

# Climate Report

**For the year ending 31 December 2024**

Prepared in accordance with UK rules for product-level Task Force on Climate-related Financial Disclosures (TCFD) reporting.

Managed by

**Baillie Gifford™**

## Introduction

Scottish Mortgage Investment Trust PLC ('Scottish Mortgage') is a Global investment trust that aims to identify, own and support the world's most exceptional growth companies, in one liquid and low-cost portfolio of public and private companies. More information about Scottish Mortgage can be found on the relevant fund pages of the Baillie Gifford website.

This report explains the portfolio managers' approach to addressing climate-related risks and opportunities and describes a current view of how they may impact the portfolio. It also includes metrics to provide useful additional information. They expect the content, format and data to evolve in future versions.

## Governance and management of climate-related risks and opportunities

Details of Baillie Gifford's approach to governing and managing climate-related risks and opportunities across the firm can be found in the entity level **Climate Report** on the Baillie Gifford website. This includes descriptions of the roles and responsibilities of relevant Boards and Committees and integration into overall risk management.

For Scottish Mortgage, the management of climate-related risks and opportunities is the responsibility of the investment team. They undertake research and engagement with specific holdings where they feel that climate-related risks and opportunities could be particularly material to investment outcomes. An example of such engagement over the course of 2024 includes Amazon. Assessing transparency in supply chain decarbonisation remains a priority, and it is encouraging to know that Amazon is increasing their adoption of low-carbon transportation fuels.

The research framework below is used when the portfolio manager is considering potential new investments and challenging existing holdings. It is within this framework that the qualitative analysis of risks and opportunities relating to climate are examined:

### Opportunity

Assess the scale of the opportunity over the next decade.

Consider how the opportunity might evolve and the likelihood of the company capitalising on it.

Determine if the company is exposed to a structural tailwind (favourable long-term trends).

### Edge

Evaluate whether the company has—or is building—a strong competitive advantage.

Analyse whether this competitive edge is strengthening or weakening as the company scales.

### Culture

Examine whether the company's management and culture improve its chances of success.

Assess if the company has a strong social license to operate, meaning it is trusted and accepted by society, and therefore able to execute on its opportunity.

### Valuation

Estimate the potential earnings of the company 5–10 years into the future based on market opportunity and market share.

Consider the trade-off between upside potential and likelihood, as well as the range of possible investment returns that could materialize.

## Implications of climate change for strategy

Climate change and the world's response to it pose potential 'physical' and 'transitional' risks and opportunities for holdings in the portfolio. Physical factors can come from changes to the climate and weather patterns, while transitional factors can come from things like changing policies, technologies or consumer behaviours.

Assessing the potential influence of these risks and opportunities on investment returns is part of the portfolio managers' long-term investment style. However, this is a complex task and they expect their views to continue to change over time. To help them, they think through different versions of the future using a technique called qualitative scenario analysis. At present, they believe this is more useful than quantitative scenario analysis (which is dependent on numerical data and modelling) because it allows them to explore the complexities and knock-on effects of future pathways.

Baillie Gifford has developed three qualitative climate scenarios in partnership with two external organisations: The Deep Transitions project (a collaboration between the universities of Utrecht and Sussex) and Independent Economics (a macroeconomics consultancy). The scenarios are based on NGFS (Network for Greening the Financial System) 'orderly', 'disorderly' and 'hothouse' world scenarios. More detail has been added in areas of interest, including human behaviour, technology adoption and societal change. This is explained further in resources on the **Baillie Gifford website**. The qualitative scenarios describe three different versions of the future:

	Smooth, orderly transition (1.5C by 2100)	Volatile, disorderly transition (<2C by 2100)	'Hothouse' world (>2.5C by 2100)
Climate	Significant but managed change; resilience retained	Worsening impacts	Major challenge to resilience; regional collapses in food/water systems
Politics	Coordination and trade supports transition	Initially divided, then more united	Fractured; protectionism rises
Policies	Well-signalled and proactive; early action	Initially diverse, then higher-cost and sometimes disruptive	Fragmented; supporting incumbents then biased to adaptation
Society	Rapid shifts in behaviour; circular and 'just transition'	Uneven development; self-reliance; inequality	Individualistic; higher levels of inequality, migration and conflict
Energy technologies	Technology tipping points reached early, influencing many sectors	Fragmented energy system limits cost reductions; innovation comes later	Fossil fuel dependency extended, costs higher, late-stage radical solutions
Adaptation responses	Varied and successful; managed across the global economy	Unequal; significant fiscal drain in some countries	Critical: agriculture, water, healthcare, climate defences
Finance	Multi-lateral financial reform supports investment flows to transition	Contradictory investments; market shocks from abrupt policy change	Greater variability; insurance contracts; adaptation costs pull investment from elsewhere

The portfolio managers are able to use these scenarios to explore possible implications for holdings in the portfolio over the short, medium and long term, which are described below. These timeframes have been chosen because they are relevant to the portfolio's investment timeframes, though it is recognised that changes to the climate happen over much longer timeframes.

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

Trends in technology, policy and markets are likely to have more of an impact on the portfolio over the next three years than physical impacts. However, climate change is already making weather events more severe and could be immediately significant for some companies.

Under orderly transition scenarios, there may be significant opportunities for holdings that are directly helping to drive the decarbonisation of the economy. Key enablers in the portfolio, including Climeworks and Redwood Materials, should benefit. Companies showing other forms of strategic leadership, such as Hermes and Atlas Copco, may also benefit from expanding markets.

Though these opportunities will still be present in the disorderly scenario, they are likely to be more volatile and unpredictable across different regions and timeframes. Under disorderly transition scenarios, benefits may accrue to companies best able to manage the volatility, whether through a strong balance sheet, geographical diversification, or portfolio flexibility. Amazon and BYD stands out in this regard.

Both orderly and disorderly scenarios are likely to increase transition risks for companies with more highly carbon intensive products, processes or supply chains. Although the timing will vary in different markets, such companies may face higher costs or risk customer loss as emissions regulations tighten and social perspectives shift. In 2024, the portfolio managers engaged with holdings, such as PDD and TSMC, to understand more about their plans to address these risks.

In a hothouse world scenario, there is risk for companies who have built their business models on pro-climate policy landscapes. However, the portfolio manager believes their particular exposure to companies driving decarbonisation, such as BYD and Tesla, is typified by businesses that are now competitive and resilient in their own right. In contrast, high emitters may find financial advantage in delaying plans to reduce emissions or diversify business models. The portfolio manager considers the resilience of holdings across scenarios to assess and manage such exposure.

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

Over the medium term, the impacts of orderly and disorderly transitions may begin to diverge. Under an orderly transition, there are likely to be significant opportunities at a global scale for companies providing climate solutions. There will also be increased pressure on high-emitting industries to deliver decarbonisation. The industrials and materials companies held in the portfolio, including Atlas Copco and Ferrari, must invest to remain competitive in such a scenario. High-emission companies able to transition with speed and efficiency will see market-expansion opportunities.

Under a disorderly transition, the most significant risk to portfolio holdings is an abrupt and dislocating shift to the policy and regulatory landscape. Companies reliant on legacy practices or unpriced externalities may struggle to adapt to rapid change. The portfolio's significant exposure to the semiconductor industry, including TSMC, NVIDIA and ASML, is reliant on significant quantities of energy and water. Unprepared, these may become more costly and scarce.

Meanwhile, the physical impacts of climate change are expected to become more widespread, especially under the hothouse world scenario. For the portfolio as a whole, the geographical and sectorial mix of holdings may help to provide some resilience. However, some companies have more concentrated geographic exposures, Meituan (China), Coupang (South Korea) and Rappi (Latin America), and others are reliant on complex international supply chains, including e-commerce companies like Amazon and Wayfair. For some, like SpaceX and Zipline, helping others navigate increased transition complexity will become an opportunity.

### **Long-term risks and opportunities (10+ years)**

Assessing risks and opportunities to the portfolio over the long term is challenging due to the uncertainties involved. However, under a hothouse world, and to some extent a disorderly scenario, it is anticipated that physical climate impacts become the main climate-related risk to returns. Impacts on people and economic activity are likely to affect most holdings in the portfolio. There may, however, be some opportunities for companies whose products and services assist with climate adaptation.

Under both orderly or disorderly transition scenarios, the risks and opportunities associated with new technologies and markets may become increasingly material to the portfolio as the 'winners' of the transition emerge, causing the old to fall away. Under a disorderly scenario, regions of the world that were delayed in their transition might need to catch up, offering new opportunities for transition-aligned companies. However, the rushed nature of this process may pose risks due to abrupt policy changes and technology shifts.

## Key Metrics (as at end December 2023)

### Emissions scopes and units

The global standard for measuring entities' greenhouse gas emissions is the Greenhouse Gas Protocol. It contains different 'scopes' of emissions, which are used in this report:

- Scope 1: Emissions produced directly by the entity, typically through the combustion of fossil fuels on site.
- Scope 2: Emissions that occur due to energy used by the entity, often through the off-site generation of electricity in a power station.
- Scope 3: Emissions that occur somewhere in the entity's 'value chain' as a result of its activities. There are 15 different categories including those associated with the raw materials an entity uses and the use of its sold products. Emissions from transport, distribution and business travel are also included.

All emissions metrics use CO<sub>2</sub>e as the unit of greenhouse gases. Carbon dioxide (CO<sub>2</sub>) is the most prevalent greenhouse gas but there are others such as methane which have different levels of warming impact per tonne of emissions. Because of this, it is common for CO<sub>2</sub>e to be used as a common unit to refer to all greenhouse gases emitted by an entity. Its value is equivalent to the total amount of CO<sub>2</sub> that would need to be emitted to achieve the same level of warming impact as the CO<sub>2</sub> plus other greenhouse gases emitted.

### Core emissions metrics

The metrics in this section include the Total Emissions, Carbon Footprint and Weighted Average Carbon Intensity (WACI) of the portfolio as required by the UK Financial Conduct Authority's (FCA) product-level climate disclosure rules. More explanation of all the metrics used can be found in the tables themselves and footnotes. Any climate targets or objectives set by the portfolio are detailed in the earlier sections of this report.

### Data availability

Data for some holdings is currently unavailable from data suppliers. The metrics presented in this section may therefore not relate to the entire portfolio, particularly where holdings are not listed on a stock exchange. Cash and derivatives are presently excluded. For emissions data, are provided on whether data is reported, estimated or unavailable in the 'Emissions data coverage' table. Disclosure of metrics associated with the portfolio managers' own assessments of holdings' targets and transition role is intended to help address gaps in data from external data suppliers, and Baillie Gifford will continue to explore additional solutions in future.

### Additional metrics

Baillie Gifford has also included additional metrics that may be useful in assessing potential climate-related risks and opportunities to the portfolio. These include external data-points such as exposure to material sectors, fossil fuels and alignment with the Science Based Targets initiative.

FCA rules also require Baillie Gifford to determine if a portfolio has concentrated or high exposures to carbon intensive sectors and if so to include quantitative scenario analysis metrics. Such portfolios are defined as those with either: 1) a WACI (on a Scope 1 & 2 basis) above that of its respective financial performance benchmark or the MSCI ACWI index, or 2) a higher level of exposure to holdings generating more than 5% revenues from fossil fuels than its respective financial performance benchmark index or the MSCI ACWI index.

For such portfolios, they also include Climate Value-at-Risk metrics in this section, provided they can obtain data for more than 70% of the portfolio by AUM from the data suppliers. However, unless specifically required, Baillie Gifford has chosen not to provide Climate Value-at-Risk metrics for all portfolios as they believe data and methodology constraints mean they are not practicable for widespread use and potentially could be inaccurate or misleading. They also do not provide Implied Temperature Rise metrics for the same reasons. They continue to engage with data providers as these metrics evolve.

## Year-on-year changes

In line with the requirements of the UK FCA, Baillie Gifford has have included values for previous years alongside the most recent values for most metrics. Where possible, they try and backdate any new metrics they include as the report evolves, but this is not always practicable. **It is important to be aware that any changes in year-on-year metric values may happen for several different reasons** including changes to the portfolio composition, data re-adjustments by the data suppliers, new data being available to the data suppliers, as well as underlying changes within the holdings themselves.

## Benchmarks

Where applicable, Baillie Gifford has provided metrics for the financial benchmark used by the portfolio for comparison purposes. The benchmark used for this portfolio is the FTSE All World.

## Emissions metrics

### Total carbon emissions from assets held by the portfolio

The total emissions of the portfolio represent the absolute greenhouse gas emissions from assets held, allocated on a proportional basis. This means a portfolio holding 1% of a company's enterprise value would be attributed 1% of the company's emissions. This metric will vary due to portfolio size and is therefore not recommended for direct comparison with other portfolios.

	Portfolio		
	2022	2023	2024
Total Scope 1&2 emissions (tCO <sub>2</sub> e)	32,662	55,265	100,703
Total Scope 3 emissions (tCO <sub>2</sub> e)	728,567	1,457,950	1,333,087
Total Scope 1,2 & 3 emissions (tCO <sub>2</sub> e)	761,229	1,513,215	1,433,790

Source: Baillie Gifford, MSCI

## Scottish Mortgage Investment Trust PLC

### Carbon footprint of the portfolio

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.

	Portfolio			Benchmark		
	2022	2023	2024	2022	2023	2024
Scope 1&2 emissions (tCO <sub>2</sub> e) per \$m invested	2	3	6	60	57	45
Scope 1,2&3 emissions (tCO <sub>2</sub> e) per \$m invested	49	88	79	418	401	331

Source: Baillie Gifford, MSCI.

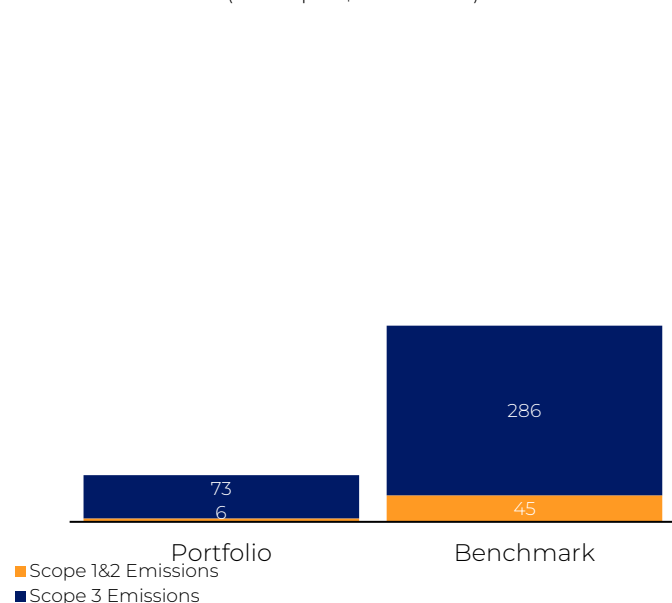
### Weighted average carbon intensity (WACI) of the portfolio

The WACI of the portfolio represents the aggregated carbon intensities per \$m revenue 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 and can be used for comparisons with other portfolios.

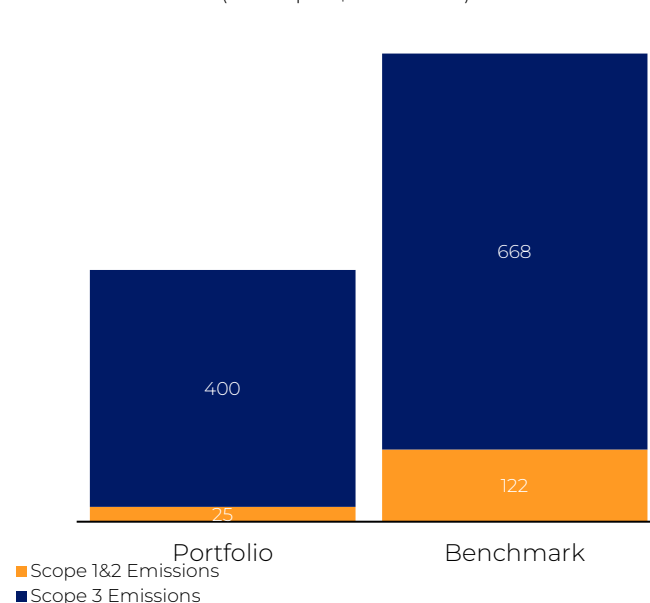
	Portfolio			Benchmark		
	2022	2023	2024	2022	2023	2024
Scope 1&2 emissions (tCO <sub>2</sub> e) per \$m revenue	18	12	25	150	129	122
Scope 1,2&3 emissions (tCO <sub>2</sub> e) per \$m revenue	426	436	425	901	820	790

Source: Baillie Gifford, MSCI.

**Carbon Footprint of the portfolio**  
(tCO<sub>2</sub>e per \$m invested)



**Weighted Average Carbon Intensity (WACI) of the portfolio**  
(tCO<sub>2</sub>e per \$m revenue)



All figures are rounded, so any totals may not sum.

### Emissions data coverage for the portfolio

These metrics are intended to provide a guide to the level of data coverage for portfolio emissions metrics. For reasons of consistency, Baillie Gifford sources all emissions data from its data provider. The metrics show the level of reported vs. estimated vs. unavailable data for different emissions scopes for the portfolio.

It is important to note that the data used for Scope 3 emissions is all estimated. This is because whilst some holdings do report Scope 3 emissions, this typically does not cover all emissions categories within Scope 3, meaning that reported data is not consistent across companies. Estimated Scope 3 data covers all relevant Scope 3 categories and is therefore more consistent.

For additional context, Baillie Gifford includes the percentage of total AUM invested in holdings who disclose to the CDP which is the world's foremost voluntary climate disclosure platform.

	Portfolio			Benchmark		
	2022	2023	2024	2022	2023	2024
% of total AUM for which <b>reported</b> Scope 1&2 emissions data from the data provider is used	43	51	54	85	88	88
% of total AUM for which <b>estimated</b> Scope 1&2 emissions data from the data provider is used	23	18	14	15	12	12
% of total AUM for which Scope 1&2 emissions data is <b>not available</b> from the data provider	34	31	32	1	0	0
% of total AUM for which <b>estimated</b> Scope 3 emissions data from the data provider is used	66	69	68	99	99	100
% of total AUM for which Scope 3 emissions data is <b>not available</b> from the data provider	34	31	32	1	1	0
% of total AUM invested in holdings disclosing to CDP annually	29	37	36	81	84	84

Source: Baillie Gifford, MSCI, CDP.

Additional insight metrics

Exposure to 'climate material' sectors

This metric is intended to show the proportion of the portfolio invested in companies operating in sectors that are materially relevant to addressing climate change. The 2024 definition references IIGCC material and high-impact sector guidance that now include, amongst others, activities such as oil and gas, mining, heavy manufacturing, cement, semiconductors, banking, real estate and agriculture. These sectors have material sources of greenhouse gas emissions in their value chains with a likely greater exposure to transition risk, alongside the opportunity to decarbonise the wider economy. This definition is much broader than the TCFD 'carbon-related assets'<sup>1</sup> definition previously used, which generally explains the higher exposures in 2024. Mapped by Baillie Gifford to GICS sub-industry.

	Portfolio			Benchmark		
	2022	2023	2024	2022	2023	2024
% of total AUM invested in companies in 'climate material' sectors	19	24	29	34	34	60

Source: Baillie Gifford, MSCI, IIGCC.

<sup>1</sup> Prior to 2024 Baillie Gifford's definition used the TCFD 'carbon-related assets' definition, ie any company operating in the Energy, Transportation, Buildings and Materials, Agriculture, or Food and Forests sectors, mapped by GICS sub-industry.

### Exposure to fossil fuels

These metrics show both the percentage of total AUM invested in fossil fuel companies (the first metric) and the percentage of total AUM invested in companies who generate at least 5% of their revenues from different kinds of fossil fuel activities (the second, third and fourth metrics). The latter metrics are included because some companies with fossil fuel revenue generation are not always classified as fossil fuel companies by international classification systems.

	Portfolio			Benchmark		
	2022	2023	2024	2022	2023	2024
% of total AUM invested in companies classified as fossil fuel companies <sup>2</sup>	--	--	0	--	--	3
% of total AUM invested in companies with > 5% revenues from oil and/or gas activities <sup>3</sup>	0	0	0	9	8	9
% of total AUM invested in companies with > 5% revenues from thermal coal mining and sale <sup>4</sup>	0	0	0	0	1	0
% of total AUM invested in companies with > 5% revenues from thermal coal power generation	0	0	0	1	1	1

Source: Baillie Gifford, MSCI.

### Exposure to physical risk

This metric shows the exposure of the portfolio to companies classified by MSCI as having severe or significant exposure to direct physical risk such as extreme weather and coastal flooding. These metrics are in a relatively early stage of development and may not reflect actual risks to the portfolio.

	Portfolio			Benchmark		
	2022	2023	2024	2022	2023	2024
% of total AUM invested in companies classified as having severe or significant physical risk exposure <sup>5</sup>	--	--	2	--	--	11
% of total AUM for which data is <b>not available</b> from the data provider	--	--	34	--	--	1

Source: Baillie Gifford, MSCI.

<sup>2</sup> This metric shows the exposure of the portfolio to any companies classified as fossil fuel companies using the NACE classification system, ie companies whose main activity is classified as any of the following: mining of coal and lignite; extraction of crude petroleum and natural gas; support activities for petroleum and natural gas extraction; manufacture of coke and refined petroleum products. This is a new metric added in 2024.

<sup>3</sup> 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.

<sup>4</sup> 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.

<sup>5</sup> This is a new metric added in 2024, and as such no history is available.

## Transition alignment metrics

### Science-Based Targets alignment among holdings

These metrics provide a view of portfolio holdings' net zero alignment targets, in addition to Baillie Gifford's own assessment in the tables above. The SBTi (Science Based Targets initiative) is the world's foremost certification body for corporate net zero targets. Companies with 'approved' targets are those whose net zero targets have been validated by the SBTi. Companies who have 'committed' are those who have submitted a commitment letter to SBTi and are in the process of setting targets or awaiting their validation.

	Portfolio			Benchmark		
	2022	2023	2024	2022	2023	2024
% of total AUM invested in companies with targets <b>approved</b> by Science-Based Targets initiative	17	14	14	35	39	45
% of total AUM invested in companies who have <b>committed</b> to set targets approved by the Science-Based Targets initiative (ie those who are in the process of setting targets or awaiting their validation)	26	21	4	16	15	11

Source: SBTi

### Low-carbon transition score

This metric shows the exposure of the portfolio to companies most positively aligned to an accelerating energy transition. The score provided by MSCI represents a multi-dimensional risk and opportunity assessment. The higher the score, the more positive the alignment. More details can be found on MSCI's Climate Data and Metrics webpages.

	Portfolio			Benchmark		
	2022	2023	2024	2022	2023	2024
% of total AUM with a top quartile score (7.5-10)	6	11	7	3	5	12
% of total AUM with a bottom quartile score (0-2.5)	0	0	0	2	2	3

Source: MSCI

## 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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