lagging'	48
% of total AUM with targets not assessed	2

Source: Assessed according to Baillie Gifford's internal assessment framework.

Our assessment of holdings' transition role ¹²	Portfolio
% of total AUM assessed as 'solutions innovators'	16
% of total AUM assessed as 'potential influencers'	47
% of total AUM assessed as 'potential evolvers'	36
% of total AUM assessed as 'materially challenged'	0
% of total AUM not assessed	1

Source: Assessed according to Baillie Gifford's internal assessment framework.

Science-Based Targets ¹³ alignment among holdings	Portfolio	Benchmark
% of total AUM invested in companies with targets approved by Science-Based Targets Initiative	17	34
% of total AUM invested in companies who have committed to set targets approved by the Science-Based Targets Initiative	26	16

Source: SBTi

⁹ Includes oil and/or gas extraction and production, distribution, retail, equipment and services, petrochemicals, pipelines and transportation and refining. Excludes biofuel production and sales, and trading activities.

¹⁰ Includes the mining of thermal coal (including lignite, bituminous, anthracite and steam coal) and its sale to external parties. Excludes metallurgical coal, coal mined for internal power generation, intra-company sales of mined thermal coal and revenue from coal trading.

¹¹ In some cases, portfolios with higher proportions of unlisted or smaller companies may contain a greater proportion of holdings assessed as 'lagging'. This may be due to the relative immaturity of some of these companies' disclosure and net zero alignment strategies, when compared to more established listed and larger companies. More details of this assessment process can be found in the [Baillie Gifford & Co TCFD Climate Report](#)

¹² More details of this assessment process can be found in the [Baillie Gifford & Co TCFD Climate Report](#)

¹³ Using the framework and methodology developed by the Science Based Targets Initiative. 'Approved' companies are those whose net zero targets have been validated by the SBTi. 'Committed' companies are those who have submitted a commitment letter and are in the process of setting and submitting science-based net zero targets or their targets are currently being validated.

Legal Notices

Baillie Gifford uses a combination of internal research and analysis and third-party data sources when preparing ESG-related disclosures.

Prior to using data sourced from a third-party provider, Baillie Gifford conducts appropriate due diligence on the third-party provider including validation of their methodology and assessment of their coverage and then carries out spot checks of the data periodically, escalating issues to the third-party provider where necessary.

However, Baillie Gifford cannot guarantee that such data is complete, up-to-date and/or accurate. Furthermore, information disclosed is based on data established at a specific time which may be liable to change. More generally, the coverage, standardisation, and comparability of ESG data continues to change and develop over time.

This disclosure is not intended to be used for marketing purposes and nor does it constitute investment advice or a recommendation to make (or refrain from making) any kind of investment decision and may not be relied on as such.

The figures in this report are aggregations and calculations which draw upon data from our external data providers, principally MSCI.

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