BAILLIE GIFFORD

Baillie Gifford Japanese Smaller Companies Fund

TCFD Climate Report for the year ending 31 December 2022

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

Introduction

Japan Smaller Companies is a Japanese equities strategy that invests in smaller companies (market cap or sales below ¥150 billion at time of purchase) that we believe have enduring competitive advantages and will grow their earnings faster than the market average. Experience has taught us that growth can come in various guises, from companies of all shapes and sizes. Therefore, our portfolios are built from the bottom up, with a diversified mix of companies across sectors and industries. More information on our philosophy, process, performance and other insights can be found on the Baillie Gifford website.

This report explains Japan Smaller Companies approach to addressing climate-related risks and opportunities through our investment process and describes a current view of how they may impact the portfolio. It also includes data and metrics to provide useful additional information. We produced the report using the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD), and we expect the content, format and data to evolve in future versions.

Our 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 our 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 our strategy

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. Japan Smaller Companies does not seek specific climate outcomes as part of its investment objectives. But we factor climate change into our investment strategy as part of our belief that considering broader environmental, social and governance factors is integral to our active, long-term investment style. Our philosophy and process includes a four-question research framework where one of the questions asked of all holdings is: "Taking in turn environmental, social and governance factors, which do you believe are important and relevant to the investment case?"

We believe climate change could materially influence the returns we generate for clients. However, assessing the significance and scale of this influence versus other factors over different timeframes is challenging. We expect our views to evolve as we gain better insight and understanding.

Below we share 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, 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, it is unlikely this will reach a systemic level of impact across the portfolio within a three-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 directly helping to drive the decarbonisation of the economy through their core products or services (for example, Nittoku and Enechange). Companies in the portfolio showing other forms of climate leadership (such as Shima Seiki and KH Neochem) should also benefit. They may avoid regulatory penalties, gain access to advantaged technologies and reinforce their brands.

Conversely, both orderly and disorderly scenarios increase the transitional risks for holdings that make a significant contribution to the portfolio's weighted average carbon intensity (WACI) through their direct or indirect emissions, although the timing may vary in different markets. These include holdings such as Kumiai Chemical Industry may face higher costs to operate or other restrictions as emissions regulations tighten and the costs of carbon increase.

Under hothouse world scenarios 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 we 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, there are likely to be significant opportunities for companies providing climate solutions and those that can reduce their emissions substantially this decade. However, under a more disorderly transition, these opportunities may be more muted as regional diversity in climate policy introduces additional complexity.

Over this timeframe, the physical impacts of climate change are expected to become more systemic. The sectorial diversity of holdings across the portfolio may provide some resilience to regional climate impacts.

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, under a hothouse world scenario, it is anticipated that the influence of physical climate impacts becomes the chief climate-related risk to returns. Under this scenario, 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.

Under orderly or disorderly transition scenarios, the impacts on the portfolio observed in the medium term may 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, regions of the world that were delayed in their transition might be expected to 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.

Our approach to climate risk management

Japan Small Companies aims to assess all holdings in the portfolio at least annually as part of Baillie Gifford’s ‘climate audit’ process. This helps inform our 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, we conduct more in-depth research into specific holdings where we feel climate-related risks could be particularly material. This research utilises a variety of information sources and is supported by our dedicated ESG analyst and Baillie Gifford’s central climate team. The insights can be discussed at stock discussions or at Portfolio Manager meetings and are shared among the investment team and colleagues across Baillie Gifford through our research library.

To help manage and mitigate risks identified, we undertake direct engagement with some holdings where we seek to understand their approach. We encourage steps to minimise risks and maximise opportunities where we believe it is material to the success of the company. You can find more details of individual company engagements in our Stewardship report, in addition to quarterly reports where company engagements are discussed.

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 our assessment of climate-related risks and opportunities across the portfolio and we believe they are useful to investors. 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 sectors[1] and if so to include quantitative scenario analysis metrics. In such cases, we therefore also include climate value-at-risk metrics in this section if we can obtain data for at least 70% of the portfolio (by AUM) from our 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 we 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 our data supplier. The metrics presented in this section may therefore not relate to 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 our own assessments of holdings' transition role and targets is intended to help address gaps in data from external data suppliers, and we 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 MSCI Japan Small Cap.

Emissions metrics

Total carbon emissions[2] from assets held by the portfolio	Portfolio	Benchmark
Total Scope 1&2 emissions (tCO_2e)	19,437	N/A
Total Scope 1,2 & material[3] Scope 3 emissions (tCO_2e)	44,081	N/A
Total Scope 3 emissions (tCO_2e)	147,582	N/A
Total Scope 1,2&3 emissions (tCO_2e)	167,018	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 (carbonaccountingfinancials.com)

Carbon footprint[4] of the portfolio	Portfolio	Benchmark
Scope 1&2 emissions (tCO_2e) per $M invested	35	122
Scope 1,2 & material Scope 3 emissions (tCO_2e) per $M invested	80	252
Scope 1,2&3 emissions (tCO_2e) per $M invested	302	863

Source: Baillie Gifford, MSCI, FactSet

Weighted average carbon intensity (WACI)[5] of the portfolio	Portfolio	Benchmark
Scope 1&2 emissions (tCO_2e) per $M revenue	42	136
Scope 1,2 & material Scope 3 emissions (tCO_2e) per $M revenue	91	229
Scope 1,2&3 emissions (tCO_2e) per $M revenue	465	773

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	24	47
% of total AUM invested in holdings where **estimated** Scope 1&2 emissions data is available from our data provider	69	53
% of total AUM invested in holdings where Scope 1&2 emissions data is **not available** from our data provider	7	0
% of total AUM invested in holdings where **reported** Scope 3 emissions data is available from our data provider[7]	10	34
% of total AUM invested in holdings where **estimated** Scope 3 emissions data is available from our data provider	93	99
% of total AUM invested in holdings where Scope 3 emissions data is **not available** from our data provider	7	1
% of total AUM invested in holdings disclosing to CDP annually	11	41

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	29	51

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.

Exposure to fossil fuels	Portfolio	Benchmark
% of total AUM invested in companies with > 5% revenues from oil and/or gas activities[9]	0	2
% of total AUM invested in companies with > 5% revenues from 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'	6
% of total AUM with targets assessed as 'preparing'	5
% of total AUM with targets assessed as 'lagging'	84
% of total AUM with targets not assessed	6

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'	1
% of total AUM assessed as 'potential influencers'	69
% of total AUM assessed as 'potential evolvers'	23
% of total AUM assessed as 'materially challenged'	0
% of total AUM not assessed	7

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	1	8
% of total AUM invested in companies who have **committed** to set targets approved by the Science-Based Targets Initiative	0	3

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