



SEI MASTER TRUST

# **Task Force on Climate- related Financial Disclosures (TCFD).**

# Table of contents.

Executive summary	1
Introduction	2
Section 1: Governance	4
Section 2: Roles and responsibilities	5
Section 3: Strategy and scenario analysis	7
Section 4: Risk management	15
Section 5: Metrics and targets	19
Appendix: Register of climate-related risks and opportunities	26

# Executive summary.

**The Taskforce for Climate-related Financial Disclosures (“TCFD”) is an international body which promotes a consistent and transparent approach to reporting the climate impact of organisations, with the goal of increasing available information and therefore better identifying a route to change and minimising the effects of global warming. The Taskforce has set out a list of recommendations for how organisations can best consider their impact on the climate.**

From 1 October 2021, the Occupational Pension Schemes (Climate Change Governance and Reporting) Regulations 2021 and Occupational Pension Schemes (Climate Change Governance and Reporting) (Miscellaneous Provisions and Amendments) Regulations 2021 introduced new requirements relating to reporting in line with the TCFD recommendations, to improve both the quality of governance and the level of action by trustees in identifying, assessing, and managing climate risk. The SEI Master Trust (“the Trust”) falls within these guidelines.

In preparing this report, we have adopted a collaborative process between SEI Trustees Limited (“the Trustee”), the scheme strategists, our investment managers, and our investment advisers. In assessing the impact of the Trust’s investments on climate change, this report focuses on what the legislation refers to as Popular Arrangements’ which, for the Trust, are fundamentally represented by the Trust’s default investment options (which are, in turn, utilised by the overwhelming majority of Trust members).

The Trustee sees this report as a key deliverable to account for how it has identified the current impacts of the Trust’s investments on climate change. From the identified impacts, the Trustee can take appropriate actions to work to reduce the Trust’s carbon footprint, whether that’s through its investment managers and their engagement with the underlying companies in which they invest and/or by adopting investment strategies that reduce climate-related risks and maximise climate-related opportunities.

Within the report, we have outlined the steps we have taken across the Trust to incorporate consideration of these climate-related risks and opportunities (“CRROs”) within the governance framework and the methods by which we will measure our impact and what we seek to achieve. To do this, we have set ourselves some goals and methods of measuring our impact. These are referred to within the report as ‘metrics’ and ‘targets’.

Whilst there has been widespread global support for the reduction of carbon emissions for many years, the required pace of change has often not met expectations. We have, therefore, also sought to identify the potential impact of three distinct climate change scenarios on the funds used within the Popular Arrangements of the Trust. The three scenarios encompass:

- An Orderly Transition, in which early, coordinated action limits temperature increases to around 1.5°C by 2100
- A Disorderly Transition, whereby late, uncoordinated action requires abrupt changes to limit temperature increases to around 2°C by 2100
- A Hot House Scenario, in which there is global warming of 3°C or more by the end of the century

We would remind members that this is only the second report of its kind published by the Trustee, covering the 2022 calendar year. The Trustee and its advisers, therefore, expect that the content of its subsequent TCFD reports will continue to evolve in line with the availability of climate-related data and a growing momentum from companies as they transition their businesses to sustainable models.

# Introduction.

## Background

This report discloses the processes that the Trustee has put in place and actions the Trustee has taken during the 2022 scheme year to understand and address the risks and opportunities that climate change poses to the Trust, in line with the TCFD recommendations.

Trustees must produce and publish a report, containing the information required by Part 2 of the Schedule to the Climate Change Governance and Reporting Regulations, within seven months of the end of any scheme year in which they were subject to the climate change governance requirements.

The Trustee has been subject to the TCFD recommendations from 1 October 2021 onwards. The Trustee regularly reviews its governance framework to ensure that CRRO are integrated at every level and form part of the decision-making processes in relation to the Trust.

The TCFD recommendations are articulated around four pillars: governance, strategy, risk management, and metrics and targets. In this document, the Trustee will report on each of these pillars:

- **Governance:** Disclose the organisation's governance around climate-related risks and opportunities.
- **Strategy:** Disclose the actual and potential impacts of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning where such information is material.
- **Risk management:** Disclose how the organisation identifies, assesses, and manages climate-related risks.
- **Metrics and targets:** Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.

Figure 1: Core elements of recommended climate-related financial disclosures



Source: TCFD

<sup>1</sup> The Occupational Pension Schemes (Climate Change Governance and Reporting) Regulations 2021 [SI 2021/839]

**Governance**

The organisation's governance around climate-related risks and opportunities.

**Strategy**

The actual and potential impacts of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning.

**Risk management**

The processes used by the organisation to identify, assess, and manage climate-related risks.

**Metrics and targets**

The metrics and targets used to assess and manage relevant climate-related risks and opportunities.

# Section 1: Governance.

## Oversight of climate-related risks and opportunities

The responsibility for investment strategy, decision-making, and governance within the Trust rests with the Trustee. As such, the Trustee has ultimate responsibility for ensuring effective governance of climate-related risks and opportunities and must establish and maintain oversight of climate-related risks and opportunities.

It, therefore, maintains strategic oversight and is ultimately responsible for CRRO within the Trust. The Trustee's Investment sub-committee reports at least quarterly on CRRO to the main Trustee Board.

The Trustee has worked with its service providers and advisers (in particular SEI as its investment adviser and investment manager, and Pinsent Masons as its legal adviser) to develop and implement its TCFD Framework (the "TCFD Framework") for the Trust. The TCFD Framework is an internal document forming part of the Trustee's ongoing governance processes and procedures in relation to the Trust, concerning the four core elements of recommended climate-related financial disclosures.

The TCFD Framework sets out: the roles and responsibilities of key stakeholders in relation to assessing and managing CRRO; the impact of CRRO on investments over time; the Trustee's approach to risk management; the Trustee's proposed approach to scenario analysis; and the metrics and targets that will be disclosed. The process of developing the TCFD Framework is a collaborative one between the Trustee and its advisers, with both parties reviewing and, where appropriate, challenging each other's input to ensure that the TCFD Framework is sufficiently considered and robust.

### In line with the TCFD Framework, during the scheme year the Trustee:

- Received regular reports at Trustee meetings (at least quarterly) from its overarching investment managers and engagement services, with commentary on the implementation of the Trustee's strategy policies in this area. This included details of any climate-related engagements over the period. The Trustee challenged its investment managers on the information provided to encourage continuous improvement.
- Reviewed the Statement of Investment Principles ("SIP") and investment strategy in conjunction with SEI in its investment adviser capacity (reviews are annual).
- Regularly reviewed its CRRO risk register and updated other relevant Trust documents (such as the annual schedule of activities and business plan) where appropriate.
- Reviewed the TCFD Framework document with its advisers (this is on at least an annual basis). The Trustee recognises CRRO as a key factor to be considered alongside its broader investment management, in addition to other ESG topics including corporate governance, human rights, labour, and environmental standards. The Trustee believes that CRRO, along with other ESG factors, can have an impact on financial performance. Accordingly, the Trustee is satisfied that it is appropriate for it to spend time and resources on its governance of CRRO in relation to the Trust.

# Section 2: Roles and responsibilities.

## Key stakeholders in assessing and managing climate-related risks and opportunities

The Trustee has established and maintained processes to satisfy itself that its service providers and advisers (excluding legal advisers) take adequate steps to identify and assess CRRO that are relevant to the Trust for the matters on which they are advising.

Other than the Trustee, the following persons have either undertaken Trust governance activities or advised and/or assisted the Trustee in connection with those activities. In respect of each person/entity, the Trustee has set out below:

- How it has satisfied itself that adequate steps are being taken to identify, assess, and manage CRRO in relation to the Trust
- The information provided to the Trustee about the consideration of CRRO faced by the Trust

### Investment adviser

The responsibility for training the Trustee on investment issues, helping develop the Trustee's investment strategy, and advising the Trustee on key aspects of CRRO governance (e.g., metrics and targets, scenario analysis, etc.) rests with the investment adviser, SEI. This type of training is provided by the investment adviser on at least an annual basis. The investment adviser liaises with the investment managers of the funds used within the Popular Arrangement glidepath strategies to seek to ensure that CRRO are considered. A Popular Arrangement is one in which £100m or more of the Trust's assets are invested, or which accounts for 10% or more of the assets used to provide money purchase benefits (excluding assets which are solely attributable to Additional Voluntary Contributions). The investment adviser advises the Trustee on at least an annual basis on setting climate-related metrics that are achievable and reportable for the default funds used. The Trustee reviews the SIP for the Trust annually, with advice from the investment adviser, which incorporates the Trustee's CRRO policies set out in the Investment Advisory Agreement between the Trustee and its investment adviser. These policies set out the Trustee's requirements in respect of CRRO and place obligations on the investment adviser to deliver its advice in accordance with those requirements. The recommendations of the Investment Sustainability Working Group (ICSWG) are followed to ensure appropriate competency of the Trust's investment advisor. The Trustee is comfortable with the climate competency of SEI Investments (Europe) Ltd as its investment advisor, noting that SEI is a member of the ICSWG.

### Investment managers

The investment managers appointed and utilised by the Trustee in the Popular Arrangements over the period include SEI and State Street Global Advisors. In accordance with the delegation from the Trustee, the responsibility for implementing the Trustee's strategy, stock selection, voting, and engagement rests with the investment managers and specialist ESG providers hired, managed, and monitored by the investment managers. As part of the investment reporting to the Trustee, the investment managers report carbon emissions and carbon intensity metrics on at least an annual basis. A proxy is an agent legally authorized to act on behalf of another party. Where the investment managers use a 'proxy agent' to vote on their behalf at annual SEI Master Trust TCFD Report 7 shareholder meetings, the proxy agent reports climate-related votes cast and the engagement partner reports climate-related engagements with company management. The Trustee relies on SEI's comprehensive Investment Manager Research Function to assess investment managers and consider the selection of managers whose approaches to ESG issues are in accordance with the Trustee's policies. The full due diligence process for selection of investment managers is described in 'Section 4 – Risk management'.

### Scheme strategists

The responsibility for the design and for developing the proposition and setting the overall direction of the Trust, including CRRO and wider ESG considerations, rests with the scheme strategists. Amongst the scheme strategists' objectives for the Trust are that the Trust should be innovative and provide 'best-of-breed' services to members. Meeting this objective requires an ongoing review of the Trust and the availability of enhancements to the investment proposition.

CRRO and wider ESG considerations form part of the scheme strategists' decision-making regarding the Trust and its future development, and scheme strategists meet regularly with members of the SEI's Investment Management Unit, including the Investment Strategy Group and SEI's Director of Sustainable Investing Solutions, to develop and incorporate best-of-breed thinking in relation to CRRO into the Trust's investment proposition. The scheme strategists provide updates to proposed, in development, and completed enhancements to the Trustee on at least an annual basis.

Changes to the investment proposition may arise following the annual review of the fund range and/or as a result of investment innovations brought to the Trustee by its advisers. Changes to the investment proposition are implemented and project-managed by SEI on behalf of the Trustee.

### **Skills, knowledge, and training**

The Trustee Directors have undertaken and received a variety of climate-related training. This training has included the whole Board, with group training sessions having been run by specialist advisers at Pinsent Masons, and SEI having covered a review of the Draft Statutory Guidance and PCRIIG Guidance. Self-study has been undertaken by the Directors via e-learning modules on the TCFD Knowledge Online Learning Hub ([tcfdfund.org](https://tcfdfund.org)). Specific training on the Trustee's legal obligations relating to governance, strategy, and risk management has also been provided by Pinsent Masons LLP.

The Trustee undertakes an annual skills audit and gap analysis to identify any particular areas where further training is required, including specific training on the most suitable and readily available metrics.

All Trustee Directors keep a training log recording all training received over the year. As well as training provided by SEI and the Trustee's other advisers, the Trustee Directors are encouraged to attend external training sessions provided by third parties, such as industry bodies. Trustee knowledge and understanding ("TKU") in relation to CRRO and wider ESG matters forms part of the Trustee's annual self-assessment and the external assessment carried out triennially by an independent third party. This independent assessment has historically been completed by the Trustee's legal advisers at Pinsent Masons.

Any identified gaps will be incorporated into the Trustee's training plan with CRRO contained within the Trustee and scheme strategists Fit and Proper Skills matrix. All new Trustee Directors will be required to demonstrate that they have relevant experience and/or will be required to demonstrate that they have completed the requisite courses from the TCFD Knowledge Hub Online Learning session within six months of appointment.



# Section 3: Strategy and scenario analysis.

## Establishing investment time horizons

The default investment options that make up the Popular Arrangements were designed with due consideration for members' investment horizons, defined as the period until funds are expected to be withdrawn (either at retirement or during the post-retirement phase). Long-term holdings are those furthest from being paid out, medium-term holdings relate to mid-career members, whilst short-term holdings are those closest to being paid out. Each section of the Trust has been assessed with regard to its membership's general investment horizon to ensure that its investment strategy is appropriate. The Trustee defines the short term as zero to seven years until savings are expected to be paid out, the medium term as seven to 15 years, and the long term as over 15 years. The table below sets out the primary investment goal (described as 'lifestyle phase') and the investment risk management objective pertaining to investments with different time horizons.

Liability	Investment horizon	Lifestyle phase	Investment risk management objective
Short-term distributions	0-7 years	Stability	Targeting an efficient level of return with a low risk of short-term loss
Medium-term distributions	7-15 years	Stability and growth while de-risking	Targeting an efficient level of return with an intermediate level of short-term risk
Long-term distributions	15+ years	Growth	Targeting a high level of return with a high level of short-term risk but a low level of long-term risk

The Trustee believes that over short-, medium-, and long-term time horizons, the carbon emissions, and intensities of investment markets (including the funds used in the Popular Arrangements) will reduce. The basis for this belief is that as countries set and implement plans to meet their commitments under the Paris Agreement, governments and companies will, in turn, reduce their greenhouse gas emissions.

SEI has identified several specific CRROs for the above investment horizons as part of its risk management system. The Trustee recognises that climate-related risks are financially material and can impact the value of the investments in which the Trust invests over the short, medium, and long term. Therefore, it is important that these risks and opportunities are understood and managed. As a diversified asset owner, the range of CRROs is varied and constantly evolving. Climate-related risks associated with the funds used in the Popular Arrangements are managed through shareholder engagement and voting, which helps ensure companies are acting to reduce climate risks over time.

There are two main types of climate-related risks: physical risks (i.e., those relating to the physical impacts of climate change), and transition risks (i.e., risks relating to the transition to a lowercarbon economy). Physical and transition risks exhibit an inverse relationship. Rapid global efforts to reduce emissions will reduce physical risks whilst exacerbating transition risks. Inversely, a more gradual reduction in global emissions may reduce transition risks but result in increased physical risks.

## Short-, medium-, and long-term climate-related risks

The following risks may present material financial risk to the underlying companies of the various funds used within the Popular Arrangements. The Trustee believes that for short- and medium-term time horizons, the investments are most exposed to transition and acute physical risks. However, over medium- and long-term time horizons, chronic physical risks are more significant.

Fund time horizon	Physical risk	Transition risk
Short-term	<p><b>Acute risks</b> that are event-driven, including those that result from severe weather events such as hurricanes, cyclones, and floods.</p> <p>Stock price movements resulting from <b>physical damage</b> to real assets caused by extreme weather events.</p> <p>Severe weather events that impact companies' <b>supply chains</b> and increase insurance costs.</p> <p>Reduced revenue from <b>decreased production capacity</b> (e.g., transport difficulties and supply chain interruptions resulting from weather events).</p>	<p><b>Policy and legal risks</b> as regulations are brought in to address companies' behaviour towards climate change. This may result in stock price falls. For example, from the effects of writeoffs, asset impairment, and early retirement of existing assets due to policy changes.</p> <p><b>Market and reputational risks</b> may represent the most immediate climate-related risks that a company faces and may crystallise with little advanced warning.</p> <p>For example:</p> <ul style="list-style-type: none"> <li>• Reduced demand for a company's products or services due to increased demand for more environmentally sensitive offerings</li> <li>• Prolonged reputational damage resulting in significant loss of customers</li> <li>• Perceived exposure or poor climate response may reduce supply of capital or availability of insurance cover</li> <li>• Inability to meet business customers' qualifying thresholds for environmental matters</li> <li>• Societal pressure for increased regulation or taxation of key business activities</li> <li>• Competitors who may move to decarbonise more rapidly</li> </ul>
Medium term	<p><b>Acute risks but also chronic risks</b> as longer-term climate patterns begin to change.</p> <p><b>Write-offs and early retirement of existing assets</b> (e.g., damage to property and assets in high-risk locations such as coastal infrastructure assets from rising sea levels).</p>	<p><b>Technology and policy risks</b> leading to rapid product obsolescence or changes in consumer behaviour, for example:</p> <ul style="list-style-type: none"> <li>• Increased consumer uptake of electric vehicles</li> <li>• Increased demand for energy efficiency, renewable energy, battery power storage, and carbon capture practices to be utilised by organisations</li> </ul>
Long term	<p><b>Chronic risks</b> resulting from longer-term shifts in climate patterns such as sustained temperature increases that may cause higher sea levels and more regular heat waves.</p> <p>Reduced revenue and profits from <b>decreased production capacity and increased costs</b> resulting from, for example:</p> <ul style="list-style-type: none"> <li>• Damaged roads, buildings, and transit infrastructure</li> <li>• Reduced productivity and hours worked by staff</li> <li>• Increased healthcare costs</li> <li>• Changes in tourism destinations</li> <li>• Reduced agriculture harvests, yields, and volumes as well as unstable year-to-year production</li> <li>• Reduced construction output</li> <li>• Water and food scarcity increasing company input costs</li> <li>• Droughts reducing hydropower electricity production</li> <li>• Overloaded power grids with the demand for cooling systems</li> <li>• Regular power blackouts and falls in company production</li> </ul>	<p><b>Stranded asset risk</b> resulting in the re-pricing of companies' assets (e.g., fossil fuel reserves, land valuations, and securities valuations).</p>

## The impact of climate-related risks and opportunities on Trustee strategy

The Trustee assesses the impact of the CRROs it has identified on its investment strategy on an ongoing basis.

To date, the Trustee has assessed that the impact of CRROs on the Trust's investment strategy has not been material. This is in line with expectations at the start of the reporting period, with the overwhelming majority of the CRROs identified expected to play out over much longer timeframes. This is especially true of the physical risks associated with climate change (projected out to 2100 in the climate scenarios described further below), whilst transition risks are weighted more heavily to the next 15 years. Therefore, whilst there have not yet been material CRROs to respond to in deciding the Trust's investment strategy, the Trustee anticipates that the impact of CRROs will increase as the Trust moves through these time horizons.

Given its belief that CRROs are material to the financial performance of the Trust's investments over the short, medium, and long term, the Trustee will continue to develop the integration of the identification and assessment of CRROs into the selection of its investment strategy.

To help in this regard, the Trustee has worked with SEI to explore the physical and transition risks associated with the funds employed by the Popular Arrangements under three climate scenarios. The funds utilised by the Popular Arrangements are as follows:

<b>Fund</b>	<b>ISIN</b>	<b>Trust holdings as at 31/12/2022 (£M)</b>
SEI Factor Allocation Global Equity	IE00BDD7WJ18	160.8
SEI Growth	IE00B614TP06	147.2
SEI Moderate	IE00B61N2T25	88.6
SEI Defensive	IE00B6145K75	25.8
SEI Core	IE00B62XK082	14.3
SW SSgA Sterling Liquidity*	GB00BWDBJF10	6.2
SEI UK Core Fixed Interest	IE0034297543	3.2

Source: SEI, as at 31 December 2022.

\*The SW SSgA Sterling Liquidity Fund will be omitted from the metrics and analysis presented in this report on the grounds that: a) it is a money markets fund, and therefore climate-related data coverage is very low; and b) the total investment in this fund by the Trust is not material in context of the Trust's aggregate portfolio

## The three scenarios

At the Trustee’s request, SEI has undertaken climate-related scenario analysis on the funds used within the Popular Arrangements. SEI uses third-party data from MSCI and globally recognised economic and scientific models to assess the financial impact of three distinct climate change scenarios (which are based on those published by the Network on Greening the Financial System (NGFS)).

When considering these scenarios for inclusion in the report, the Trustee has considered not only the projected global average temperature rise associated with each scenario, but also the nature of the transition under that scenario. The three scenarios set out below reflect the Trustee’s reasoned assessment of plausible pathways.

Scenario	Description
<p><b>Orderly Transition</b></p> <p>Early, coordinated action limits temperature increases to around 1.5°C by 2100</p> <p>Paris Agreement targets are broadly achieved</p>	<p>ISEI’s Orderly Transition Scenario models the early implementation of policies and technologies required to limit global warming to 1.5°C. It implies that a coordinated, global effort to reduce greenhouse gas emissions is undertaken immediately and smoothly, allowing economic actors to plan for, respond to, and make the necessary investments to adapt to a changing policy and technology landscape.</p>
<p><b>Disorderly Transition</b></p> <p>Late action, requiring abrupt changes to limit temperature increases to around 2°C by 2100</p> <p>Paris Agreement targets are partly achieved</p>	<p>SEI’s Disorderly Transition Scenario models a late implementation of policies and technologies required to limit climate change, and therefore assumes that global warming reaches 2°C. It implies that policy actors are uncoordinated, and action begins later, resulting in more drastic policies and shorter time horizons to reduce emissions. It also means that the revenue-generating opportunities of low-carbon technologies are not fully realized until later years.</p>
<p><b>Hot House Scenario</b></p> <p><b>Global warming of 3°C or more by 2100</b></p> <p><b>Targets are not met, resulting in a significant impact on the global climate</b></p>	<p>SEI’s Hot House Scenario models a failed transition, in which the world does not take enhanced action to address climate change and continues towards a path aligned with existing nationally determined contributions (NDCs) set under the Paris Agreement. Nationally determined contributions imply some additional policy implementation over current policies, as many countries are not yet on track to meet their NDCs. As a result, the world experiences very little transition risk but the physical risks of climate change are exacerbated and more uncertain.</p>

## Climate value at risk (CVaR)

For each fund used within the Popular Arrangements, SEI estimates the climate value at risk (CVaR) under each of the scenarios set out above. The forward-looking CVaR metric represents the aggregate, estimated financial impact of a given climate change scenario, expressed as a shock to the discounted present value of the fund under consideration. (In turn, this can be understood as the potential shock to the enterprise market value of the underlying securities in the fund, which results from the scenario assumptions.) In most cases, this figure represents downside risk (<0%), but may, in some circumstances, reflect upside opportunity (>0%).

To provide greater context, the CVaR for a given portfolio is an aggregation of the policy risks, technology opportunities, and physical risks of each security in the portfolio. The policy and technology costs and revenues associated with each security reflect a forecast out to 2080, discounted back to their present value. The physical risk costs are forecast out to 2100, and again discounted back to their present value. As such, future costs and revenues are less impactful than near-term costs and revenues.

The Trustee believes that analysing CVaR will enable exposures and contributions by sector and security level to be identified. It also thinks that this will help it focus its time and resources on the most material issues. It will allow the Trustee to review (with its advisers) whether adjustments to investment holdings should be made to limit exposures to climate-related risks and maximise exposures to opportunities.

It should be noted that CVaR is a tool intended to illustrate a range of possible outcomes, not to forecast actual future portfolio value.

## Data coverage

Data coverage is the key metric for examining data quality at present. Currently, CVaR is available for corporate equity and debt, with coverage and quality declining in parallel with company size and market maturity. The data coverage for the funds used within the Popular Arrangements is set out below. Here, data coverage is expressed as the proportion of the market value of the fund (as at YE 2022) for which data is available. We recommend using caution when interpreting CVaR for portfolios with limited coverage (<80%).

In particular, data coverage for the Moderate, Defensive, Core, and UK Core Fixed Interest Funds is limited. This is because fixed income assets and government bonds—for which data coverage is a challenge—comprise a larger proportion of the fund holdings. As a consequence, the CVaR figures for these funds do not fully reflect all climate risks and opportunities associated with their underlying securities. We expect data coverage/quality to improve over time and assume this may impact the CVaR metrics for the funds in question in future years. (The RAG colour coding used below is an indication of relative data coverage across the funds; it should not be interpreted as conveying anything about the absolute level of data coverage. To reiterate, we recommend using caution when interpreting CVaR for funds with data coverage below 80 percent.)

Fund	CVaR Data Coverage
SEI Factor Allocation Global Equity	96.5%
SEI Growth	80.7%
SEI Moderate	47.5%
SEI Defensive	16.9%
SEI Core	56.3%
SEI UK Core Fixed Interest	13.3%

## Results

For each of the funds used within the Popular Arrangements, we set out below the Transition, Physical, and Aggregate CVaR under each of the three aforementioned climate scenarios. (The RAG colour coding is an indication of relative risk across funds and scenarios and should not be interpreted as conveying anything about absolute climate-risk levels; it is, however, useful for identifying concentrations of risk.)

### Transition CVaR

Fund	Orderly transition	Disorderly transition	Hot house scenario
SEI Factor Allocation Global Equity	-11.3%	-8.6%	-2.9%
SEI Growth	-11.2%	-8.2%	-2.3%
SEI Moderate	-12.6%	-9.8%	-2.8%
SEI Defensive	-10.6%	-8.2%	-2.5%
SEI Core	-11.2%	-8.3%	-2.3%
SEI UK Core Fixed Interest	-3.2%	-2.2%	-0.3%

Source: SEI, MSCI as at 31 December 2022.

## Physical CVaR

<b>Fund</b>	<b>Orderly transition</b>	<b>Disorderly transition</b>	<b>Hot house scenario</b>
SEI Factor Allocation Global Equity	-11.3%	-8.6%	-2.9%
SEI Growth	-11.2%	-8.2%	-2.3%
SEI Moderate	-12.6%	-9.8%	-2.8%
SEI Defensive	-10.6%	-8.2%	-2.5%
SEI Core	-11.2%	-8.3%	-2.3%
SEI UK Core Fixed Interest	-3.2%	-2.2%	-0.3%

Source: SEI, MSCI as at 31 December 2022.

## Aggregate CVaR

<b>Fund</b>	<b>Orderly transition</b>	<b>Disorderly transition</b>	<b>Hot house scenario</b>
SEI Factor Allocation Global Equity	-11.3%	-8.6%	-2.9%
SEI Growth	-11.2%	-8.2%	-2.3%
SEI Moderate	-12.6%	-9.8%	-2.8%
SEI Defensive	-10.6%	-8.2%	-2.5%
SEI Core	-11.2%	-8.3%	-2.3%
SEI UK Core Fixed Interest	-3.2%	-2.2%	-0.3%

Source: SEI, MSCI as at 31 December 2022.

## Analysis

### Orderly transition

In this scenario, the funds are exposed to the highest policy-related transition risks (as well as the greatest technology opportunities) relative to the other scenarios, on aggregate. This results in the highest overall Transition CVaR across our three scenarios for all funds. This is due, in part, to the discounting of future costs in CVaR modelling—near-term costs and revenues are weighted more heavily than costs and revenues experienced at a future date.

For the Orderly Transition, we model physical risk using a mid-range forecast of the physical risks associated with climate change under a 1.5°C scenario. In this scenario, portfolios will see the lowest levels of Physical CVaR associated with chronic and acute physical impacts of climate change. This is because early action slows the accumulation of carbon dioxide in the Earth's atmosphere and achieves net zero by 2050.

### Disorderly transition

In this scenario, the funds typically experience a more moderate level of transition policy risk and technology opportunities, resulting in a more moderate overall Transition CVaR figure, relative to the Orderly Transition. This is because future costs and benefits are discounted more heavily than their near-term counterparts.

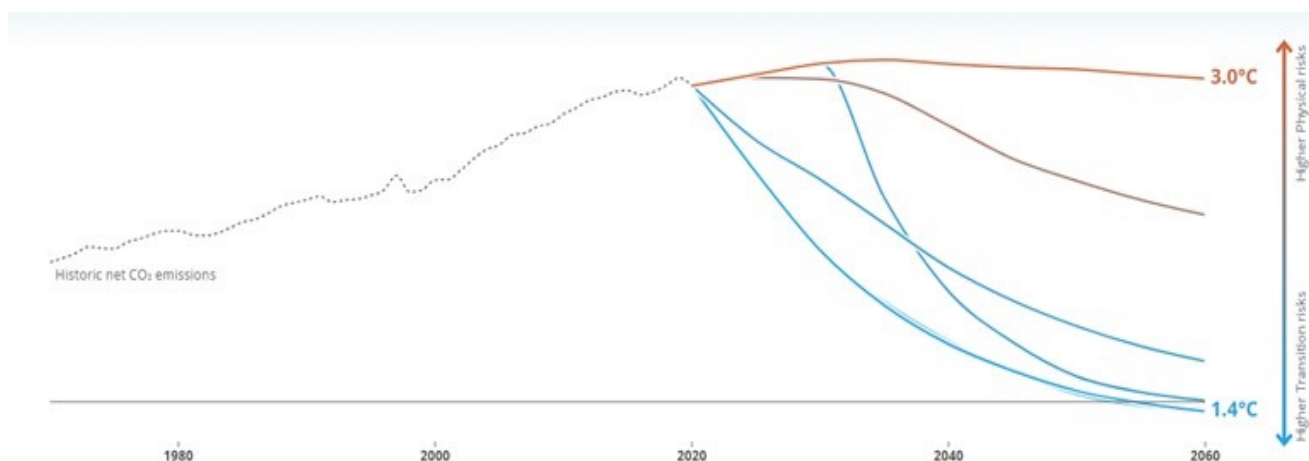
Here, we model physical risk using a mid-range forecast of the physical risks associated with climate change under a 2.0°C scenario. In this scenario, portfolios are exposed to greater levels of Physical CVaR—associated with the chronic and acute physical impacts of climate change— than under an Orderly Transition, as the world experiences greater levels of warming and its resultant impacts.

## Hot House Scenario

The funds are subject to the least transition policy risk and technology opportunities, relative to the other scenarios. While the use of low-carbon technologies will continue to grow, such growth occurs at a slower pace than for the Orderly and Disorderly Transition scenarios, resulting in more heavily discounted future benefits.

Physical risk is modelled using a 95th percentile forecast of physical risks associated with climate change under a 3.0°C scenario. In this case, a more aggressive physical risk model is applied because there are more unknowns. Physical risk models are continuing to evolve, and the Intergovernmental Panel on Climate Change assessments paint an increasingly concerning picture of the risks associated with climate change. Our estimate of physical risk in this scenario is therefore deliberately at the high end of the spectrum. The resulting Physical CVaR is somewhat moderated by future cost discounting.

To help visualise the above analysis, the chart below plots relative net CO<sub>2</sub> emissions under a range of climate scenarios. Higher physical risks are, as one would expect, associated with higher temperature rise scenarios, whilst scenarios in which net CO<sub>2</sub> emissions decline rapidly exhibit higher transition risks.



## Aggregate climate risk

Overall, aggregate CVaR tend to be less significant under the Hot House Scenario and more significant under the Orderly Transition. (The UK Core Fixed Interest Fund bucks this trend, but data coverage for the fund is very low, and so the results should be treated with caution.) This may seem counterintuitive at first, but can be understood by referring back to the components of aggregate climate risk: transition and physical risk. As mentioned previously, transition risk tends to be greatest under the Orderly Transition. At the other end of the temperature rise spectrum, the Hot House Scenario carries higher physical risk, but exposes the funds analysed to less transition risk. However, the physical risks modelled are generally projected to materialise further into the future, and the CVaR methodology discounts them more heavily than the near-term costs associated with transition risk. Therefore, in moving from the Orderly Transition to the Hot House Scenario, the fall in transition risk more than offsets the increase in physical risk, leading to a fall in Aggregate CVaR.

To reiterate, caution should be applied when interpreting CVaR for portfolios with limited coverage (<80%). Furthermore, climate-related scenario analysis cannot predict future performance but rather provides a comparative assessment of relative risks under a range of potential outcomes. The analysis demonstrates that the funds used within the Popular Arrangements may be exposed to a range of physical and transition risks, but the degree to which the portfolios are impacted by those risks depends on global mitigation and adaptation pathways.

The results of the analysis suggest that the Trust's assets could be adversely impacted by climate risk under each of the three scenarios. At a fund level, the magnitude of this impact is likely to be in the region of 5% to 15% of the fund value (depending upon the realised future climate pathway), though any such impact would likely materialise over a significant length of time. The investment strategy is expected to be more resilient to climate pathways that are more closely aligned with the Hot House Scenario (at least in the short to medium term), because the climate risks associated with such pathways— primarily physical— are anticipated to materialise further into the future. The transition risks more heavily associated with the Orderly Transition Scenario pose more imminent challenges for the investment strategy and its resilience to them.

## Impact on investment strategy

The Trustee will continue to monitor CRROs on an ongoing basis. The realisation of CRROs over time and future revisions to the CRRO assessment for the Trust will be important factors in determining the investment strategy for the Popular Arrangements. At this point, it is difficult to state definitively how the Trust's investment strategy will evolve in response to the climate pathway that emerges. The Trustee, in collaboration with its advisers, will need to consider a myriad of interrelated effects, and balance CRROs against other risks and issues impacting the Trust. For example, when reviewing the investment strategy, the Trustee will likely need to consider:

- The impact of the emerging climate pathway on the income or capital growth expected to be generated by different asset classes (i.e., the impact on the capital market assumptions used when forecasting investment returns)
- Opportunities arising from the transition to a low-carbon economy that could proffer superior investment returns
- Whether the implementation of the investment strategy remains appropriate (for instance, increasing likelihood of a severe, Hot House scenario may warrant exclusions within the investment portfolio or enhancements to investment stewardship)
- Any demographic impacts the emerging climate pathway could have on the membership profile of the Trust (for instance, reduced expectations of longevity may mean there is less need for capital growth in the years immediately preceding retirement) (The above list is by no means exhaustive.)

Whilst scenario analysis is not intended to provide a forecast of the future, the Trustee believes that it will prove vital in future years for evaluating CRROs impacting the Trust and making investment decisions—particularly as climate data improves and the analysis becomes more sophisticated. (Indeed, in future versions of this report, the Trustee aims to extend its modelling of climate change to individual member pension pots, projecting their growth under the aforementioned climate scenarios for members of varying ages. This should bring greater context to the scenarios, helping members within the Popular Arrangements understand what they may mean for their own benefits at retirement.) When analysed over multiple years, the scenarios considered, along with the metrics disclosed later in this report, should help the Trustee to:

- Identify new/emerging CRROs and concentrations of risk
- Assess the likelihood and severity of CRROs impacting the Trust, over different time periods and for different climate pathways
- Explore risk mitigation options and any associated secondary effects
- Determine whether the Popular Arrangements investment glidepaths remain appropriate given the Trust's member profile
- Determine whether the implementation of the investment strategy needs to be adapted



# Section 4: Risk management.

## Identifying and managing CRRO: How the Trustee identifies and assesses climate-related risks

The Trustee understands that it must:

Other than the Trustee, the following persons have either undertaken Trust governance activities or advised and/or assisted the Trustee in connection with those activities. In respect of each person/entity, the Trustee has set out below:

- Establish and maintain processes that enable it to identify, assess, and effectively manage climate-related risks which are relevant to the Trust
- Ensure that management of climate-related risks is integrated into its overall risk management of the Trust

### CRRO risk register

The Trustee has prepared a specific CRRO risk register, which it has included as an Appendix to this document. Risks have been prioritised based on materiality, likelihood, and financial impact. Sections of the Risk Register have been regularly reviewed at Trustee meetings during the scheme year and CRRO risks are specifically reviewed at least annually. As part of the annual review, the Trustee's investment adviser highlighted those risks most relevant to the Trust and provided recommendations as appropriate relating to any Trustee actions arising, such as advising the investment manager of its climate-related ESG priorities via the annual ESG survey issued by SEI. The review of all risks relating to the ongoing governance of the Trust forms part of the Trustee's decision-making process and is recorded accordingly in its meeting minutes.

### Statement of investment principles (SIP)

The Trust has a SIP that sets out the Trustee's investment objectives, its policies on financially material factors (including environmental, social, and governance factors), and how it implements these for the Trust as a whole. The SIP also includes details of all investment options used within the Popular Arrangements/available to members as individual 'self-select' options.

The Trustee has, in consultation with SEI European Services Limited, the Founder of the Trust, amended the SIP to incorporate the Trustee's policy on identifying, assessing, and managing CRRO in relation to the Trust. The Trustee reviews the SIP at least annually and whenever there is any material change in investment policy.

### Due diligence

The Trust's investment offering provides access to a range of investment managers within a risk-controlled framework, ensuring sufficient choice whilst keeping the selection process straightforward for members. Fundamental to the investment proposition is SEI's 'manager-of-manager' fund range, which facilitates manager changes within the fund without out-of-market exposure or the costs associated with transitions, white labelling, or blending.

Underpinning SEI's investment solutions as investment manager is the foundation in manager research and selection. Managers are not hired on the basis of ESG ratings and SEI has not set a minimum threshold. However, SEI's well-established approach to manager research includes a proprietary ESG scoring system. Every firm and investment strategy that is considered by SEI as the 'manager of managers' undergoes an ESG due diligence review and receives a score of Strong, Moderate, Limited, or Weak. The investment manager's final ESG evaluations are based on the following factors:

#### Firm assessment

- **Profile:** Analysis of the extent of the manager's sustainability practices in a broad sense, as well as its commitment to sustainable investing.
- **Resources:** Evaluation of how well-resourced the manager is to achieve its sustainable investing goals. This can be viewed as the bridge between the manager's words and its actions.
- **Practices:** Assessment as to how the manager actually implements sustainable investing in its investment process. This helps to distinguish true sustainable investing from "greenwashing," or presenting false integration of sustainable investing practices to attract clients.

## Investment strategy assessment

- **Investing:** Analysis of the strategy's integration of ESG factors, taking into account degree of materiality in affecting investment decisions and portfolio construction, quality of data and analytics employed, and alignment across the strategy's investment team.
- **Stewardship:** Evaluation of the strategy's approach to stewardship, focusing on reporting capabilities and the intensity and thoughtfulness of issue engagement.

In addition to the SEI Fund Range, members have access to additional 'external' fund managers, including a range of Passive, Factor-based, UK Property, and Ethical investment options. These include State Street Global Advisors, BlackRock, and Columbia Threadneedle. The Trustee formally reviews each of these managers at least every three years and more frequently if required. The purpose of the review is to reassess the fundamental characteristics of the existing fund managers to ensure they remain appropriate, focusing on philosophy, product, people, investment process and portfolio construction, and performance.

With effect from the most recent review in 2020, the Trustee has specifically requested an assessment of each manager's approach to ESG issues. Each of the external managers received a 'Strong' Firm ESG rating in the 2020 Investment Manager Review. Furthermore, the Trustee receives quarterly updates from the SEI Investment Strategy Group highlighting whether there has been any variance from its original assessment of the provider, including all of the fundamental characteristics and its ESG rating.

## Vendor management

When procuring any third-party services, the Trustee has requested that all potential suppliers are asked about their CRRO planning and compliance and business-continuity planning as part of its provider selection process. This forms part of the Trustee's decision-making process for shortlisting and selection. CRRO planning and compliance and business continuity planning is also to be included in any subsequent benchmarking review process post-appointment.

## Business plan

The business plan is updated by the scheme strategists at least annually and is subsequently reviewed by the scheme funder and Trustee prior to approval. As part of each update, the scheme strategist will take CRRO into account and document this within the updated business plan.

## Scheme calendar

The Trust's annual calendar has been updated to include the following:

- Annual TCFD report, incorporating:
  - An assessment of the climate risks facing the Popular Arrangements
  - A review of the Trustee's CRRO governance framework
  - A qualitative assessment of the CRROs associated with the funds contained in the Popular Arrangement (i.e., metrics for the funds and their benchmarks, and a review against targets)
- Triannual climate-related scenario analysis review and interim annual reports (climate value at risk – CVaR)
- Investment strategy review (quarterly), including a review of the metrics and performance analysis

The review intervals for the items recorded on the Trust's annual calendar are for business-as-usual operations. In the event that a material change occurs, the Trustee will instigate one or more reviews of the various items as it believes to be appropriate.

## Identifying, assessing, and managing climate-related risks and integrating them into the Trustee's risk management processes

The Trustee is early in the journey towards long-term management of climate-related risks and opportunities. As such, establishing effective governance structures, tools, and processes for **identifying** climate-related risks and opportunities has been central to the Trustee's ability to **manage** climate-related risks and opportunities.

Building on the processes described above, the Trustee seeks to use climate-related metrics (described in Section 5) and scenario analysis (described in Section 3) to monitor the effectiveness of its risk management activities going forward. Over time, the Trustee will look for metrics such as carbon footprint, total emissions, and weighted average carbon intensity to decline.

The Trustee will also monitor trends in the results of climate-related scenario analysis, while recognizing that the quality of climate change models will evolve over time and therefore comparison of scenario analysis results across time frames may not be appropriate. For example, new physical risk models may take into account new scientific projections about interrelated impacts and positive feedback loops. Meanwhile, transition risk models may evolve to take into account the pace of policy change, progress towards country-level goals, and technological advances.

For investment funds that exhibit multi-year trends towards rising climate risk, the Trustee and its advisers will engage with the funds' portfolio manager(s) to understand what is driving that trend (e.g., macroeconomic trends, changes to portfolio strategy, or investments in specific securities). The Trustee recognises that not all investments in carbon-intensive companies are misaligned with the management of climate-related risks and opportunities; for example, heavy emitters with ambitious science-based targets or with low-carbon products and solutions are likely to play an important role in the transition to a low-carbon economy.

Recognising that most climate-related metrics are backwards facing and may not fully capture forward-looking plans, the Trustee believes that proactive and collaborative engagement with companies is critical to the long-term management of climate-related risks and opportunities. The Trustee maintains oversight of the investment manager's shareholder engagement activity, monitoring action, and progress through the core process metrics defined in Section 5. Through its involvement in collaborative engagement activity, including Climate Action 100+, the Trustee has assessed that the investment adviser and manager are contributing to the long-term management of climate-related risks and opportunities at investee companies through improvements in climate change governance, greenhouse gas mitigation, and disclosure practices. Enhanced disclosure, in particular, will lead to the continued improvement of climate-related data that will, in turn, improve the quality of the Trustee's selected metrics and scenario analysis.

## Metrics used by the Trustee to assess climate-related risks and opportunities

The Trustee will disclose the following on an annual basis within its TCFD report:

- One absolute emissions-based measure: total carbon emissions
- Two intensity emissions-based measures: weighted average carbon intensity ("WACI") and carbon footprint
- Implied temperature rise and proportion aligned metrics
- Additional measures: three engagement metrics specified below and proxy voting data

### Core outcome metrics

#### Absolute: Total carbon emissions in tCO<sub>2</sub>e

This measures the total greenhouse gas emissions attributable to a portfolio and is expressed as tonnes (t) of carbon dioxide (CO<sub>2</sub>) equivalent (e) – i.e., tCO<sub>2</sub>e. 'Carbon dioxide equivalent' is a standard unit for counting greenhouse gas emissions regardless of whether they are from carbon dioxide or another gas, such as methane. For each holding within a portfolio, its associated total carbon-equivalent emissions can be prorated according to the investor's ownership share—this metric is the sum of these prorated amounts. In other words, this metric represents the sum of the carbon emissions attributable to the investor's ownership share in each of the securities that make up the portfolio/fund.

This metric gives a sense of the scale of the carbon emissions associated with each fund holding in the Popular Arrangements and the potential reduction in emissions required to assist the transition to a net zero economy.

The total carbon emissions data associated with the funds used in the Popular Arrangements is shown below. To be clear, the tCO<sub>2</sub>e figures are not representative of the total emissions associated with each fund; rather, they represent the emissions associated with the Trust's holding in each fund.

Please note that metrics are currently not produced for the SSgA Sterling Liquidity Fund (invested within the Popular Arrangements at the point that members might be expected to withdraw tax-free cash) due to a combination of poor data coverage and the lack of an established methodology for calculating such metrics for money market funds. The Trustee will review this position annually to monitor if it changes.

The tables below also set out the 'data coverage' for each of the funds in question, which is the key metric for examining data quality at present. Coverage for each of the funds is expressed as the percentage of the fund's total market value for which there is appropriate data, meaning that the coverage figures take into account the relative size of the underlying security positions. The Trustee is mindful of the lack of coverage in certain areas of the market, in particular, fixed income and government bonds. The Trustee expects that over the coming years, data quality will likely improve. Where data coverage is limited (< 80%), we advise caution when interpreting the results.

The total carbon emissions data for the funds used within the Popular Arrangements and their respective benchmarks is shown below. (The RAG colour coding used in the tables below is an indication of relative data coverage across the funds; it should not be interpreted as conveying anything about the absolute level of data coverage. To reiterate, we recommend using caution when interpreting results for funds with data coverage below 80 percent.)

<b>Fund</b>	<b>Fund coverage (% MV)</b>	<b>Scope 1 and 2 carbon emissions (tCO<sub>2</sub>e)</b>	<b>Benchmark coverage (% MV)</b>	<b>Scope 1 and 2 carbon emissions (tCO<sub>2</sub>)</b>
SEI Factor Allocation Global Equity	99.3%	17,782	99.9%	10,708
SEI Growth	94.8%	15,904	82.5%	11,313
SEI Moderate	83.9%	11,059	45.7%	4,127
SEI Defensive	75.2%	1,671	15.4%	414
SEI Core	85.5%	1,564	57.6%	895
SEI UK Core Fixed Interest	37.7%	86	N/A	N/A

<b>Fund</b>	<b>Fund coverage (% MV)</b>	<b>Scope 3 carbon emissions (tCO<sub>2</sub>e)</b>	<b>Benchmark coverage (% MV)</b>	<b>Scope 3 carbon emissions (tCO<sub>2</sub>)</b>
SEI Factor Allocation Global Equity	99.3%	100,434	99.7%	73,916
SEI Growth	93.6%	106,093	81.7%	83,261
SEI Moderate	82.8%	55,597	45.4%	28,618
SEI Defensive	74.7%	9,352	15.3%	2,635
SEI Core	84.0%	10,090	57.1%	6,162
SEI UK Core Fixed Interest	30.7%	699	N/A	N/A

Source: MSCI ESG Fund Ratings (publicly available data sourced from <https://www.msci.com/our-solutions/esginvesting/esg-fund-ratings>). We have expressed in tCO<sub>2</sub>e.

# Section 5: Metrics and targets.

## Intensity: Weighted average carbon intensity (“WACI”)

This is a key (backward-looking) metric for measuring a fund’s exposure to carbon-intensive assets, expressed in tonnes of CO<sub>2</sub>e per million pounds of sales. This metric provides a broad indication of how heavily a portfolio’s underlying holdings are involved in the emission of greenhouse gases. As this metric is standardised, it can be readily used for comparative purposes.

For a given fund, the WACI is calculated as the weighted average of the carbon intensities of the underlying holdings, whereby the weights are the percentage allocations to each holding. This metric can be used across equities and corporate bonds.

The WACI data for the funds used within the Popular Arrangements and their respective benchmarks is shown below.

Fund	Fund coverage (% MV)	Scope 1 and 2 weighted average carbon intensity (tCO <sub>2</sub> e / £M sales)	Benchmark coverage (% MV)	Scope 1 and 2 weighted average carbon intensity (tCO <sub>2</sub> e / £M sales)
SEI Factor Allocation Global Equity	94.7%	143	99.3%	176
SEI Growth	71.1%	174	81.8%	190
SEI Moderate	46.2%	290	45.6%	124
SEI Defensive	27.7%	147	15.3%	42
SEI Core	52.7%	186	57.4%	159
SEI UK Core Fixed Interest	30.2%	65	N/A	N/A

Fund	Fund coverage (% MV)	Scope 1 and 2 weighted average carbon intensity (tCO <sub>2</sub> e / £M sales)	Benchmark coverage (% MV)	Scope 1 and 2 weighted average carbon intensity (tCO <sub>2</sub> e / £M sales)
SEI Factor Allocation Global Equity	94.7%	702	99.1%	892
SEI Growth	70.0%	951	80.8%	1,074
SEI Moderate	44.9%	909	45.0%	657
SEI Defensive	27.1%	855	15.2%	200
SEI Core	51.1%	1,013	56.5%	850
SEI UK Core Fixed Interest	23.9%	1,664	N/A	N/A

Source: MSCI ESG Fund Ratings (publicly available data sourced from <https://www.msci.com/our-solutions/esg-investing/esg-fund-ratings>). We have expressed in tCO<sub>2</sub>e / £M sales.

## Intensity: Carbon footprint

Carbon footprint tells the Trustee how many tonnes of CO<sub>2</sub>e emissions were produced by a particular portfolio for each million pounds invested. For the funds used within the Popular Arrangements, the carbon footprint is measured the same way as total carbon emissions (above) but scaled per £M invested in the fund. This metric may facilitate comparison across sectors, portfolios, and companies and is therefore useful for internal and external purposes.

A drawback of this metric is that increasing security prices can result in falling carbon footprints, without a commensurate fall in carbon emissions. In addition, the metric does not capture differences in the size of companies, nor the carbon efficiency of their production processes etc. relative to other companies within the same industry.

The carbon footprint data for the funds used within the Popular Arrangements and their respective benchmarks is shown below.

<b>Fund</b>	<b>Fund coverage (% MV)</b>	<b>Scope 1 and 2 carbon footprint (tCO<sub>2</sub>e / £M invested)</b>	<b>Benchmark coverage (% MV)</b>	<b>Scope 1 and 2 carbon footprint (tCO<sub>2</sub>e / £M invested)</b>
SEI Factor Allocation Global Equity	99.3%	111	99.9%	67
SEI Growth	94.8%	108	82.5%	77
SEI Moderate	83.9%	125	45.7%	47
SEI Defensive	75.2%	65	15.4%	16
SEI Core	85.5%	109	57.6%	63
SEI UK Core Fixed Interest	37.7%	27	N/A	N/A

<b>Fund</b>	<b>Fund coverage (% MV)</b>	<b>Scope 3 carbon footprint (tCO<sub>2</sub>e / £M invested)</b>	<b>Benchmark coverage (% MV)</b>	<b>Scope 3 carbon footprint (tCO<sub>2</sub>e / £M invested)</b>
SEI Factor Allocation Global Equity	99.3%	625	99.7%	460
SEI Growth	93.6%	721	81.7%	566
SEI Moderate	82.8%	627	45.4%	323
SEI Defensive	74.7%	363	15.3%	102
SEI Core	84.0%	706	57.1%	431
SEI UK Core Fixed Interest	30.7%	220	N/A	N/A

Source: MSCI ESG Fund Ratings (publicly available data sourced from <https://www.msci.com/our-solutions/esg-investing/esg-fund-ratings>). We have expressed in tCO<sub>2</sub>e / £M invested.

### Implied temperature rise and proportion aligned

Implied temperature rise measures, in aggregate, a fund's temperature alignment (in °C) to keeping the world's temperature rise to 2°C by 2100. The calculation uses an aggregated budget approach that compares the sum of financed emission budget overshoot against the sum of financed carbon emission budgets for the underlying portfolio holdings. The total fund carbon emission over/undershoot is then converted to a degree of temperature rise using the science-based ratio approach of transient climate response to cumulative carbon emissions (TCRE). For example, an implied temperature rise of 2.5°C assigned to a given fund would indicate that the fund is exceeding its fair share of the global carbon budget, and that if everyone exceeded their fair shares by a similar proportion, we would end up in a world with ~2.5°C of warming. The allocation base used to define a fund's financed stake is enterprise value including cash (EVIC).

The proportion aligned metric reflects the percentage of a fund's market value invested in issuers with an implied temperature rise that corresponds to a business-as-usual alignment to global warming of ~1.5°C by 2100.

For the funds used within the Popular Arrangements, these metrics are set out in the table below. (Benchmark data for the implied temperature rise is not available.)

<b>Fund</b>	<b>Fund coverage (% MV)</b>	<b>Scope 1 and 2 carbon footprint (tCO2e / £M invested)</b>	<b>Benchmark coverage (% MV)</b>	<b>Scope 1 and 2 carbon footprint (tCO2e / £M invested)</b>
SEI Factor Allocation Global Equity	99.3%	111	99.9%	67
SEI Growth	94.8%	108	82.5%	77
SEI Moderate	83.9%	125	45.7%	47
SEI Defensive	75.2%	65	15.4%	16
SEI Core	85.5%	109	57.6%	63
SEI UK Core Fixed Interest	37.7%	27	N/A	N/A

Source: MSCI ESG Fund Ratings (publicly available data sourced from <https://www.msci.com/our-solutions/esg-investing/esg-fund-ratings>).

## Core process metrics

### Shareholder engagement metrics

The Trustee is a strong advocate of investment stewardship as an effective way to enact change and ensure companies in the portfolio are adequately managing CRRO. The Trustee will report the following three metrics relating to engaging with companies on CRRO: companies engaged on CRRO, Climate Action 100+ companies engaged, and companies achieving milestones on CRROs.

### Engagement metrics

#### Companies engaged on CRRO

The number of engagements with companies held by the investment manager on CRRO: the investment manager will (in conjunction with their specialised climate engagement partners) assess the key climate risks and opportunities in the portfolio holdings and proactively engage to enhance shareholder value. The number of such engagements will be measured.

#### Climate Action 100+ companies engaged

The number of engagements with companies through the Climate Action 100+ initiative: the investment manager, through specialised climate engagement partners, will participate in climate-related engagements each year with some of the targeted companies as part of the initiative. The number of such lead engagements will be measured.

#### Companies achieving milestones on CRRO

The number of engagement milestones achieved on climate-related issues: companies are targeted for engagement and progress is logged, recording examples of positive change ('milestones') over each year. The number of milestones achieved each year will be measured.

## 2022 engagement data

Fund	Companies engaged on CRRO	Climate Action 100+ companies engaged	Companies achieving milestones on CRRO
SEI Factor Allocation Global Equity	92	18	22
SEI Growth	239	37	52
SEI Moderate	98	23	27
SEI Defensive	83	18	24
SEI Core	242	38	52
SEI UK Core Fixed Interest	5	0	3
Aggregate across funds*	246	39	52

Source: Data reflects all of SEI's climate change engagement activity for funds in the Popular Arrangements for YE 31 December 2022.

\*This row is an aggregation of unique engagements/milestones across the six funds covered.

## Shareholder voting policy

Shareholder voting is used in conjunction with engagements to affect meaningful change in corporate behaviour. The table below sets out SEI's shareholder voting data (with respect to CRRO issues) for the funds used within the Popular Arrangements. SEI, as investment manager, uses a proxy voting service for all of its UCITS funds (including all those made available by SEI within the Trust) which brings consistency and high standards to the proxy research and voting decisions made on behalf of the Trust. The Trustee expects all votes to be cast in line with its voting policy and will periodically review its policy and evaluate whether any changes would be appropriate. The Trustee will report upon compliance with this policy.

Fund	SGMF Factor Allocation Global Equity	SGAF Growth	SGAF Moderate	SGAF Defensive	SGAF Core	Aggregate across funds*
Number of votable items	60	115	60	58	115	117
For	23	32	16	16	32	34
Against	37	82	44	42	82	82
Abstain	0	1	0	0	1	1
Number of votes with management	41	87	45	43	87	87
Number of votes against management	18	24	14	14	24	26
Other	1	4	1	1	4	4

Source: Data reflects all of SEI's UCITS Proxy Voting activity for YE 31 December 2022 for the funds included in the table. No votes were cast in relation to the SGMF UK Core Fixed Interest Fund, given it is a fixed income fund.

\*This column is an aggregation of unique votes across the five funds covered.



### **Disclosure of emissions data (Scope 1, 2, and 3) and related risks**

The Trustee has disclosed the above metrics using Scope 1, 2, and 3 emissions data, where relevant. Scope 1 and 2 are those emissions that are owned or controlled by a company, whereas Scope 3 emissions are a consequence of the activities of the company but occur from sources not owned or controlled by it. Scope 3 emissions include the indirect emissions from sources connected to a business, such as suppliers or distributors.

At present, Scope 3 data is still not widely available, but expected to improve over time, which, in turn, will provide information that is more meaningful.

The information for the above metrics will be obtained via SEI's third-party independent data provider. Using an independent, competitively sourced data provider brings confidence that the Trustee is using good quality, unbiased market data.

Given the nature of Scope 1 and 2 versus Scope 3 emissions, the Trustee deemed it appropriate to disclose and analyse the carbon metrics along these lines. This layer of granularity should provide greater insight and help the Trustee make more informed decisions.

### **Data limitations and keeping metrics under review**

The limitations we face today are not necessarily limitations we will face in the future, as this is an area that is changing rapidly, with research organisations continually developing new metrics and companies generating better data.

The total carbon emissions, weighted average carbon Intensity, and carbon footprint are all backward-looking metrics. While useful to measure for the companies held in portfolios, they do not consider these companies' projected carbon emissions. Moreover, they do not consider scientifically robust targets and business plans that companies may have put in place to reduce future carbon emissions. Consequently, going forward the Trustee intends to consider measuring forward-looking carbon emissions metrics as well as backward-looking ones.

The Trustee proposes the above metrics as necessary starting points. However, the Trustee will build in reviews to ensure that the selection of metrics and targets is appropriate in light of the evolving regulatory landscape.

The Trustee will also review data as it becomes more complete and meaningful; one can therefore expect the metrics used to evolve over time.

### **Using the metrics/targets to enact strategy decisions**

The Trustee will monitor climate-related metrics and targets through the Trust's investment reports. This will create Trustee discussion around CRRO over short-, medium-, and long-term time horizons.

It also allows the Trustee to determine if CRRO are being appropriately acted upon, and to adapt default glidepath design and fund selection if it wishes to change the implementation of its strategy on CRRO.

### **Targets used by the Trustee to manage CRRO and performance against targets**

The Trustee uses targets to track its climate-related metrics and to manage CRRO. The Trustee has set meaningful targets that are in line with its investment and climate objectives. The Trustee is taking a measured approach to setting climate-related targets and will continue to review how it can use additional quantitative analysis and recognised industry frameworks to allow it to set meaningful climate-related targets. The Trustee is of the view that its approach to stewardship, including engagement and voting activities, is part of its effort to have meaningful climate-related impacts.

In its 2021 scheme year report, the Trustee set the following targets for its Popular Arrangements and, on an annual basis, continues to measure performance of the metrics against the targets. Taking into account performance, the Trustee will periodically determine whether the climate-related targets should be retained or replaced.

## Core process targets

Shareholder engagement is the primary method for affecting changes in corporate behaviour, rather than excluding stocks and disengaging with climate-related issues.

The Trustee has reviewed and disclosed the climate-related voting metrics from the investment managers, which show that a high level of climate and environmental votes have been voted on (excluding shareholdings in jurisdictions where vote blocking inhibits voting).

The Trustee will endeavour to ensure full compliance with the shareholder voting policy. The Trustee's primary climate-related core process targets for 2022 were as follows

Core process shareholder engagement metrics	Number reported over reporting period	Annual target
Companies engaged on CRO	246	20 or more
Climate Action 100+ companies engaged	39	5 or more
Companies achieving milestones on CRRO	52	15 or more

Source: Data reflects all of SEI's climate change engagement activity for funds in the Popular Arrangements for YE 31 December 2022.

The above targets were set by the Trustee in collaboration with SEI at the beginning of 2022, without the benefit of a significant history of engagement data for the Trust. In light of actual versus targeted engagement over 2022, the Trustee will review its annual targets with the aim of setting more challenging objectives for 2023.

## Core outcome targets

The current limitations on both the scope of the data and its backward—rather than forward-looking—nature means it is appropriate to be cautious about targets based on this type of data.

The investment manager and the Trustee believe that targets that would result in exclusionary policies based on backward-looking data could lead to worse outcomes for both the successful transition to a net zero economy and the Trust's risk and return prospects. For these reasons, we will continue efforts through active ownership to manage CRRO and to monitor the available carbon metrics, but not to manage exclusionary policies around them.

For the funds used in the Popular Arrangements, the Trustee targets reductions in WACI, carbon footprint, and carbon emissions over rolling three-year periods which are in line with the reductions in appropriate benchmarks that broadly reflect the investment strategies of these funds. WACI, carbon footprint, and carbon emissions are expected to reduce, as described in the section on short-, medium-, and long-term time horizons, due to shareholder engagement and government policies. The methodology used for performance measurement takes account of how changes in fund data compare with changes in the respective benchmark data over the rolling three-year period. The Trustee is collating appropriate benchmark data to enable measurement over that period.

Next year's report will feature an assessment to that effect. Given the risks surrounding reducing carbon emissions and the Trustee's focus on investment stewardship and proactive engagement as an effective tool for managing CRRO, the Trustee's short-, medium-, and long-term ambitions are to:

- Reduce the impact of the Trust's investments on global warming
- Harness climate-related opportunities to generate investment returns for our members
- Invest Trust assets in a manner that minimises members' exposure to climate risk

The intersecting and cross-industry nature of CRRO means that climate considerations must be actively managed in the portfolio and cannot simply be addressed by divesting from certain sectors or business activities.

The Trustee will continue to use best endeavours to report WACI, carbon footprint, and carbon emissions dependent on the data available from data providers.

## Climate-related opportunities

The efforts to mitigate and adapt to climate change will likely result in new opportunities, such as through resource efficiency and cost savings, the adoption and utilisation of low-emission energy sources, the development of new products and services, and the building of resilience along the supply chain. Climate-related opportunities will vary depending on the region, market, and industry in which an organisation operates.

One way that climate-related opportunities are captured in the Popular Arrangements is through members' long-term growth fund, the SEI Factor Allocation Global Equity Fund. The investment manager of the fund takes into account ESG factors when constructing the investment portfolio, although it should be noted that such factors are not the primary driver of security selection/ weighting.

The ESG factors aim to measure features that may affect companies in the form of additional unanticipated costs or opportunities over long-term horizons, such as:

- Climate change
- Pollution
- Human capital
- Social opportunities
- Corporate governance
- Corporate behaviour

In doing so, the investment manager may make adjustments to the exposure of the fund to a particular security based on the security's ESG rating, with a higher weighting being given to securities that are rated highly for their overall sustainability performance.

## Signature of Chair

This report was approved by the Trustee on 27 June 2023, and signed on its behalf by:

**Allan Course**

Chairperson of SEI Trustees Limited

# Appendix: Register of climate related risks and opportunities.

Knowledge and understanding					
Fund	Impact (1=Low, 5=High)	Likelihood (1=Low, 5=High)	Controls	Overall rating (1-8: Green/ 9-16: Amber/ 17-25: Red)	Comments
1. Key persons, such as Trustee Directors and scheme strategists, do not have sufficient knowledge and understanding to be able to identify, assess, and manage CRRO in relation to the Trust.	4	1	<ul style="list-style-type: none"> <li>Trustee Directors [and scheme strategists] have completed training provided by the TCFD Hub. New Trustee Directors [and scheme strategists] are required to complete this training within six months of appointment.</li> <li>CRRO included as part of the Trustee's annual training programme.</li> <li>All Trustee Directors and scheme strategists are required to maintain and demonstrate CPD appropriate to their role and responsibilities and complete an annual skills assessment.</li> <li>Trustee's and scheme strategists' annual skills assessment updated to incorporate ESG and CRRO specifically.</li> <li>Independent triennial review of the Board to consider whether TKU is sufficient to manage CRRO in relation to the Trust.</li> </ul>	4	
2. Trustee's appointed investment managers do not keep abreast of developments in this area.	5	1	<ul style="list-style-type: none"> <li>Trustee carries out triennial review on all investment managers, with managers' ESG capabilities assessed.</li> <li>Triennial reviews will specifically explore managers' approach to CRRO and establish whether they are considered best of breed.</li> <li>The Trustee has the power to change or appoint additional investment advisers if required.</li> </ul>	5	

## Investment performance and governance

Fund	Impact (1=Low, 5=High)	Likelihood (1=Low, 5=High)	Controls	Overall rating (1-8: Green/ 9-16: Amber/ 17-25: Red)	Comments
1. There is a fundamental failure in the integration of financially material considerations around CRROs in the Trustee's investment strategy and fund choices in the Popular Arrangements.	5	1	<ul style="list-style-type: none"> <li>The Trustee ensures that CRROs are sufficiently considered in the funds used in the Popular Arrangements by monitoring the climate-related engagements, shareholder voting, and portfolio positioning being undertaken by the specialist providers and the investment manager.</li> <li>The investment adviser ensures that the consideration of CRRO is integral to the investment strategy advice that is provided to the Trustee.</li> </ul>	5	
2. There is a failure by third-party providers in supplying data on shareholder voting, shareholder engagements, carbon emissions, or carbon emission intensities.	4	3	The investment manager has processes in place to ensure that (a) best-in-class specialist providers are selected to supply climate-related shareholder voting, company engagement, and carbon emissions data provision services, and (b) performance is monitored, tested, and challenged as necessary. The investment manager will monitor these services and if standards are insufficient will select a different service provider	12	This is only the second year in which this data is being requested and so the Trustee anticipates that there could be difficulty obtaining all the data required as the industry adjusts. This will be kept under close monitoring and alternative providers can be sought if required.
<p>The opportunity to invest in:</p> <ul style="list-style-type: none"> <li>Companies involved in the manufacture/ distribution of 'green technologies', for which there is likely to be heightened demand in the future.</li> <li>Companies that could benefit as an end-user of such technologies, through cost savings/increased productivity etc.</li> </ul> <p>Such opportunities could have a positive impact on the investment performance of the Trust's assets.</p>	3	3	N/A	9	Cell shaded green to reflect opportunity (i.e., upside risk).

## Reporting and compliance

Fund	Impact (1=Low, 5=High)	Likelihood (1=Low, 5=High)	Controls	Overall rating	Comments
Trustee Directors do not produce annual TCFD report in accordance with legislative requirements/ timescales.	4	1	<ul style="list-style-type: none"> <li>The provision of the TCFD report has been added to the Trustee's Scheme Calendar.</li> <li>The provision of the report will be considered within the Risk and Operations sub-committee.</li> <li>The Trustee's TCFD Framework Agreement provides the starting structure for the TCFD and some of the intended content.</li> <li>TCFD will be considered and developed at each Risk and Operations sub-committee with progress reported at main Trustee meetings to ensure that it is provided well within legislative requirements/timescales.</li> </ul>	4	

## Operations, costs, and suppliers

Fund	Impact (1=Low, 5=High)	Likelihood (1=Low, 5=High)	Controls	Overall rating	Comments
1. The Trust's operations are directly impacted by climate-related physical risks, e.g., extreme weather.	2	1	<ul style="list-style-type: none"> <li>The Trustee assesses all significant vendors' business continuity prior to appointment through SEI's Vendor Management Team, and on at least an annual basis thereafter.</li> <li>The Trustee also assesses SEI's business continuity testing annually as the Trust provider.</li> </ul>	4	
2. The cost of running the Trust increases as a result of the additional activities required to identify and assess CRRO.	2		<ul style="list-style-type: none"> <li>The Scheme funder has provided a commitment to the Trustee through its Deed of Agreement to meet all costs arising from the Trust.</li> <li>The scheme strategists and Funder update the Trust's business plan at least annually taking account of factors that could impact the cost of operating the Trust.</li> <li>Budgets are agreed at least annually between scheme strategists and funder, with additional resources provided by the scheme funder to meet any increase in costs and to further develop the Trust as required.</li> </ul>	2	