Climate-related Disclosures Report

Report prepared in alignment with the recommendations on the Taskforce on Climate-related Financial Disclosures

31 March 2023

Contents

Introduction to TCFD

The Task Force on Climate-related Financial Disclosures (TCFD) was established in 2015 by the Financial Stability Board (FSB). The TCFD's purpose is to improve and increase reporting of climate-related financial information, and in 2017, the TCFD released its climate-related financial disclosure recommendations.

The eleven disclosure recommendations (Appendix 1) are structured around four thematic areas: governance; strategy; risk management; and metrics and targets. They are designed to make TCFD-aligned disclosures clear and comparable, but with sufficient flexibility to allow reporting entities to leverage existing processes.

The Northern Ireland Local Government Officers' Superannuation Committee (NILGOSC/the Fund) considers the disclosure of climate risks and opportunities to be essential if shareholders are to determine whether the companies in which they invest are adequately addressing the changing climate. Improving the quality, consistency and transparency of climate-related financial disclosures will allow economies to have the necessary information to better assess the impact and effects of an organisation on climate change.

NILGOSC was named on the official list of supporters in June 2020. By publicly declaring support for the TCFD and its recommendations, NILGOSC sought to demonstrate that, alongside other supporters, it is taking action to help build a more transparent and resilient financial system through climate-related disclosure.

TCFD-aligned disclosure is currently voluntary for NILGOSC; however, supporters are expected to encourage TCFD implementation, therefore NILGOSC produced its inaugural Climate-related Disclosures Report for the year ended 31 March 2021, utilising the TCFD's framework to describe and communicate the steps the Fund is taking to manage climate-related risks and incorporate climate risk management into its investment process. Regulatory disclosure is expected to follow in due course, as TCFD-aligned climate risk disclosures have now been mandated in many jurisdictions globally.

In the UK, the regulations came into force in 2021 requiring the trustees of occupational pension schemes in Great Britain to produce and publish a TCFD report. On 1 September 2022, the UK's Department for Levelling Up, Housing and Communities launched an open consultation seeking views on proposals to require Local Government Pension Scheme (LGPS) administering authorities in England and Wales to assess, manage and report on climate-related risks in line with the TCFD recommendations. The consultation ended in November 2022, the responses of which are under review, and legislation is expected to follow for LGPS in those regions. In Northern Ireland, it is expected that the Department for Communities will follow suit with equivalent legislation in due course.

As a result of the TCFD's success in developing a framework of recommendations that have become the foundation for many national and international climate-related disclosure requirements, including the global baseline set by the International Sustainability Standards Board's (ISSB) general sustainability-related and climate-related disclosure standards; in October 2023, it was announced that the taskforce had fulfilled its remit and the TCFD was disbanded. The International Financial Reporting Standards (IFRS) Foundation have taken over the role of monitoring the progress of companies' climate-related disclosures.

NILGOSC continue to support the recommendations, and in 2022/23, procured the long-term provision of TCFD-aligned carbon analytics as part of the remit of its global custodian, the Northern Trust Company (Northern Trust). It is hoped that by working closely with one provider, NILGOSC will benefit from consistent data outputs allowing year-on-year comparison, as well as continued evolution of the ESG analytics service and increased coverage over the length of the contract.

In both the occupational pension scheme regulations, and the proposed drafting accompanying the LGPS consultation, scheme trustees are asked to undertake relevant activities to make disclosures "as far as they are able". NILGOSC has used its third year of voluntary reporting to further develop its activity and capabilities, while also highlighting areas to focus on in subsequent reporting periods.

Governance

The Northern Ireland Local Government Officers' Superannuation Committee (NILGOSC) is a non-departmental public body (NDPB) sponsored by the Department for Communities (Northern Ireland). It was established on 1 April 1950, by the Local Government (Superannuation) Act 1950, to administer and maintain a fund providing pension benefits for employees of local authorities and other admitted bodies.

NILGOSC's corporate vision is "to provide an excellent and sustainable pension scheme" and its mission statement is "to operate the pension scheme efficiently and effectively while enhancing the quality of service provided to stakeholders". NILGOSC's overriding obligation is to act in the best financial interests of the pension scheme beneficiaries, seeking a return that is consistent with a prudent and appropriate level of risk. This includes the risk that environmental, social and governance (ESG) factors, including climate change, negatively impact the value of investments held if not understood and evaluated properly. Therefore, as part of NILGOSC's fiduciary role, it makes the consideration of such matters part of its risk management and investment process.

Climate change, in particular, is a global challenge for governments, corporations and institutional investors alike. NILGOSC acknowledges that the changing climate will have a significant impact on the global economy, corporations and society, whether through direct physical impacts, tighter regulations or reputational damage suffered by those who fail to adequately address the risks posed.

NILGOSC's oversight

Describe the board's oversight of climate-related risks and opportunities

NILGOSC is the corporate body responsible for the administration of the Local Government Pension Scheme (LGPS) in Northern Ireland and is managed by a Management Committee (the Committee). The Committee is responsible for approving and monitoring NILGOSC's investment strategy (which is reviewed triennially). The Committee also regularly reviews NILGOSC's: Statement of Investment Principles; Statement of Responsible Investment; and Climate Risk Statement.

The Statement of Investment Principles and Statement of Responsible Investment set out NILGOSC's approach to incorporating responsible investment considerations, including climate risk, into its investment strategy and decision-making process. The Climate Risk Statement acknowledges the individual, material importance of climate risk as an investment issue and sets out the steps taken to address it, both at a policy and portfolio level. NILGOSC considers that this approach is consistent with its legal duty to act in the best long-term interests of its members and to deliver the long-term returns necessary to ensure an affordable and sustainable pension fund. In addition to setting out how climate risk is taken into account across the range of assets in which it invests, the Climate Risk Statement also sets out how NILGOSC will consider the opportunities that the changing climate presents. All documents are publicly available via NILGOSC's website.

All external managers are appointed by the Committee and selection exercises incorporate mandatory criteria in respect of the ability to take climate risk into account in the investment process. NILGOSC will only appoint investment managers who have demonstrated that they meet an acceptable threshold for ESG capabilities and have the necessary expertise in assessing climate risk. The Committee reviews performance on a quarterly basis by way of a balanced scorecard, which assesses investment managers against a range of qualitative criteria, one of which relates to the inclusion of ESG factors in the decision-making process. In addition, the Committee receives an annual briefing report on each investment manager, which includes a dedicated section on ESG performance.

The Committee receives regular training on responsible investment, including climate risk, through a combination of in-house training and attendance at external conferences.

Furthermore, before making an investment decision, NILGOSC is required to obtain and consider proper advice, from an advisor with appropriate knowledge and experience (as defined by section 36(6) of the Pensions (Northern Ireland) Order 1995).

Management's role

Describe management's role in assessing and managing climate-related risks and opportunities

Day to day implementation of NILGOSC's climate risk policy and responsible investment strategy is delegated to the Secretary and the Investment team, with primary responsibility sitting at a senior level with the Investment Services Manager.

NILGOSC's assets are externally managed. The Investment Team are responsible for monitoring the ESG performance of external managers, specifically managers' compliance with NILGOSC's Climate Risk Statement. NILGOSC also has a bespoke Voting Policy which sets out its expectations for good governance, including how companies manage their impact on society and the environment. This policy sets out how NILGOSC addresses sustainability-related resolutions, including specific reference to climate risk and climate related financial disclosures. Full disclosure of NILGOSC's voting policies and records is available on it's website.

The Investment team are also responsible for liaising with the Investment Advisor to ensure that climate risks and opportunities are taken into account both when setting the investment strategy, and when selecting individual funds and managers. NILGOSC will only appoint investment managers and consultants who have demonstrated that they meet an acceptable threshold for ESG capabilities.

NILGOSC seeks to collaborate with like-minded investors and shares knowledge and resources on managing climate risk through its membership of industry initiatives including: the United Nations supported Principles for Responsible Investment (PRI); the Institutional Investors Group on Climate Change (IIGCC); the CDP (formerly the Carbon Disclosure Project); the UK Pension Scheme Responsible Investment Roundtable; the Occupational Pensions Stewardship Council (OPSC); and Climate Action 100+.

Strategy

NILGOSC aims to invest the assets of the Fund prudently, ensuring an appropriate balance between risk and return so that the benefits promised to members can be provided, and to provide reasonable stability in contribution rates for the employers.

In setting the Fund’s investment strategy, NILGOSC first considers the lowest risk strategy that it could adopt in relation to the Scheme’s liabilities. The investment strategy is designed to achieve a higher return than the lowest risk strategy while maintaining a prudent approach to meeting the Scheme’s liabilities. The strategy is formally reviewed every three years, taking into account the nature and timing of the Fund’s liabilities identified through the triennial actuarial valuation. NILGOSC’s next strategic review is due to commence in 2024.

The Fund’s investments are diversified across various asset classes in order to increase the overall expected returns while reducing the overall level of expected risk. NILGOSC considers it to be in the long-term interests of its members to promote climate risk mitigation and adaption in the implementation of its investment strategy.

Climate related risks and opportunities

Describe the climate-related risks and opportunities the organisation has identified over the short, medium, and long term

As a diversified asset owner, the range of climate related risks and opportunities are varied and constantly evolving.

In its Climate Risk Statement, NILGOSC classifies climate risk into three broad categories, which are applicable across the range of asset classes in which it invests: policy risk; technology risk; and physical risk, the first two of which fall under the bracket of 'transition risk', which is the risk to underlying assets in a portfolio resulting from changing policies, practices and technologies as countries move towards reducing their carbon reliance. The other primary climate-related risk is 'physical risk', which can be either acute or chronic in nature. Different asset classes will be susceptible to different risks, over different time frames, with some assets demonstrating more sensitivity than others, even within a particular asset type or sector. As a general rule, more liquid assets like equities and bonds will be impacted more quickly by policy changes, than real assets such as property or infrastructure.

- **Policy risk**: the impact of policy decisions and regulatory change on global economies, companies and individual investments is considered to be both a short and medium-term risk as the exact timescales of necessary changes remains unclear. Current global policy is not aligned with the aims of the Paris Agreement, which is to keep a global temperature rise this century well below 2°C above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5°C. It is not clear how quickly, if at all, governments will act to meet their commitments.

- The implementation of long-term global climate stabilisation targets and securing sufficient investment in future low carbon patent revenues is considered an opportunity for investors. However, **Technology risk** covers the risk that key low or no carbon technologies do not deliver as planned, as well as the risk incurred if the costs of transitioning to lower emissions technology are more extensive than expected. Technology risk is considered a short to medium term risk and is linked to the pace of policy change.

- **Physical risk**: the impact of extreme weather, flooding, droughts and rising sea levels on industry, physical assets, companies and infrastructure is considered a medium to longer term risk. Physical risks will have financial implications for schemes, such as direct damage to assets and indirect destabilising impacts from supply chain disruption. Other potential impacts of physical changes in the climate are wider economic and social disruption, including mass displacement, environmental-driven migration and social strife.

All of which can impact changes in consumer behaviour and cause shifts in consumer preferences, affecting the market value of assets within the portfolio.

Figure 1: Examples of Short, Medium and Long-term risks

	Short and Medium-term risks	Long-term risks
Acute Risks	Stock price movements	Extreme weather events (flooding, droughts)
Chronic Risks	Policy changes Regulatory changes Technological changes Changes in consumer behaviour Reputational damage Carbon pricing	Rising sea levels Stranded assets Resource availability Temperature extremes Water stress
Assets	Equities Index-linked gilts Absolute return bonds (ARB) Multi-asset credit (MAC)	Infrastructure Property

As referenced, the changing climate may also provide opportunities for investors and, like risks, these will vary across asset classes, sectors and individual portfolio holdings. NILGOSC has instructed its Investment Advisor to consider opportunities arising from climate change in the provision of advice, including the proactive consideration of opportunities to invest in low carbon assets. With respect to its real asset allocation, NILGOSC encourages its managers to consider investment opportunities in low carbon infrastructure and real estate where appropriate.

Impact

Describe the impact of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning

The primary risk to NILGOSC is that its investment strategy and individual portfolios are not properly positioned to avoid the risks, or to avail of the opportunities, presented by the changing climate. As the investment strategy is intrinsically linked to the funding strategy, any material impact on investment returns will result in changes in cost to scheme employers. As set out in the Climate Risk Statement, NILGOSC has developed a suite of procedures and policy documents which set out how climate risks and opportunities are incorporated into its investment processes and practice.

NILGOSC's Corporate Plan includes the strategic objectives of: investing scheme funds in accordance with the Statement of Investment Principles; ensuring effective stewardship in line with the Statement of Responsible Investment; and managing the investment risks posted by climate change. The Plan includes a number of climate related operational actions to assist meeting those objectives, such as undertaking carbon intensity and scenario analyses, and disclosing the outputs of both.

NILGOSC believes that diversification across asset classes, geographies and sectors is an important tool to manage risk, although the Fund recognises that climate risk is systematic and cannot be eliminated through diversification alone. NILGOSC's assets are externally managed, and managers are required to incorporate ESG factors including climate risk, into their investment decision making processes, in line with NILGOSC's Statement of Investment Principles, Statement of Responsible Investment and Climate Risk Statement.

The Investment team works with its external managers to identify elements of individual portfolios which have a higher exposure to carbon. Managers report on ESG performance quarterly and present an annual briefing report to the Committee which includes a dedicated section on ESG performance. Managers are asked to account for how climate risk is integrated into decision making, and managers are also asked to disclose any holdings in coal, oil and gas extraction companies, plus a rationale for those holdings (if any).

A significant portion of NILGOSC's assets are held passively and managed by Legal & General Investment Management (LGIM). Passively managed funds are designed to follow an index, which means no active decision-making is undertaken when selecting stocks, and ESG risks cannot be taken into account. However, a decision can be made as to which index to track. Therefore, as a means of mitigating climate risk in the Fund's passive equity portfolio, in January 2021, NILGOSC transitioned its passive equities (equating to £2.8 billion) to a fund which tracks the climate-tilted 'Solactive L&G Low Carbon Transition Developed Market' index.

The strategy behind the index is to self-decarbonise by reducing exposure to carbon emissions over time. The index aims to reduce carbon intensity by 70% relative to the starting universe, and to reach the goal of achieving Net Zero carbon emissions by 2050, along a decarbonisation pathway of 50% at the outset and a further 7% each subsequent year. The universe of holdings within the index covers all developed markets but is slightly reduced by three exclusions: companies that derive 20% of their revenue from thermal coal mining and power generation; companies in perennial beach of the UN Global Compact; and manufacturers of controversial weapons. Each holding within the remaining universe is assigned a climate score, based on three main indicators: emissions intensity; reserves intensity; and green revenues. Using the overall climate scores, an adaptive tilt away from climate laggards and towards climate leaders is applied to capital allocation within the index.

NILGOSC has also invested in several low carbon opportunities via its infrastructure investments and continues to actively seek out and assess other opportunities. For example, as at 31 March 2023, at least 21.5% of NILGOSC's infrastructure holdings were invested in renewables (including solar, wind and battery storage assets). This figure does not account for committed, but not-yet-drawn, investment.

Challenges continue to exist in respect of the limitations and backward-looking nature of carbon disclosures. NILGOSC undertook its first portfolio-wide carbon analysis as at 31 March 2021, and commissioned the same in the two years since. In the most recent analyses, forward-looking metrics such as scenario analysis were also undertaken. The outcomes of such analysis, as well as continued engagement with investment managers and investment advisor, will help determine next steps in assessing and managing NILGOSC's exposure to various climate outcomes.

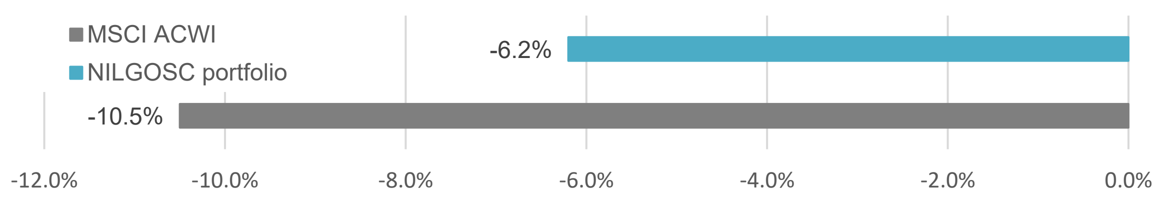
Resilience

Describe the resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario

NILGOSC is a diversified asset owner with investments over many asset classes. The Investment team are responsible for liaising with the Investment Advisor to ensure that the impact and opportunities presented by climate change are taken into account when setting and implementing the investment strategy, and analysis of multiple potential scenarios (including those influenced by climate change) are undertaken by the Investment Advisor when setting the strategy on a triennial basis. So too, it is recommended by TCFD that climate scenario analysis is undertaken at least triennially.

For the year ended 31 March 2022, NILGOSC procured the services of MSCI ESG Research LLC (MSCI) to specifically model the Climate Value-at-Risk (Climate VaR) of the portfolio, which is a forward-looking assessment that can help determine the resilience of an organisation's strategy. MSCI were able to assess 49.8% of the fund (primarily equities and corporate fixed income). The part-portfolio was compared to the performance of a portfolio replicating the MSCI ACWI benchmark. NILGOSC's **Portfolio Climate VaR** within a 2°C transition scenario[1] is presented in Figure 2:

Figure 2: 2°C transition scenario – NILGOSC's Climate VaR at 31 March 2022



As disclosed, NILGOSC's portfolio valuation stood to be negatively affected by -6.2% in a 2°C transition scenario. Although, such a loss presents a considerable risk to the

[1] MSCI utilise the 'Asia-Pacific Integrated Modelling/Computable General Equilibrium' (AIM/CGE) model which represents all economic activities and is designed to have the flexibility to be used at a global and individual country scale.

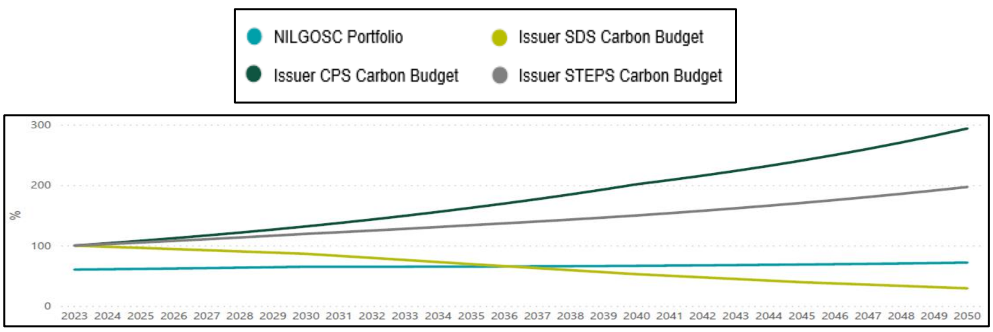
overall Fund, it was found to be less exposed than the benchmark which demonstrated a value loss of -10.5%.

Northern Trust (and their external specialist data provider ISS ESG) take a different approach when undertaking scenario analysis, presenting instead 'scenario alignment analysis' which compares the GHG emissions of the current portfolio with three climate scenarios produced by the International Energy Agency (IEA):

- **Sustainable Development Scenario** (SDS): which is the most ambitious scenario, wherein key energy-related UN Sustainable Development Goals are achieved, reaching global net zero emissions by 2070. In this scenario, temperatures exceed 1.5°C by the early 2030s and reach a peak of 1.7°C around 2050 (with 50% probability);
- **Stated Policies Scenario** (STEPS): reflects policies which have been stated and those outlined under the Nationally Determined Contributions (NDC) made for the Paris Agreement. In this scenario, global warming exceeds 1.5°C by around 2030 and leads to a 2.6°C increase (and rising) by 2100 (with 50% probability); and
- **Current Policies Scenario** (CPS): reflects current policy settings and the current trajectory, projecting global warming of c.5°C by 2050.

Each scenario expects a certain level of temperature increase by 2100 and is thus tied to a carbon budget, which specifies the cumulative amount of GHG emissions permitted in order to remain within a certain temperature. The analysis looks at a more immediate time horizon, demonstrating the pathway to 2050 for each of the three scenarios as well as the NILGOSC portfolio, based primarily on sectoral Scope 1 and 2 emission intensity:

Figure 3: NILGOSC's Portfolio Emissions Pathways vs. Climate Scenarios budgets at 31 March 2023



The ISS ESG scenario analysis combines the IEA scenarios with the Sectoral Decarbonisation Approach (SDA) as developed by the Science-based Targets Initiative (SBTi[2]), allocating a carbon budget to each company, based on its market share and the expected emissions trajectory associated with that sector.

The percentage alignment is normalised at 100% for the portfolio SDS, for the year under review, and the slope of the portfolio line is influenced by the portfolio composition and the ownership ratio in each company. Emission reduction targets are also taken into consideration, and the expected trajectories of companies are adjusted downwards if companies have either: set ambitious decarbonisation targets; have committed to targets; or have approved Science-based Targets (SBTs).

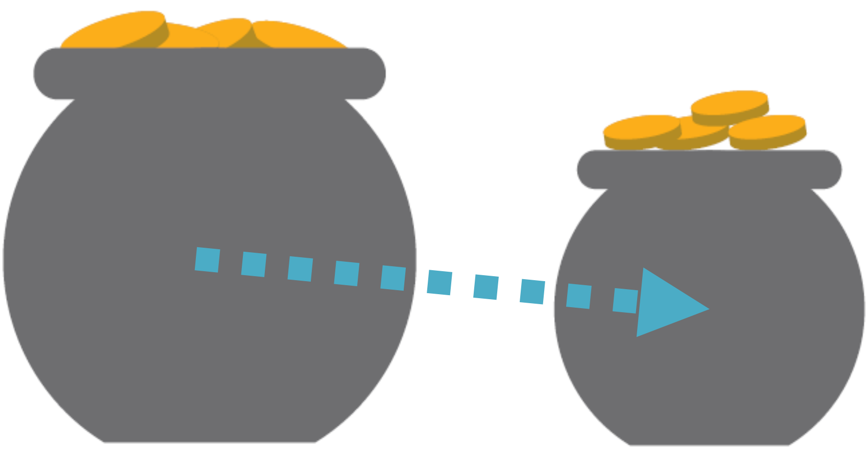
In total Northern Trust were able to assess 45.7% of the fund at year end (this part-portfolio is referred to as the 'NILGOSC portfolio' throughout). The analysis demonstrates that the flightpath of the part-portfolio is Paris-aligned until approximately 2036, at which point, if no changes were made to the 31 March 2023 portfolio, it will contribute towards a +2°C warming outcome by 2050. Despite the portfolio comparing well to the STEPS (stated policies) and CPS (current policies) scenarios, the analysis identifies misalignment with the Paris Agreement, and will be closely monitored. The slope of the portfolio line is influenced by the portfolio composition and the ownership ratio in each company at the date of analysis, and also takes into consideration emission reduction targets. The expected trajectories of companies will be adjusted downwards if companies set either ambitious targets, committed or approved SBTs, and therefore can be influenced by continued engagement with asset managers and the underlying holdings.

[2] The Science Based Targets initiative (SBTi) was established in 2015 to help companies set emission reduction targets in line with climate science and the Paris Agreement goals. Best practice as identified by SBTi is for companies to adopt transition plans covering scope 1, 2 and 3 emissions, set out short-term milestones, ensure effective board-level governance and link executive compensation to the company's adopted milestones. Companies must use the SBTI's criteria to set a target(s), submitting the target(s) to the SBTi for official validation and approval.

Separately, a number of the segregated mandate managers (not otherwise encompassed by the portion of NILGOSC's Fund that MSCI or Northern Trust could assess) have carried out scenario analysis on the portfolios managed on NILGOSC's behalf (particularly the property managers) in order to assist the prioritisation of engagement activities and identify further opportunities to mitigate exposure to climate hazards.

When assessing the valuation of the Fund as a whole, the Scheme actuary undertook climate scenario analysis in order to test the resilience of the Fund to climate related risks over the 10-20 year time horizon. The scenarios considered included a Paris-aligned orderly transition, a fragmented base case transition and a disorderly transition, demonstrating the volatility of the funding level over the medium term. Similarly, in the delivery of the triennial strategy review in 2021, detailed modelling was carried out by NILGOSC's Investment Advisor, quantifying the VaR under various strategies and stressors. The Capital Market Assumptions (CMAs) used in setting the high-level investment strategy account for climate change indirectly with the view that the effects of climate change are captured in the economic outlook and market pricing that feeds into the return assumptions. NILGOSC's next strategic review is due to commence in 2024.

The use and methods of calculating scenarios to assess climate related issues and their financial implications are evolving. Although it is well documented that translating climate scenario analysis into an investment strategy is challenging, NILGOSC believes it is worthwhile procuring climate-related research in order to support robust decision making.



Risk Management

NILGOSC's processes for identifying and assessing risks

Describe the organisation's processes for identifying and assessing climate-related risks

NILGOSC's Climate Risk Statement sets out how it will identify and classify climate risks together with the steps which it will take, both at a policy and portfolio level. Day-to-day, climate related factors and risks are managed on a delegated basis by individual investment managers. The Statement requires that, where climate change produces a financial risk for a particular investment, NILGOSC expects this to be a fundamental part of the investment decision-making process and will monitor such decisions accordingly. Quarterly reporting requirements, including engagement activity, are set out in contractual arrangements and are subject to ongoing review by the Investment team.

NILGOSC has instructed its Investment Advisor to consider the impact and opportunities presented by climate change in the provision of advice, both at an overall strategy level and individual investment level.

Furthermore, NILGOSC's support of and decision to commence voluntarily reporting in line with TCFD recommendations has introduced an annual process, through which, by compiling and preparing the climate-related financial disclosures, the Investment Team are given the opportunity to independently verify and assess the climate-related risks identified by the investment managers. The exercise also provides a means by which the portfolio as a whole can be reviewed, allowing action to be taken if needed.

NILGOSC's processes for managing risk

Describe the organisation's processes for managing climate-related risks

The processes for managing climate-related risks are set out in NILGOSC's Climate Risk Statement. Its approach is essentially a blend of top-down (asset allocation) and bottom-up stewardship (individual holdings). Climate risks and opportunities are taken into account at a strategic asset allocation level with specific advice sought from the Investment Advisor as part of the investment strategic review process.

The primary way in which NILGOSC has managed its climate related risks is through its stewardship activities. NILGOSC has a bespoke Voting Policy which sets out its expectations for good governance, including how companies manage their impact on society and the environment with specific reference to climate risk and climate related financial disclosures. NILGOSC uses its ownership rights to ensure that companies provide accurate and timely disclosure of the material risks and opportunities associated with climate change. By exercising its voting rights and via targeted engagement, NILGOSC encourages companies to be transparent and accountable in respect of their impact on the environment, for example through the setting of targets and timeframes for the reduction of GHG emissions. Where such disclosure is lacking, or where there are shortcomings in the steps taken to address climate risks and opportunities, NILGOSC will engage with companies either directly or by joining together with likeminded investors. In order to demonstrate effective stewardship of the assets it holds, NILGOSC prepares a comprehensive annual Stewardship Report to a June year end, submitting its report to the FRC for assessment. NILGOSC's reports are published on its website.

Examples of such activities undertaken during the year ended 31 March 2023, include:

Date	NILGOSC's activity
August 2022	Alongside 64 other global organisations, NILGOSC endorsed a **Statement on Sustainable Corporate Reporting** calling for stronger alignment of regulatory and standard-setting efforts to establish a baseline for sustainability-related disclosures.

Date	NILGOSC's activity (continued)
September 2022	Successfully admitted as a signatory to the UK **Stewardship Code 2020**, following the review of its first Stewardship Report.
October 2022	Signatory to the CDP's **2022 Science Based Targets Campaign**.
November 2022	Signatory to the **2022 Global Investor Statement to Governments on the Climate Crisis**, to urge global governments to raise their ambition on climate policy.
November 2022	Took part in a Department of Agriculture, Environment and Rural Affairs (DAERA) Cross-Sectoral Advisory Working Group on **Climate Change Reporting by Public Bodies** in Northern Ireland.
December 2022	NILGOSC responded to the PRI's formal global signatory consultation: **PRI in a Changing World**, which set out to explore key issues for the future of responsible investment, including: the PRI's vision, mission and purpose.
March 2023	Alongside 288 financial institutions with nearly $29 trillion USD in assets, NILGOSC became a signatory to the **CDP's 2023 Non-Disclosure campaign**, in calling on companies to report on their environmental impact through CDP's questionnaires. This year, co-signers set out to engage 1,607 of the world's highest-impact companies demanding they disclose environmental data via CDP.
March 2023	Renewed commitment to CDP (formerly the Carbon Disclosure Project), signing up to their **2023 Climate Change, Forests and Water programmes**. NILGOSC supports the CDP's work to improve the management of environmental risk by encouraging listed companies to measure and disclose environmental information, which it does by issuing annual questionnaires on behalf of its investor signatories, requesting standardised information on climate, water and forests.

NILGOSC believes that active engagement is the most effective way to bring about change, both at a policy level and in respect of individual investments. NILGOSC considers divestment to be a blunt instrument which removes the ability to engage effectively with a company or government. NILGOSC does not therefore exclude investments nor divest solely on ESG grounds.

NILGOSC publishes both an annual voting report detailing the Fund's voting activity for assets held by its active managers, as well as detailed quarterly voting reports. In 2021, NILGOSC commenced publishing rationale for votes against management recommendations. In such circumstances, NILGOSC also issues letters to UK and European listed companies explaining the reason for voting against a management recommendation and initiating engagement with the recipient.

The Fund's passively held equity is managed by LGIM, who cast all votes in respect of those assets. LGIM has a robust approach to incorporating climate change factors in its voting decisions, including on specific climate related shareholder resolutions. As disclosed, the passive equities track a climate-tilted index, within which each holding is assigned a climate score.

NILGOSC also encourages its real asset managers to adopt sustainable asset management practices with respect to its infrastructure and property holdings, and monitors progress and performance through regular engagement.

NILGOSC will only appoint investment managers and advisors who have demonstrated the necessary expertise in assessing climate risk. NILGOSC assesses these capabilities at the selection and appointment stage, by applying mandatory ESG criteria in the tender process.

Furthermore, as a TCFD signatory (until its disbandment in October 2023), NILGOSC is in its third year of undertaking an annual carbon analysis of as much of its portfolio as possible, the results of which can be used to monitor progress and aid engagement with the Fund's managers on climate risk, allowing action to be taken if necessary.

How processes are integrated

Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organisation's overall risk management

NILGOSC's Corporate Risk Register includes a number of investment related risks, including two risks that relate specifically to responsible investment, namely the risks that:

- responsible investment considerations are not taken into account in the implementation of the investment strategy; the primary consequences of which are documented as: reduced investment returns; reputational risk resulting in loss of confidence in the Scheme; and the potential for adverse publicity; and
- inaction to address and limit exposure to climate change risk will adversely affect investment returns; the main consequences are recognised as: sub-optimal returns; reduced investment returns; an increasing deficit; and insufficient funds to pay retirement benefits and pensions.

NILGOSC's Corporate Plan sets out the business objectives of complying with its regularly reviewed and updated statements and policies (Statement of Responsible Investment, Climate Risk Statement, Voting Policy, Statement of Investment Principles and Investment Monitoring Guidelines) and additional control measures include: engagement with managers; quarterly monitoring; advice of the Investment Advisor; support of industry initiatives; and disclosing in line with TCFD recommendations.

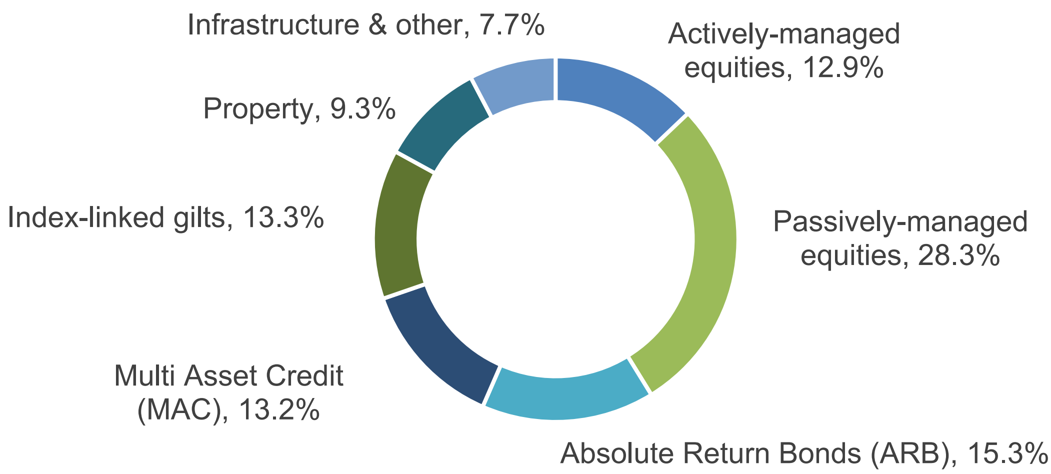
Ownership of the Corporate Risk Register and Corporate Plan sit with the Committee, with quarterly assurance provided by the Head of Investment Services and Investment team.

Metrics and Targets

Overview

The value of the Fund as at 31 March 2023 was £9.5 billion (2021/22 £10.2 billion). NILGOSC's investments are diversified across various asset classes in order to increase overall expected return while reducing the overall level of expected risk.

Figure 4: Assets as a percentage of total Fund at 31 March 2023



In 2022/23, NILGOSC procured the services of its global custodian, Northern Trust, to carry out carbon analysis on the portfolio's assets on a semi-annual basis. At present, the analysis considers only listed equity and corporate fixed income assets. It is hoped that by working closely with one provider, NILGOSC will benefit from both year-on-year comparison, and a continued evolution of Northern Trust's ESG analytics service over an extended period of time.

Northern Trust utilise the data feed of external specialist provider ISS ESG, which is the responsible investment arm of Institutional Shareholder Services Inc. In total, Northern Trust were able to assess 45.7% of the total fund (this part-portfolio is referred to as the 'NILGOSC portfolio' throughout this section). Availability of carbon emissions data for the listed equities is greater than 96% across all mandates, but coverage of fixed income assets, particularly the ARB mandates, is much lower, as indicated in Figure 5, overleaf.

The poor availability of data for asset classes other than listed equities is well documented, however it is hoped that securing a long-term service provider will allow NILGOSC to benefit from the continued evolution of the service and expansion of coverage into other assets.

Figure 5: Carbon Emissions Data Availability[3] (% Market Value)

Actively managed equities - Baillie Gifford	99.1%
Actively managed equities - Unigestion	98.5%
Actively-managed equities – William Blair	96.3%
Passively managed equities - LGIM	97.8%
Absolute Return Bonds (ARB) - T Rowe Price	8.0%
Absolute Return Bonds (ARB) – RLAM	14.9%
Multi Asset Credit (MAC) – BlueBay	20.8%
Multi Asset Credit (MAC) – PIMCO	33.6%

Within the 'Metrics' disclosures, the total portfolio is benchmarked against the MSCI All Country World Index (ACWI). MSCI ACWI is a global market index is designed to represent performance of the full opportunity set of large and mid-cap stocks across 23 developed and 24 emerging markets. It covers more than 2,948 constituents, and approximately 85% of the global investable equity opportunity set, meaning it is a useful proxy for the market at large.

It should be noted that comparison with prior year reporting is not possible. When collating the carbon metrics for comparison across mandates, Northern Trust use the Market Capitalisation of the issuers as the denominator to allocate GHG emissions to each portfolio. MSCI, who provided the analysis for the previous two reports, used Enterprise Value including Cash (EVIC) as the denominator. Both measures are allowable market practices, however EVIC is often considered the preferred measure as it takes an entity's debt into the consideration when valuing. It is expected that Northern Trust will commence utilising the Adjusted Enterprise Value (AEV), which is equivalent to EVIC, as the denominator for 2024 year end reporting, meaning that any past and future analysis will be more readily comparable.

[3] Data Availability represents coverage of each mandate for which the weighted average of corporates' carbon intensity using a Market Capitalisation allocation base is available.

Carbon Emissions Template

To help plug some of the coverage gap, in addition to securing Northern Trust's analysis, NILGOSC also requested that all of its investment managers (equities, ARB, MAC, index linked gilts and property) complete the second iteration of the Carbon Emissions Template (CET) developed by the joint Pensions and Lifetime Savings Association (PLSA), Investment Association (IA) and Association of British Insurers (ABI) working group. Managers were asked to complete data as at 31 March 2023, however it was flagged that given the template was still new to all parties, NILGOSC was keen to work with managers to understand both the availability and limitations of the data set, with the expectation that data outputs will strengthen over time. The outputs were compared to Northern Trust's analysis where possible, as well as to the managers' submissions for the year ended 31 March 2022, and used as a tool for engagement with the managers.

For some managers, the data reported via the CET and that reported by Northern Trust was largely aligned. Discrepancies arose, where for example, the CET requested data using GBP as a denominator, but Northern Trust currently present their data using USD; the presentation and format of data differed across managers; and, in some cases, consistency of starting point or date varied. NILGOSC expects that, as the template evolves and managers become more familiar with it, such issues will be ironed out.

For the purposes of this report, the metrics presented will be those from Northern Trust's analysis of the part-portfolio. The reasons for doing so are to help maintain consistency of data sets and allow the CET format a longer period of bedding in.

However, key takeaways from the second year of CET reporting are as follows:

- A number of the managers (including Unigestion and BlueBay) are now estimating internally, where previously they either relied on external estimations or did not estimate GHG emissions at all. BlueBay's Scope 1 and 2 coverage has increased from 66% to 83%, which corresponds to an increase in internal estimation (and also resulted in a proportionate increase in reported template emissions).

- Baillie Gifford and William Blair do not internally estimate emissions, but both reported an increase in reported emissions from underlying holdings, meaning less reliance was placed on external estimations.

- RLAM's coverage increased from 73% to 88% over the year, and similarly all Scope 1 and 2 emissions were based on reported, rather than estimated data.

- CBRE reported on Scope 3 emissions for the first time, and also flagged a large increase in available actual data for its assets.

- LaSalle also reported that all assets provided emissions data for the year ended 31 March 2023 which is a positive development, albeit the manager noted there may be a lag in receipt of the data for quality checking, so the proportion of 'actual' data is expected to improve gradually over time.

- Last year, 46% of M&G's data was estimated, whereas, for the year ended 31 March 2023, all data provided was based on actual figures.

- Across the board, there was a considerable reduction in 'unavailable' Scope 1 and 2 emissions data. So too, has there been an increase in investments with Scope 3 data (albeit all externally estimated).

For the asset managers, as well as for asset owners, carbon analysis, particularly the portfolio alignment and scenario analyses are evolving. For example, some managers chose not to disclose certain forward-looking metrics for this period, noting concerns over methodology and coverage.

There is also work to be done regarding appropriate measures for certain asset types. For example, there is a debate across the property industry as to how WACI can consistently be calculated for real estate as a sector. The British Property Federation and Association of Real Estate Funds have highlighted the potential variation in the WACI metric depending on the various weighting measures used, such as floor area, rent or valuation.

As above, it is expected that outputs of the CET will strengthen and outputs will converge over time; allowing the data gathered to be compared, integrated into and used to supplement the metrics disclosures that follow.

Metrics

Disclose the metrics used by the organisation to assess climate-related risks and opportunities in line with its strategy and risk management process

Drawing upon the guidance laid out in the TCFD recommendations, the following metric calculations were undertaken:

Absolute emissions metric

- Total GHG emissions (*tons CO2e*)

Emissions intensity metrics

- Carbon Footprint (*tons CO2e/$m invested*)
- Weighted Average Carbon Intensity (*tons CO2e/$m revenue*)

Portfolio alignment metric

- Climate Targets Alignment (%)

Different metrics may be selected for different parts of the portfolio, and the guidance suggests that metric selection should be reviewed and replaced if necessary.

The guidance laid out in the consultation for the 'Local Government Pension Scheme (England and Wales): Governance and reporting of climate change risks' also suggests the disclosure of a data quality metric. Data quality is considered within the carbon risk rating that ISS ESG assign to each issuer, and NILGOSC will work with Northern Trust to secure this analysis as a standalone metric.

Please note that the analysis does not include NILGOSC's carbon footprint as a standalone entity. The analysis is undertaken for the assets in which it invests, which are managed by external investment managers and located globally. Carbon risk metrics aid the assessment of potential climate-related risks to which the Fund is exposed, as well as opportunities, and helps identify areas for further monitoring and/or engagement.

NILGOSC also monitors Stewardship Data, publicly disclosing: quarterly voting records; an annual Voting Review; and a comprehensive annual Stewardship Report (prepared in compliance with the UK Stewardship Code 2020). All disclosures are made via the NILGOSC website.

GHG emissions

Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks

GHG emissions are classified per the Greenhouse Gas Protocol:

- Scope 1 are ‘direct’ emissions, “occurring from sources that are owned or controlled by the institution”;
- Scope 2 are ‘indirect’ emissions, “generated in the production of electricity consumed by the institution”; and
- Scope 3 emissions are composed of all the other ‘indirect’ emissions that are “a consequence of the activities of the institution but occur from sources not owned or controlled by the institution". Examples include: employee’s commuting; waste disposal; the suppliers’ emissions in production; and the end-of-life treatment of sold products.

The greenhouse gases included in the GHG emissions are the seven gases mandated by the Kyoto Protocol: Carbon dioxide (CO_2); Methane (CH_4); Nitrous oxide (N_2O); Hydrofluorocarbons (HFCs); Perfluorocarbons (PFCs); Sulphur hexafluoride (SF_6); and Nitrogen trifluoride (NF_3). These gases contribute directly to climate change due to their positive radiative forcing effect.

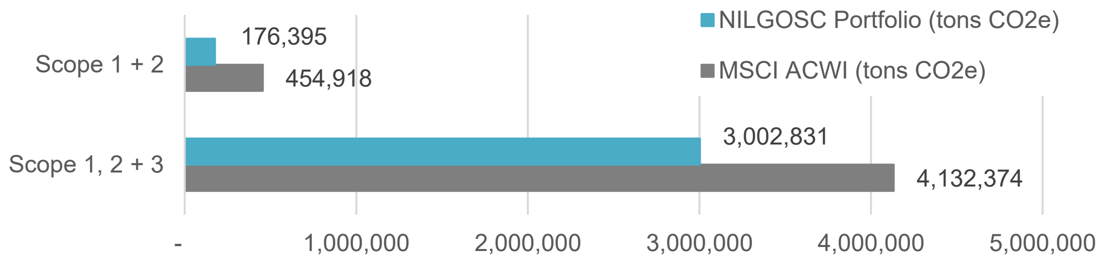
Total GHG emissions are presented as a carbon dioxide equivalent (CO2e), which is a metric measure used to compare the emissions from the various gases on the basis of their global-warming potential, by converting them to the equivalent amount of carbon dioxide with the same global warming potential.

The following disclosures primarily relate only to Scope 1 and Scope 2 GHG emissions, unless expressly highlighted. Where information is unavailable, not reported or does not meet quality standards, the underlying specialist data provider (ISS ESG) can estimate emissions using a proprietary model. It should be noted that definitions of which emissions should be included in Scope 3 are not yet well defined nor consistently calculated, and, as a result, the analysis of Scope 3 emissions is less reliable. NILGOSC has chosen not to place undue focus on that element of the analysis during this reporting cycle.

Total GHG emissions

Total GHG emissions associated with the 'NILGOSC portfolio' (i.e. the portion of the portfolio that could be analysed) as at 31 March 2023 are converted and expressed as Carbon dioxide equivalents in 'tons CO2e'. Emissions are apportioned based on equity ownership.

Figure 6: Total Carbon Emissions across NILGOSC portfolio (tons CO2e)



The full portfolio was compared to the performance of a portfolio replicating the MSCI ACWI benchmark. On a Scope 1 and 2 carbon emissions basis, NILGOSC's portfolio is emitting 61.2% less carbon than benchmark.

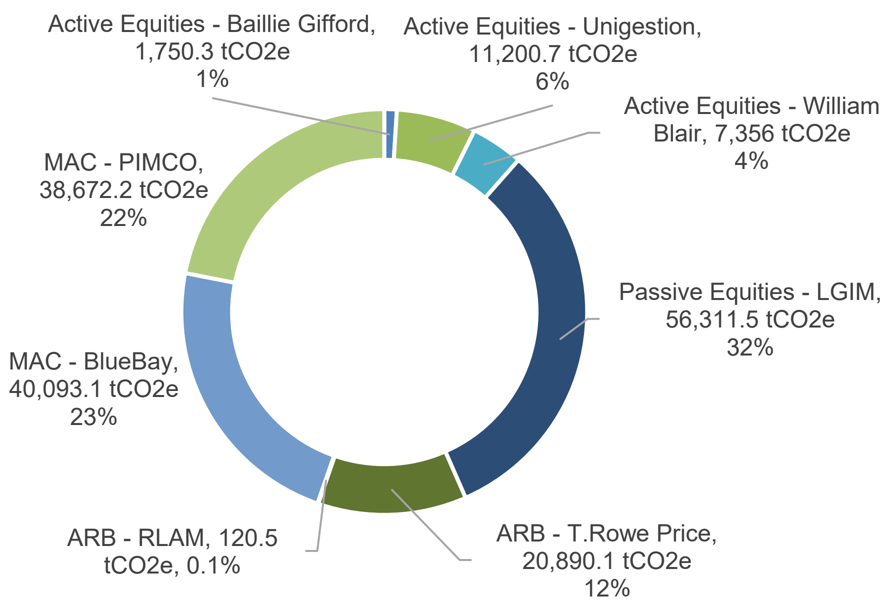
The analysis also demonstrates that collectively Scope 1, 2 and 3 emissions are 27.3% lower than benchmark. However, corporate reporting on Scope 3 emissions remains sparse, incomplete and potentially highly volatile, which poses a challenge for the reviewer to reliably provide an analysis at this time.

Figure 7 demonstrates how the NILGOSC equity and fixed income mandates collectively make up the total carbon emissions of 176,395 tons CO2e; with the largest of the holdings (LGIM's passive mandate) accounting for 32% of that total.

As encountered in the prior years, three of the four fixed income mandates were found to be emitting proportionally more GHG than the equity mandates, despite much lower coverage of in-scope assets.

Coverage of fixed income assets, in particular derivatives and sovereign bonds, is very poor and neither are included within the scope of the assets that Northern Trust currently analyse. Challenges regarding meaningfulness of fixed income data is well documented generally, for example, data at a mandate level can be skewed depending on the sectors within which data can be assessed. In the case of T Rowe Price, only 8.0% of the mandate's corporate constituents could be analysed, but those holdings were primarily in the utilities and industrial sectors, which are high carbon emitters. By comparison, 14.9% of the other ARB mandate (managed by RLAM) could be assessed, of which those holdings are primarily in financial services, which are comparably much lower emitters.

Figure 7: Scope 1 and 2 Carbon Emissions in each mandate (tons CO2e)



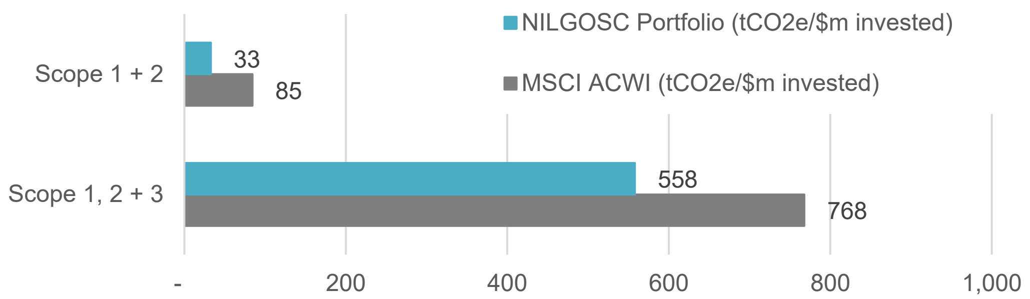
Despite such challenges, NILGOSC is of the view that it is preferable to continue to seek data for non-equity asset classes, with the hope that engagement and disclosure will encourage improvements. NILGOSC will continue to assess the most meaningful way to present such disclosures going forward.

Carbon Footprint

The Carbon footprint reflects the total carbon emissions for which the investor is responsible, apportioned by equity ownership, and therefore normalised by the market value of the portfolio.

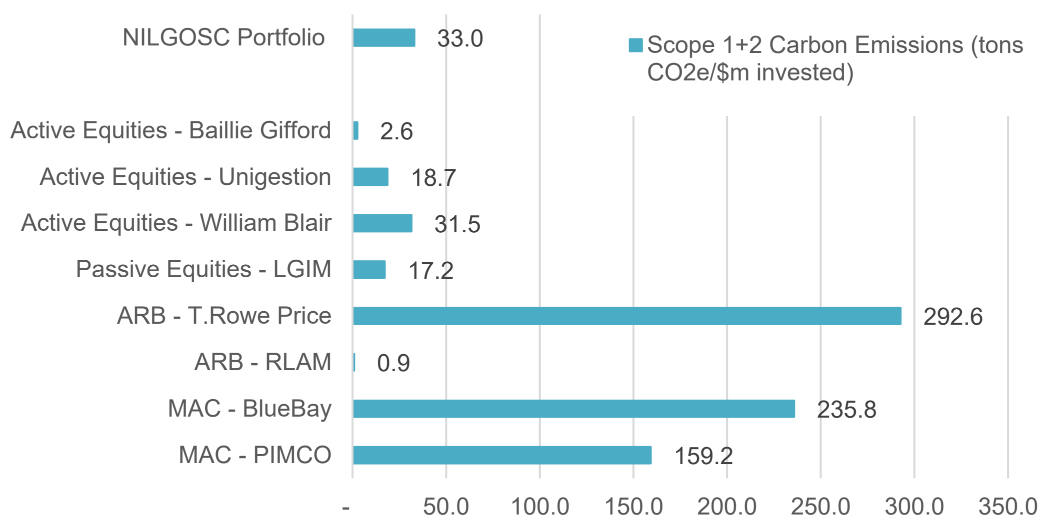
At a high level, the NILGOSC portfolio compares favourably to benchmark, reporting 61.2% lower Scope 1 and 2 emissions. Collectively Scope 1, 2 and 3 emissions are also lower than benchmark (-27.3%).

Figure 8: Total Carbon Footprint (tons CO2e/$m invested)



The Carbon Footprint metric is a normalised measure, expressed in ‘tons CO2e/$m invested’, which should allow for comparisons between multiple portfolios, irrespective of size. As with GHG emissions though, the poor coverage of fixed income assets continues to skew the output:

Figure 9: Scope 1 and 2 Carbon Footprint (tons CO2e/$m invested)

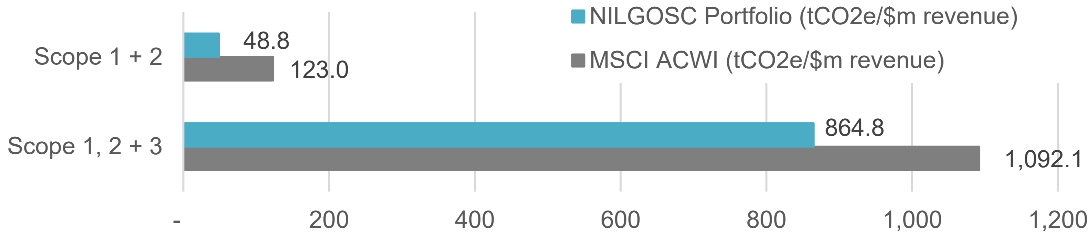


However, where coverage is better (>96%) for equities, the analysis demonstrates differences in the underlying holdings of each mandate. For example, Baillie Gifford's Long-term Global Growth mandate holds more in relatively low-emitting sectors like healthcare and consumer discretionary (exhibiting a footprint of 2.6 tons of CO2e for each $1 million invested), compared to William Blair's emerging markets mandate which is more exposed to industrials and information technology and is reporting a footprint of 31.5 tons of CO2e per $1 million invested. Across the equity mandates, the footprint figures tally closely to those self-reported by the managers via the CET, and all equity mandates compare favourably to the global equity benchmark (85 tons CO2e/$m invested).

Weighted Average Carbon Intensity

Weighted Average Carbon Intensity (WACI) is a popular measure of a portfolio's exposure to carbon-intensive companies, expressed in 'tons CO2e/$m revenue'. WACI is indicative of a portfolio's exposure to potential carbon-related market and regulatory risks since companies with a higher carbon intensity are more likely to face increased exposure to potential climate change-related risks relative to other portfolios. The measure is agnostic to ownership share and facilitates comparison with non-equity asset classes.

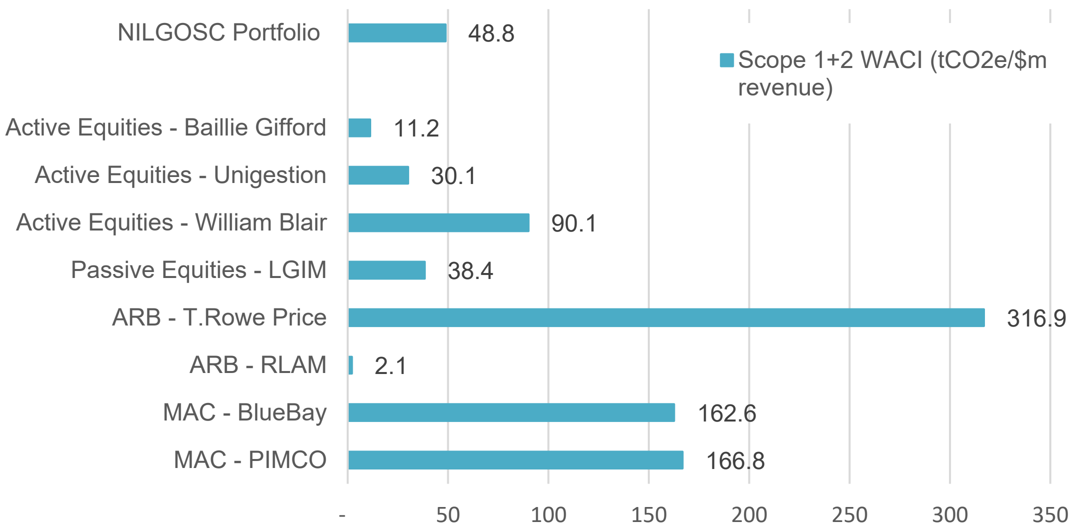
Figure 10: Total WACI (tons CO2e/$m revenue)



The 'NILGOSC Portfolio' Scope 1 and 2 WACI is 60.3% lower than the MSCI ACWI benchmark, meaning that, on average, for every USD of economic output companies produce, the Fund's holdings emit 60.3% fewer GHG emissions that the companies in the benchmark. Scope 3 emissions were also lower than benchmark (-20.8%).

Despite the measure aiding comparability, as noted previously, the overall portfolio data is skewed by inclusion of the fixed income mandates, for which coverage is significantly lower.

Figure 11: Scope 1 and 2 WACI (tons CO2e/$m revenue)



NILGOSC will continue to assess the most meaningful way to present such disclosures going forward, with the belief that continued engagement and disclosure will encourage improvements, and ultimately more accurate emissions data.

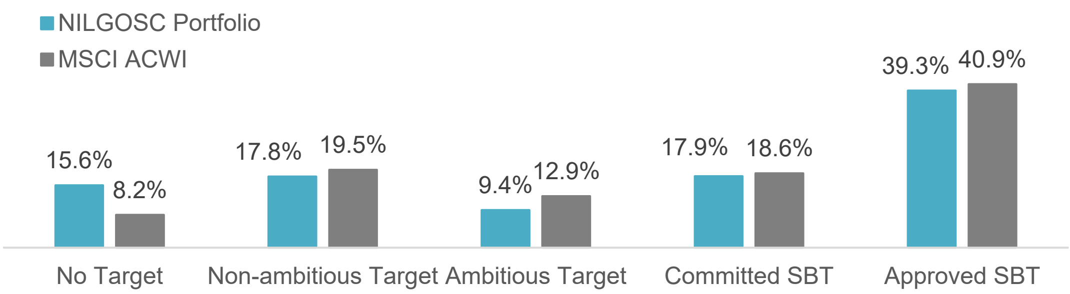
Furthermore, the key benchmark recommended by Northern Trust is an assessment of the Fund's progress over time. By working closely with one provider, it is hoped that NILGOSC will benefit from consistent data outputs allowing comparison of portfolio outputs at each period end, as well as a continued evolution of Northern Trust's ESG analytics service over the length of the contract.

Climate Targets Alignment

Northern Trust undertook a climate targets assessment on the portfolio, which provides an indication of how well companies are aligning with international climate goals. Issuers are differentiated based on the existence and quality of their GHG emissions reduction targets, assigned one of five classifications: no target; non-ambitious target; ambitious target; a commitment to Science-Based Target (SBT); and an approved SBT. An approved SBT confirms the corporate is aligned with the Paris Agreement, which is to keep a global temperature rise this century well below 2°C above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5°C; and a committed SBT indicates an aligned target, which has not yet been submitted or approved by the SBTi.

Non-Ambitious and Ambitious targets are analysed and categorised as part of the ISS ESG ratings, identifying companies that have set climate targets, albeit not science-based and therefore not confirmed to be Paris-aligned.

Figure 12: Climate Targets Assessment (%)



Almost two fifths of the portfolio's holdings (39.3%) were found to be Paris-aligned (i.e. to have an implied temperature rise of 2.0°C or lower), and a further 17.9% of the portfolio have committed to Paris-aligned targets. Although ideally the proportion would be higher, monitoring forward-looking metrics such as the differential between the portfolio and benchmark will be important; the expectation being that there will be a trend towards greater alignment in the benchmark, as more corporates make net zero commitments and implement transition plans to meet such targets.

As laid out, NILGOSC expects to update its carbon metrics annually and will review the availability of data, with a view to increasing disclosure, on an ongoing basis.

Targets

Describe the targets used by the organisation to manage climate-related risks and opportunities and performance against targets

NILGOSC has not yet set climate targets. NILGOSC is a diversified asset owner with investment over many asset classes and geographies, a significant proportion of which cannot yet be analysed. NILGOSC is supportive of the increased coverage of carbon datasets and the continued development of target-setting methodologies. Whilst methodologies mature, and NILGOSC establishes the groundwork for long-term, consistent carbon data provision, the adoption of quantifiable and meaningful climate targets remains under review.

Progress

Steps identified in 31 March 2022 report	Progress
NILGOSC will partake in Phase 2 of the IA/PLSA/ABI's working group on asset manager data for TCFD disclosures.	NILGOSC issued the second iteration of the CET to its investment managers securing 31 March 2023 data.
NILGOSC will utilise the outputs of its portfolio analysis to highlight areas for further risk management, engagement and monitoring.	The outputs of which were used to enhance and drive engagement with managers.
NILGOSC will continue to work with other asset owners and asset managers to help improve the quality and scope of the data available.	Alongside other asset owners, NILGOSC endorsed numerous investor statements, urging increased and aligned disclosures.
NILGOSC will partake in consultations/working groups regarding carbon reporting, if applicable to NILGOSC.	In November 2022, NILGOSC took part in the DAERA's Cross-Sectoral Advisory Working Group and the PRI consultation.
NILGOSC will continue to seek out climate change opportunities, in compliance with its overriding obligation to act in the best interests of the scheme beneficiaries.	A commitment of $20m was made to a co-investment in a renewables asset, managed by DIF Capital Partners.
NILGOSC will seek to carry out scenario analysis on at least a triennial basis, or as required by regulation when enforced.	Completed – as disclosed within 31 March 2022 report.
NILGOSC will continue to support increased coverage of carbon datasets and the continued development of target-setting methodologies, keeping the development of appropriate climate targets under review.	Ongoing engagement with asset managers and other asset owners, as well as reviewing publicly released targets.

Next Steps

- NILGOSC will continue to work with other asset owners and the Fund's asset managers to help improve the quality and scope of the data available, particularly via the continued use and analysis of the Carbon Emissions Template (CET).
- NILGOSC will partake in consultations/working groups regarding carbon reporting, if applicable to NILGOSC.
- NILGOSC will continue to seek out climate change opportunities, in compliance with its overriding obligation to act in the best interests of the Fund beneficiaries.
- NILGOSC will utilise the outputs of its portfolio analysis to highlight areas for further risk management, engagement and monitoring.
- NILGOSC will continue to carry out scenario analysis on at least a triennial basis, or as required by regulation when enforced.
- NILGOSC will continue to support increased coverage of carbon datasets and the continued development of target-setting methodologies, keeping the development of appropriate climate targets under review.

Appendix 1: TCFD Disclosures

Governance

- Describe the board's oversight of climate-related risks and opportunities
- Describe management's role in assessing and managing climate-related risks and opportunities

Strategy

- Describe the climate-related risks and opportunities the organisation has identified over the short, medium, and long term
- Describe the impact of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning
- Describe the resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario

Risk Management

- Describe the organisation's processes for identifying and assessing climate-related risks
- Describe the organisation's processes for managing climate-related risks
- Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organisation's overall risk management

Metrics and Targets

- Disclose the metrics used by the organisation to assess climate-related risks and opportunities in line with its strategy and risk management process
- Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks
- Describe the targets used by the organisation to manage climate-related risks and opportunities and performance against targets

Important Information

The content of this report was produced by Northern Ireland Local Government Officers' Superannuation Committee ('NILGOSC'). This content is provided for information purposes only and is NILGOSC's current view, which may be subject to change.

This report is based upon information available to NILGOSC at the date of this report and takes no account of subsequent developments. In preparing this report, NILGOSC may have relied upon data supplied to us by third parties, and therefore no warranty or guarantee of accuracy or completeness is provided. NILGOSC cannot be held accountable for any error, omission or misrepresentation of any data provided by third parties.

The following notices relate to the 'Climate Value at Risk' metric which was developed using information from MSCI ESG Research LLC or its affiliates or information providers; and the 'Resilience' and 'Metrics and Targets' sections, which were developed using information from the Northern Trust Company or its information provider, ISS ESG. Although the Northern Ireland Local Government Officers' Superannuation Committee's information providers, including without limitation: MSCI ESG Research LLC and its affiliates; and the Northern Trust Company and its data provider ISS ESG (the "ESG Parties"), obtain information (the "Information") from sources they consider reliable, none of the ESG Parties warrants or guarantees the originality, accuracy and/or completeness, of any data herein and expressly disclaim all express or implied warranties, including those of merchantability and fitness for a particular purpose. The Information may only be used for your internal use, may not be reproduced or redisseminated in any form and may not be used as a basis for, or a component of, any financial instruments or products or indices. Further, none of the information can in and of itself be used to determine which securities to buy or sell and when to buy or sell them.

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