Baillie Gifford™

Baillie Gifford Shin Nippon PLC

TCFD Climate Report for the year ending 31 December 2023

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

Introduction

Baillie Gifford Shin Nippon ('Shin Nippon') is an investment trust, managed by Baillie Gifford & Co Ltd, which invests in Japanese smaller companies that the portfolio managers believe have enduring competitive advantages and will grow their earnings faster than the market average. The Trust's Board and Managers currently consider a small company to be one that has either market capitalisation or turnover of less than ¥150 billion. Growth can come in various guises, from companies of all shapes and sizes. The portfolio is built from the bottom up, with a diversified mix of companies across sectors and industries. More information about Shin Nippon 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. It is expected 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 TCFD 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 Shin Nippon, the management of climate-related risks and opportunities is the responsibility of the investment team. They undertake tailored research and engagement with specific holdings where they feel that climate-related risks and opportunities could be particularly material to investment outcomes. They also aim to assess all holdings at least annually using the Baillie Gifford 'Climate Audit' process. The results of this are reported in the metrics section of this report and further detail on the process can be found in Baillie Gifford's entity level TCFD Climate Report.

Implications of climate change for strategy

Climate change and global efforts to address 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 new 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 articles 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)

Over the next few years, climate-related risks for most portfolio holdings are more likely to be transitional than physical. Although climate change is already making weather events more severe, this is unlikely to significantly impact the whole portfolio within a three-year timeframe, even under a hothouse world scenario. However, physical impacts could be significant for some companies.

Trends in technology, policy and markets are likely to have more of an impact on the portfolio over this timeframe. Under both orderly and disorderly transition scenarios, there may be significant opportunities for holdings that are directly helping to drive the decarbonisation of the economy. However, in the disorderly scenario this is likely to be more volatile across different regions and sectors. Key enablers of decarbonisation in the portfolio (including Katitas and Enechange) and companies showing other forms of strategic leadership (such as SWCC Showa and KH Neochem) should benefit. They may avoid regulatory penalties, gain access to technology and reinforce their brands.

Conversely, both orderly and disorderly scenarios may increase transitional 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 2023 we engaged with holdings such as Descente to understand more about their plans to address these risks.

Under the hothouse world scenario, the risks and opportunities described above are less likely to accrue over the short term. For high emitters there may even be financial advantages to delaying plans to reduce emissions or diversify business models. However, the portfolio has limited exposure to companies in this position.

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

Over the medium term, the impacts of orderly and disorderly transitions may become more different from each other. Under an orderly transition, there are likely to be significant opportunities at a global scale for companies providing climate solutions and those that can reduce their emissions substantially this decade. Under a disorderly transition, these opportunities may be reduced as regional diversity in climate policy introduces additional complexities for companies to navigate.

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 sectorial mix of holdings may help to provide some resilience.

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 scenario it is anticipated that physical climate impacts become the main climate-related risk to returns. Under this scenario, the 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 orderly or disorderly transition scenarios, the impacts on the portfolio in the long term may become even more significant. Risks and opportunities associated with new technologies and markets may become even more material 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 asset retirement.

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.
- Material Scope 3: An additional category of 'material' scope 3 emissions is also added to this report in line with the recommendations of the Partnership for Carbon Accounting Financials (PCAF). Material scope 3 emissions are the scope 3 emissions from entities operating in certain sectors where such emissions are particularly significant. In the 2022 reporting year this covered the oil and gas and mining sectors, however for the 2023 reporting year it also includes the transportation, construction, buildings, materials and industrial activities sectors, per PCAF guidance.

All emissions metrics use CO_2e as the unit of greenhouse gases. Carbon dioxide (CO_2) 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_2e 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_2 that would need to be emitted to achieve the same level of warming impact as the CO_2 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.

Data availability

Data for some holdings is currently unavailable from the 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, details are provided on whether data is reported, estimated or unavailable in the 'Emissions data coverage' table. The 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 are exposure to 'climate material' sectors and fossil fuels. In addition, they have also provided metrics on 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 by Baillie Gifford as those with either: 1) a WACI (on a Scope 1, 2 & material Scope 3 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 included values for previous years alongside the most recent values for most metrics. **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 MSCI Japan Small Cap.

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.

	2022	2023
	Portfolio	Portfolio
Total Scope 1&2 emissions (tCO_2e)	23,293	14,990
Total Scope 1,2 & material Scope 3 emissions (tCO_2e)	45,193	142,018
Total Scope 3 emissions (tCO_2e)	190,884	208,826
Total Scope 1,2 & 3 emissions (tCO_2e)	214,177	223,817

Source: Baillie Gifford, MSCI, FactSet

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.

	2022		2023	
	Portfolio	Benchmark	Portfolio	Benchmark
Scope 1&2 emissions (tCO_2e) per $m invested	31	122	21	117
Scope 1,2 & material Scope 3 emissions (tCO_2e) per $m invested	61	252	199	602
Scope 1,2&3 emissions (tCO_2e) per $m invested	289	863	313	828

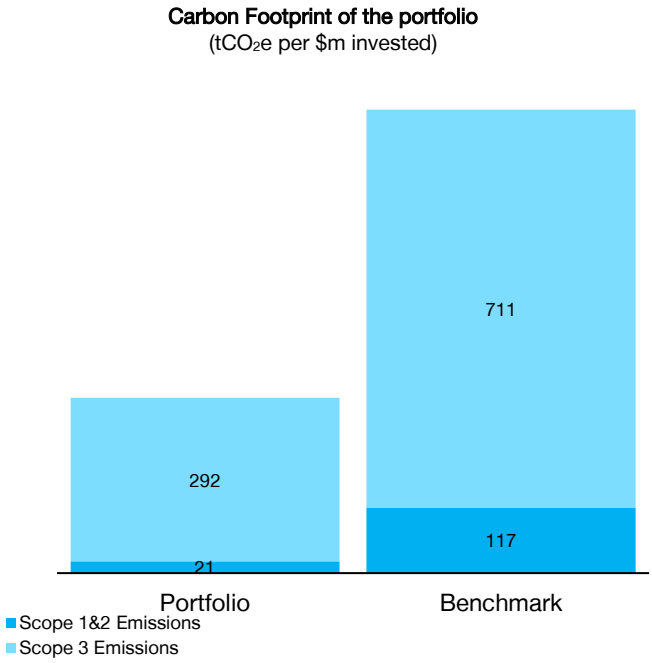
Source: Baillie Gifford, MSCI, FactSet

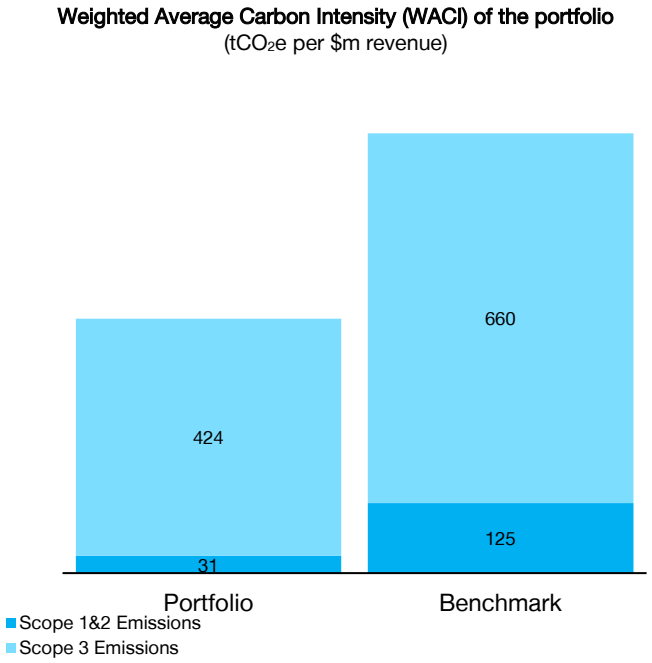
Weighted average carbon intensity (WACI) of the portfolio

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.

	2022		2023	
	Portfolio	Benchmark	Portfolio	Benchmark
Scope 1&2 emissions (tCO_2e) per $m revenue	39	136	31	125
Scope 1,2 & material Scope 3 emissions (tCO_2e) per $m revenue	70	229	265	520
Scope 1,2&3 emissions (tCO_2e) per $m revenue	466	773	455	786

Source: Baillie Gifford, MSCI, FactSet





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.

	2022		2023	
	Portfolio	Benchmark	Portfolio	Benchmark
% of total AUM for which **reported** Scope 1&2 emissions data from the data provider is used	20	47	41	66
% of total AUM for which **estimated** Scope 1&2 emissions data from the data provider is used	67	53	45	33
% of total AUM for which Scope 1&2 emissions data is **not available** from the data provider	13	0	14	1
% of total AUM for which **estimated** Scope 3 emissions data from the data provider is used	87	99	86	99
% of total AUM for which Scope 3 emissions data is **not available** from the data provider	13	1	14	1
% of total AUM invested in holdings disclosing to CDP annually	11	41	26	61

Source: Baillie Gifford, MSCI, CDP, FactSet

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. These sectors may be exposed to higher levels of climate-related risks and opportunities. The definition uses 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.

	2022		2023	
	Portfolio	Benchmark	Portfolio	Benchmark
% of total AUM invested in companies in 'climate material' sectors	30	51	28	52

Source: Baillie Gifford, FactSet

Exposure to fossil fuel activities

These metrics show the exposure of the portfolio to any companies generating at least 5% of their revenues from fossil fuel activities. This is a broad metric which can include companies in fossil fuel sectors and those operating mainly in other sectors.

	2022		2023	
	Portfolio	Benchmark	Portfolio	Benchmark
% of total AUM invested in companies with > 5% revenues from oil and/or gas activities[1]	0	2	0	2
% of total AUM invested in companies with > 5% revenues from thermal coal mining and sale[2]	0	0	0	0
% of total AUM invested in companies with > 5% revenues from thermal coal power generation	0	1	0	2

Source: Baillie Gifford, MSCI, FactSet

Transition alignment metrics

Science-Based Targets alignment among holdings

These metrics provide a view of portfolio holdings' net zero alignment targets. 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.

	2022		2023	
	Portfolio	Benchmark	Portfolio	Benchmark
% of total AUM invested in companies with targets **approved** by Science-Based Targets initiative	1	8	1	12
% of total AUM invested in companies who have **committed** to set targets approved by the Science-Based Targets initiative (ie those who are in the process of setting targets or awaiting their validation)	0	3	0	4

Source: SBTi

[1] 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.

[2] 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.

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 external data providers, principally MSCI.

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