



# Task Force on Climate-Related Financial Disclosures

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Alignment with the recommendations of the Task Force on Climate-Related Financial Disclosures, and the Transition Plan Taskforce

For the year ended 31 December 2023





# Contents

CEO Foreword	4
Alignment of report with the recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD) and Transition Plan Taskforce (TPT)	5
Executive summary: our TCFD report	6
<b>Governance</b>	<b>8</b>
Oversight of climate risks and opportunities	8
<b>Strategy</b>	<b>12</b>
Overview	12
Our Corporate Sustainability Strategy	13
Our climate investment strategy	15
Climate Strategy: Real Assets	18
Climate Strategy: Strategic Equity	34
Scenario analysis	36
<b>Risk Management</b>	<b>40</b>
Overview	40
Identifying and assessing climate-related risks	41
Managing climate-related risks	42
<b>Metrics and Targets</b>	<b>44</b>
Methodology	44
Carbon footprint of our investments	45
Operational metrics and KPIs	47
Improving accuracy	48
Forward looking targets	48
Outlook	49
Contacts	50



# CEO Foreword

## Supporting our clients’ decarbonisation ambitions and the global transition to net-zero emissions.

Global greenhouse gas emissions must be reduced by 45% from 2010 levels by 2030 and reach net-zero by 2050 to limit global warming to 1.5°C above pre-industrial levels, averting the most catastrophic impacts of climate change.<sup>1</sup>

Yet if the latest available national climate action plans are implemented, current commitments will increase emissions by 9% compared with 2010. Government spending alone will be insufficient in achieving the required emissions reductions.

Significant private investment is required to address this funding gap, which presents material opportunities for investors in mobilising the solutions required to reach net-zero.

## Our net-zero capabilities

Our role as specialists in sustainable alternatives means we are committed to investments such as new energy, sustainable infrastructure and forestry that provide long-term solutions to the transition to a low-carbon economy.



**Our corporate purpose**

To deliver effective and alternative investment solutions to help clients achieve their financial objectives while contributing towards the transition to a more sustainable economy.

We provide our clients with the opportunity to invest in a range of asset classes with returns that are tied to climate-related opportunities. These include:

- Renewable energy generation and battery energy storage solutions within New Energy
  - In 2023, our renewables assets generated 418GWh of renewable energy, equivalent to powering 130,000 homes<sup>2</sup>
  - Our battery assets’ capacity of 690MW avoided 680,000tCO<sub>2</sub>e in 2023<sup>3</sup>
- Sustainable building materials and carbon sequestration within the Forestry division
  - In 2023, our forests sequestered 1.9mn tCO<sub>2</sub> and we planted 6.4mn trees across the 196,000 hectares of forest that we manage

1. IPCC  
2. BEIS, 2024  
3. Carbon Responsible. In 2024 we are working with industry peers to agree upon a common methodology. Please see [GRID Annual Report](#) for details on the methodology used.

- Innovative agricultural practices, biodiversity net gain, and waste-to-energy solutions within Sustainable Infrastructure
  - In 2023, Waste Knot Energy, a company that turns non-recyclable commercial and industrial waste materials into Solid Improved Recovered Fuel (SIRF) pellets, became operational. Once at full capacity, the plant will process c. 300,000 tonnes of SIRF waste into 250,000 tonnes of pellets per year which can be used instead of coal in highly energy intensive industries
- Low-carbon homes within UK Housing
  - Over the past three years we have upgraded 78% of the homes we manage with an Energy Performance Certificate (EPC) of D to at least a C, in line with our objective to upgrade 100% of our properties to an EPC C or higher by 2025

We continue to invest in new product development to offer clients the ability to meet their financial ambitions alongside their sustainability and climate objectives. This includes our expertise in the next frontier in sustainable investment, natural capital.

At Gresham House, natural capital means providing investors with access to return-generating real assets that, where possible, contribute to both the transition to a nature positive economy and a net-zero economy. We are the world’s ninth largest natural capital manager<sup>4</sup> and provide our clients with a platform of return-generating natural capital assets with established track records, including sustainable forestry, sustainable agriculture, carbon forestry and biodiversity creation.

## Supporting our clients in a new era for Gresham House

At the end of 2023, Gresham House was acquired by Searchlight Capital Partners and became a privately owned company.

Our new ownership structure will enable us to accelerate our growth ambitions and increase opportunities for continuing strong investment returns across multiple strategies, asset classes and regions.

Central to these growth plans will be the provision of climate solutions that support our clients’ financial and sustainability ambitions.



**Tony Dalwood**  
CEO of Gresham House

4. IPE research, 2023

# Alignment of report with the recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD) and Transition Plan Taskforce (TPT)

	Alignment with TCFD	Alignment with TPT	Pages
Governance	Board oversight of climate related risks and opportunities. Management role in assessing and managing climate related risks and opportunities.	5.1 Board oversight and reporting 5.2 Roles, responsibility and accountability 5.4 Incentives and remuneration 5.5 Skills, competencies and training	8-11
Strategy	Climate-related risks and opportunities the organisation has identified over the short, medium, and long term. Impact of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning. Resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	1.1 Strategic ambition 1.2 Business model and value chain 5.3 Culture 1.3 Key assumptions and external factors 2.1 Business operations 2.2 Products and services 2.3 Policies and conditions 2.4 Financial planning 3.1 Engagement with value chain 3.2 Engagement with industry 3.3 Engagement with government, public sector, and civil society	12-39
Metrics & Targets	Metrics used to assess climate-related risks and opportunities in line with its strategy and risk management process. Management's role in assessing and managing climate related risks and opportunities.	4.1 Governance, business and operational metrics and targets 4.2 Financial metrics and targets 4.3 GHG metrics and targets 4.4 Carbon credits	44-49
Risk Management	Processes for identifying and assessing climate related risks. Processes for managing climate related risks. Processes for identifying, assessing, and managing climate related risks are integrated into the organisation's overall risk management.		40-43

# Executive summary: our TCFD report

We have prepared this report in line with the recommendations of the Taskforce on Climate-related Financial Disclosures (TCFD) and the Transition Plan Taskforce (TPT), frameworks that helps companies more effectively disclose their climate-related risks, opportunities, and transition strategies.

This report aims to provide our clients, shareholders and other key stakeholders with a better understanding of our exposure to climate-related risks and the climate-related opportunities that we are pursuing.

While this year we have reported in full against the recommendations of the TCFD and TPT, we are committed to continue improving both the quality and granularity of our climate-related disclosures over time.

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



## Governance

The Governance section provides information on the oversight of climate-related issues at Gresham House.

The Group Board is responsible for defining our direction and business strategy. Steps have been taken to embed climate-related risks and opportunities within this strategy and as such these factors have a direct impact on strategic decision making and financial planning.

The delivery of the business strategy has been delegated to the Group Management Committee (GMC). The GMC regularly reviews performance against the Company's strategic targets, including its approach to and implementation of sustainable investment practices, and management of climate-related risks.

The GMC is supported by our dedicated Sustainable Investment team and the Sustainability Executive Committee, which drives sustainability-related deliverables across the Group. This includes developing the Group's climate strategy as part of the broader Corporate Sustainability Strategy, and for implementing actions aligned with its climate change objectives.

## Strategy

This section details our overall climate strategy, as outlined in our Corporate Sustainability Strategy (CSS) as well as each division's strategy for managing climate-related issues.

The CSS outlines the approach we take both as a sustainable investor and as a sustainable business and employer in addressing global environmental and social challenges, including climate change.

As an investor, we are well positioned to take advantage of the increasing focus on the transition to a low-carbon economy. Our role as specialists in sustainable alternatives means we are committed to investments such as new energy, sustainable infrastructure and forestry that provide long-term solutions to the transition to a low-carbon economy. These investments are characterised by long-term investment horizons that are inherently aligned with climate-oriented, long-term approaches to risk and opportunity.

We continue to invest in new product development to offer clients the ability to meet their financial ambitions, alongside their sustainability and climate objectives.

## Risk management

This section provides readers with a better understanding of our strategic resilience to the climate-related risks that we face.

The identification and assessment of climate-related risk takes place using our Enterprise Risk Management (ERM) Framework. This framework assesses and manages Group-wide risks based on the likelihood of the risk materialising and the business exposures faced if it does.

We maintain a risk register which records all the key risks which are relevant to the Group. At a divisional level, the responsibility for climate-related risk management has been embedded into the activities of each business unit throughout the lifecycle of an investment.

Risk owners are supported in the identification of division-specific climate risks by the Group's dedicated Sustainable Investment team, which periodically reviews and provides guidance on the sustainability and climate-related risks facing each division.

## Metrics & Targets

This section discloses the metrics we use to assess climate-related risks and opportunities in line with our climate strategy and risk management processes.

For the fourth consecutive year we undertook an exercise to understand the carbon emissions of our operations and our investments alongside expert carbon consultants.

For both our business operations and our investments, we disclose several metrics that will help us manage our climate impact over the coming years.

We aim to set net-zero targets covering both our investments and our operations. We are currently in the process of working with expert carbon consultants to draw up a proposed strategy and expect to formalise and communicate this in the coming year.

## Outlook

As part of our GH30 strategic plan, central to our Group strategy is our ambition to be the manager of choice for sustainable investment client solutions.

In this section we outline how we aim to continue to evolve and advance our Corporate Sustainability Strategy (CSS) over the coming years, including our priority topics, core objectives to be achieved by 2025, and actions to be completed over the short and medium term.





# Oversight of climate risks and opportunities

## Board oversight

The Group Board sets the Group’s strategy (including its various subsidiaries, “the Company or Group”) and risk appetite after considering recommendations received from the Group Audit Committee. Climate-related risks and opportunities are an embedded part of the formal risk and strategy Board processes; the output of these considerations and the factors have a direct impact on strategic decision making and financial planning, are set out in the Strategy section.

The Board has embedded climate-related risks and opportunities within its processes and committees in the following ways:

## Group Risk Register

The Group Risk Register serves as a comprehensive repository for cataloguing the Company’s material risks, their likelihood, potential impact, and corresponding mitigation strategies. It plays a central role in strategic decision-making, regulatory compliance, and ensuring the long term stability and success of the business.

Within the Group Risk Register, ESG and climate-related risks are captured both as overarching risks and as specific risk-drivers. Within the structure of the Risk Register, they are a “Level 1 Risk Group” warranting special attention due to their classification. This prioritisation ensures that these risks are prominently featured in risk management reports, directing the focus of Senior Management and the Board towards current risk evaluations and any fluctuations therein.

The Group Audit Committee receives regular updates on the current level of risk incurred, and the adequacy and effectiveness of the risk management process. The Group Risk Register is maintained by the permanent Risk Management Function, who provide regular reports to the Group Audit Committee. The Group Audit Committee in fulfilling its duties, provides recommendations to the Group Board concerning risk management strategy.

## Risk Management Policies

The Group Audit Committee oversees the risk management policies and procedures designed and implemented by the Company’s senior executives and risk managers. It ensures these are consistent with the Company’s strategy and risk appetite and that these policies and procedures function as directed.

The Group Risk Management Policy, approved by the Group Audit Committee, specifically addresses the arrangements for the identification, assessment, monitoring and reporting of ESG and climate-related risks.

Please note the below graphic details the updated governance structure following the acquisition of Gresham House by Searchlight Capital in December 2023.

The Company was taken private in December 2023 and has since refined its governance structures accordingly. As part of this evolution, the previous Sustainability Committee at the Board level was integrated into the overarching roles and responsibilities of the Board itself. This consolidation of committee functions into Board responsibilities signifies a streamlined and efficient approach to decision-making and oversight. By incorporating sustainability considerations directly into Board roles, the Company underscores its dedication to ensuring sustainable practices remain a core focus within its governance framework.

## Management oversight

The delivery of the business strategy has been delegated to the Group Management Committee (GMC). The GMC regularly reviews performance against the Company’s strategic targets, including its approach to and implementation of sustainable investment practices, and management of climate-related risks.

With respect to the Group’s strategy relating to climate-related issues, this includes, but is not limited to:

- The management of climate-related risks relevant to each managed fund and Company operations
- The performance of existing Gresham House funds against their stated environmental and climate change objectives, where applicable
- The ability of prospective funds to capitalise on the global transition to a low-carbon economy
- Performance of the Group against its Corporate Sustainability Strategy, including specific climate change objectives
- The alignment of potential acquisitions with the Group’s broader sustainability and climate ambitions

The GMC meets with the Board regularly throughout the year and provides accurate, timely and clear information in a form and of a quality appropriate to enable the Board to discharge its duties effectively.

The Group CFO is also the Head of Risk, accountable for overseeing strategic and operational aspects of the risk management framework, chairing the executive AIFM Risk Committee, and reporting to the Board.

The Risk and Compliance team is responsible for the implementation of effective risk management policies and procedures to identify, measure, manage and monitor the risks relevant to each business-unit, including climate risks.

Risk metrics are reported to both the appropriate fund-level governance forum (e.g. Investment Committee), and the Gresham House AIFM Risk Management Committee.

- The fund’s governance forum will typically cover performance, operations, and risk management; ESG and climate-related risk is a standing agenda item.
- In parallel, the AIFM Risk Management Committee oversees all Gresham House managed funds’ risk profile and risk limit adherence.

The two committees complement each other due to different memberships and focus. The permanent Risk Management Function attends both fora to ensure consistency of data and reporting. The fund’s governance forum is typically chaired by the Divisional Head, Group CEO or MD. The AIFM Risk Management Committee is chaired by the Group CFO/Head of Risk.

## Climate-related risks

Climate-related risk management has been embedded into the activities of each business unit taking into account the whole lifecycle of a product. Risks relevant to each fund, including ESG and climate-related risks are considered as part of the Product Governance committee, Investment Oversight committee and AIFM Risk Management Committee.

Each committee has defined Terms of References under which they meet at least quarterly and consider all relevant risks through their oversight responsibilities. Prescribed management information, systems and controls addressing climate-related risk, have been developed with input from the Company’s dedicated Sustainable Investment team, that helps to build, manage, authenticate and articulate the sustainable investment approach of all of Gresham House’s divisions.

## Climate-related opportunities

On a quarterly basis, divisional heads report to the GMC on their business units’ performance opportunities. The Company’s real asset divisions sit at the forefront of sustainable solutions to some of the most pressing challenges of our age, including climate change. Any conversations about the Company’s real asset divisions’ opportunities include the ways in which they are making the most of the transition to a lower carbon economy. Indicative conversations may include the following:

- **Forestry:** inclusion of biodiversity and natural capital as fundamental elements of investment decision making
- **Sustainable Infrastructure:** progress of existing investments in capitalising on the transition to a low-carbon economy, such as vertical farming or waste-to-energy
- **Housing:** progress against its stated ambition to upgrade all existing EPC D-rated properties to EPC C by 2025
- **New Energy:** development of new battery energy system capacity in line with the UK’s net-zero strategy and predicted uplift in renewable energy generation

The GMC is supported by Gresham House’s dedicated Sustainability Executive Committee, which drives sustainability-related deliverables across the Group, including developing the Group’s net-zero strategy as part of the broader Corporate Sustainability Strategy, and for implementing actions aligned with its climate change objectives.

Figure 2: Sustainability Governance Structure



Sustainability Executive Committee

The GMC is supported by the Sustainability Executive Committee (Sustainability ExCo), which drives sustainability-related deliverables across Gresham House and owns the delivery and oversight of the Corporate Sustainability Strategy (CSS).

Climate change has been identified as a priority topic for two of the three pillars of the CSS, covering our activities as a sustainable investor and sustainable business and employer. We have set core climate change objectives, KPIs used to measure success, and short- and medium-term actions to be completed by 2025. More information on the CSS can be found on [page 13](#).

The Sustainability ExCo met six times in 2023 and is chaired by our Sustainable Investment Director. Members of this Committee include two Group Management Committee (GMC) members, the Head of Compliance, and two divisional heads.

The chair of the Sustainability Executive Committee reported to the Board Sustainability Committee twice in 2023. Examples of climate-related issues discussed include:

- The progress that Gresham House has made in advancing the Corporate Sustainability Strategy (CSS) and the topic of climate change contained within it
- The development of Gresham House’s inaugural net-zero strategy
- Updates to ESG and climate-related risk processes and the impact of upcoming sustainability-related regulation, such as the UK’s Sustainability Disclosure Requirements (SDR)

Remuneration

For the past four years, sustainability-related objectives have been contained within yearly performance appraisals for every individual at Gresham House. Variable remuneration for all team members at all levels is derived in part from alignment with relevant objectives. Sustainability-related measures are reviewed by the Sustainable Investment team each year to align with Gresham House’s key sustainability priorities.



Figure 3: Sustainability Committee Network

Committee	Description	2023 Information	Climate activities during 2023
Board Committees			
Sustainability Committee <sup>5</sup>	Oversees and reviews the Corporate Sustainability Strategy and Sustainable Investment Strategy	<b>Chair:</b> Gareth Davis (until company was taken private in December 2023) <b>Membership:</b> 5 non-executive directors <b>Meetings:</b> 2	Consideration of upcoming sustainability reporting and regulation, including UK SDR Discussion of proposed net-zero strategy Discussion of progress against Corporate Sustainability Strategy objectives
Audit Committee	Responsible for identification and monitoring of business risks, including ESG and climate change	<b>Chair:</b> Sarah Ing (until company was taken private in December 2023) <b>Membership:</b> 5 non-executive directors <b>Meetings:</b> 3	Discussion of the addition of climate related financial disclosures to the Annual Report Discussion of the performance and resilience of asset classes in turbulent markets Review of risk process to deliver an enhanced risk framework
Management Committees			
Group Management Committee (GMC)	Responsible for the delivery of business strategy, reviewing performance against strategic targets, including the approach and implementation of sustainable investment practices	<b>Chair:</b> Anthony Dalwood <b>Membership:</b> Senior management from across the Company, including the CEO, CFO, MD of GHAM, COO, CTO and CLO	Assessment of the performance of Gresham House funds against their stated environmental and climate change objectives Analysis of alignment of potential acquisitions with the Group’s broader sustainability and climate ambitions Assessment of the Group’s progress against its Corporate Sustainability Strategy, including climate change objectives Analysis of the potential impact of a net-zero strategy on the Group’s performance
Sustainability Executive Committee (Sustainability ExCo)	Drives sustainability-related deliverables to ensure the business, its staff and the investments made demonstrate best practice and leadership	<b>Chair:</b> Rebecca Craddock-Taylor <b>Membership:</b> Senior members from across the Group including two GMC members, the Head of Compliance, and two divisional heads <b>Meetings:</b> 8	Advanced the Group’s Corporate Sustainability Strategy, a core topic of which is climate change Introduced a travel policy with the objective of reducing work-related travel emissions Discussion of proposed net-zero strategy targets and scope Discussion of potential changes in net-zero strategy and reporting requirements as a result of delisting
AIFM Risk Committee	Assists GHAM board in fulfilling its AIFM responsibilities by identifying, defining, assessing, reviewing and monitoring the significant risks faced by the vehicles managed by Gresham House	<b>Chair:</b> Kevin Acton <b>Membership:</b> CFO, COO, Risk Manager and Head of Compliance as quorum members with other invitees as needed <b>Meetings:</b> 4	The Committee evaluated various challenges within its managed funds, including windblow damage to forest investments, changing nature of insurance market for climate-related risks, revenue challenges for certain renewable energy funds due to governmental policies related to climate risks  Each risk event was considered in depth, including assessment of the effectiveness of risk management strategies and exploration of adaptive measures to navigate evolving environmental factors, ensuring continued resilience and sustainable growth across its portfolio

5. Following the acquisition of Gresham House by Searchlight Capital, the remit of the Nomination and Sustainability Committees have been transferred to the full board, while the Audit (which includes corporate risk oversight), Remuneration and Investment Committees have been retained.



Overview

Our Corporate Sustainability Strategy



Our role as specialists in sustainable alternatives means we are committed to investments such as new energy, sustainable infrastructure and forestry that provide long-term solutions to the transition to a low-carbon economy. Our investments are characterised by long-term investment horizons that are inherently aligned with climate-oriented, long-term approaches to risk and opportunity.

We are acutely aware of the potential impact both physical and transition climate risks may have on the financial value of the Group, our assets and our investments. The identification, assessment and management of climate-related risks forms a core part of our investment strategy.

- This section will:
- Identify climate-related risks and opportunities facing Gresham House
  - Outline our climate change strategy for our investment management approach at a corporate and divisional level
  - Illustrate how climate is integrated into our wider strategy, including the Corporate Sustainability Strategy

As part of our GH30 strategy, central to our Group strategy is our ambition to be the manager of choice for sustainable investment client solutions. Our Corporate Sustainability Strategy (CSS) aims to support that ambition and aims to identify underlying objectives, as well as set out the actions we will take to meet our sustainability goals.

The CSS is based on the ten themes of our Sustainable Investment Framework (SIF). These themes include Climate Change and Pollution and are the most material factors that may impact upon the Group. It is used by investment teams to structure analysis, monitoring and reporting of ESG and climate-related issues and opportunities within the investment lifecycle as an aid to more consistent integration across the business.

Under the first pillar covering Gresham House’s role as a sustainable investor, a range of actions have been identified to support the Climate Change and Pollution priority topic. These include, but are not limited to:

- Expanding the range of climate data measured and reported for each fund
- Developing a suite of investment strategies that support clients’ net-zero and climate strategy requirements

- Assessing the feasibility of using our investments to create carbon offsets for use by Gresham House investment strategies and Gresham House itself to achieve its net-zero ambitions

Delivery of the CSS is overseen jointly by our Sustainable Investment Team and Sustainability Executive Committee.

Gresham House’s Corporate Sustainability Strategy (CSS)

The CSS supports our GH30 strategic objective to be the manager of choice for sustainable investment client solutions. We aim to lead by example through our internal commitments to sustainability and align our actions with our corporate purpose.

The CSS has three core pillars covering our role as a Sustainable Investor, Sustainable Business and Employer and Sustainable Corporate Citizen. Across the first two pillars, Climate Change and Pollution has been identified as a priority topic. For both pillars we have set a core objective to be achieved by 2025, KPIs used to measure success and short- and medium-term actions to be completed between 2023 and 2025.



Gresham House as a Sustainable Investor

**2025 strategic objective:** Set net-zero targets for each division

KPIs to monitor progress:

- 1 Carbon footprint of investments (tCO<sub>2</sub>e)
- 2 Carbon intensity of investments (tCO<sub>2</sub>e/£mn)
- 3 Alignment to Science Based Target

Gresham House as a Sustainable Business and Employer

**2025 strategic objective:** Set a net-zero target covering the Group’s operations and use its industry position to encourage the transition to a low carbon economy

KPIs to monitor progress:

- 1 Operational carbon footprint and progress against net-zero target
- 2 CO<sub>2</sub>e per full time employee and CO<sub>2</sub>e per £mn revenue
- 3 Annual energy use (kWh) and energy type

Our Culture

Our culture empowers our team to design and implement alternative investment solutions in support of a more sustainable future, and keeping ESG considerations front and centre. Six values are deeply rooted across Gresham House, ensuring we focus intently on our goals and ambitions. These state that we are: ambitious; authentic; collaborative; dynamic; empowered; and meritocratic.

Alongside our values are our corporate competencies which provide a common language that clearly defines what it takes to be successful at Gresham House. Division specific job frameworks have been developed to recognise and reward strong performance of employees, while ensuring that career development aligns with the business needs and goals of the organisation.

To improve education and engagement on sustainability matters across the business, the Sustainable Investment team ran several Lunch and Learn sessions throughout 2023 on topics from anti-greenwashing policy to Biodiversity Net Gain. These will continue throughout 2024 with planned topics including greenwashing, climate physical risks and carbon pricing.

Contributions to the industry

Gresham House understands it has a responsibility to play an industry leadership role in supporting and promoting sustainable investment, and this includes participation in industry bodies, contributing to thought leadership opportunities and providing feedback to climate and sustainability-related regulatory consultations.

We support and actively engage with a range of sustainability and climate-related initiatives, memberships and organisations. Participation in these initiatives helps to drive progress towards a low-carbon economy. Notable contributions in 2023 include:

- UK Sustainable Investment and Finance Association (UKSIF): Members of Gresham House's Sustainable Investment Team participated in a number of roundtable discussions on the formation of the UK's Sustainability Disclosure Requirements (SDR) and contributed to the draft response to the European Commission's targeted consultation on the Sustainable Finance Disclosure Regulation (SFDR)
  - Alongside other investment managers, banks, and asset owners and other financial institutions managing £1.5 trillion in assets under management, the team signed a letter to the UK Government expressing concern at its public statements and policy signals, which risk undermining the UK's leadership in the clarity, certainty, and confidence of policymaking toward meeting the UK's commitment to net-zero
- Solar Energy UK Responsible Sourcing Steering Group: Members of our New Energy and Sustainable Investment divisions joined Solar Energy UK's Responsible Sourcing Steering Group. This group aims to work with key stakeholders and unravel the complexity of the sector's supply chain, engaging with suppliers and business partners to implement a responsible sourcing programme
  - This Group developed a new responsible sourcing statement designed to promote the highest possible levels of transparency and sustainability throughout the solar value chain
  - It also developed the Solar Stewardship Initiative, a solar-specific supply chain assurance scheme with a dedicated environmental, social and governance standard
- London Stock Exchange Green Economy Mark: Gresham House's Renewable Energy VCTs and GRID plc have been awarded the Green Economy Mark. This recognises that over 50% of revenues come from products and services that contribute to environmental objectives such as climate change mitigation and adaptation. Gresham House was awarded the LSE Green Economy mark until its delisting from the stock exchange in December 2023
- Principles for Responsible Investment (PRI): Gresham House has been a signatory to the UN-supported PRI since 2018. For its 2023 PRI Report, Gresham House was awarded 4 or 5 stars, out of a maximum of 5 stars, for all modules



Our climate investment strategy

Gresham House has a stated ambition to be the manager of choice for sustainable investment client solutions. As part of this we are committed to providing investment solutions to our clients that contribute to the global transition to a low-carbon economy.

In developing new products, divisional heads, the Group Management Committee (GMC) and distribution teams work with prospective investors to shape and refine the investment proposition. The final decision as to whether to launch a fund balances market demand with its alignment with Gresham House's stated commercial and sustainability ambitions, outlined in our GH30 strategy.

For existing funds, sustainable investment considerations are applied across the investment process for all assets and involve the integration of ESG factors, including climate change, as well as the application of active stewardship responsibilities.

Specific climate risks unique to each division are considered prior to and throughout the life of a transaction. To assist in the identification of climate risks at the pre-investment stage, we have developed asset class specific, proprietary, ESG Decision Tools. These Tools support the investment teams in identifying potential, material ESG risks, including climate change risks that need to be managed and mitigated, to help shape the due diligence process for individual companies prior to investment. More detail on the ESG Decision Tools can be found in the Risk Management section of this report.

In conjunction with our Sustainable Investment Team, each investment division has drawn up a list of ESG KPIs that it will track for each of its investments. These KPI banks have been created with reference to a number of well-known sustainability reporting frameworks and reflect the unique nature of our asset classes and the ESG and climate-related risks and opportunities that they face.

We consider the following time horizons as part of climate planning and analysis:

- Short-term horizon looks at a period of up to three years
- Medium-term horizon looks at the risks and opportunities up to 10 years
- Long-term horizon considers activities over a time frame of over 10 years

The investment time horizon of our investment funds is driven by the asset classes into which we invest. Most clients seek long-term investments and as such funds are designed to meet those requirements.

The table below summarises the time horizons for each asset division:

Asset division	Time horizon
Public Equity	3-5 years
Private Equity	5-7 years
Sustainable Infrastructure	8-10 years
Forestry	20+ years
New Energy	25+ years
Housing	40+ years

These KPIs help investment teams track the progress a particular asset is making towards its ESG and climate-related ambitions, and to what extent ESG and climate-related risks are being managed effectively. More information on the KPI banks can be found in the Metrics & Targets section.

Gresham House has developed and published an overarching Sustainable Investment Policy along with asset specific sustainable investment policies.<sup>6</sup> These policies describe our approach to sustainable investment, including climate change, and highlight our commitments to investing sustainably while meeting our overall business objectives

The following pages set out the relevant climate risks and opportunities and their potential financial impacts that Gresham House and its associated strategies face over the short-, medium- and long-term.

6. All asset class policies can be found at the bottom of our Sustainable Investing webpage: greshamhouse.com/sustainable-investing/



Climate-related opportunities and risks

We consider our main direct exposures to climate change risks and opportunities to sit within our Real Assets divisions, which account for £6.3bn (74%) of AUM as at 31 December 2023 as set out in Figure 4.

Figure 4: Overview of Gresham House’s investment divisions



It is primarily through these investment divisions that we offer our clients exposure to climate change solutions, and it is the opportunities that these multi-decade investment solutions provide that drive the development of new products.

Opportunities

Gresham House is well positioned to take advantage of the increasing investor focus on the transition to a low-carbon economy. We provide our clients with the opportunity to invest in a range of asset classes that have long-term investment horizons and returns that are tied to climate-related opportunities. These include:

- Renewable energy generation and battery storage solutions within New Energy
- Sustainable building materials and carbon sequestration within the Forestry division
- Innovative agricultural practices, biodiversity net gain, and waste-to-energy solutions within Sustainable Infrastructure
- Low-carbon homes within Housing

To meet increased demand for climate-related opportunities across our client base, we continue to invest in new product development to offer clients the ability to meet their sustainability and climate objectives alongside their financial ambitions.

Risks

We recognise that the changing climate will present risks to our strategy.

The examples below detail risks that may impact upon our ability to deliver effective and alternative investment solutions to help clients achieve their financial objectives, while contributing towards the transition to a more sustainable economy:

Transition Risks

- The risk that investment solutions do not meet clients’ evolving climate needs, leading to outflows and reduced demand for investment products
- The risk that competitors grow faster by offering better climate solutions for clients, resulting in a loss of market share
- The reputational risks associated with funds not decarbonising as fast as clients expect, leading to reduced demand for investment products
- High delivery costs of more energy efficient, low-carbon solutions leading to reduced margins across our Real Assets divisions

Physical Risks

- The risk that the increased prevalence of extreme weather events leads to a fall in asset values or higher insurance costs
- The risk that damage to facilities caused by acute weather leads to increased capital costs or asset impairment
- The risk that changing climate conditions will alter the provisioning of essential ecosystem services
- The risk that extreme weather could disrupt supply chains due to reduced resource availability or disrupted distribution networks

Climate change risks

TCFD divides climate-related risks into two major categories:

Transition risks

Business risks associated with the transition to a low-carbon economy. These include changes to the policy and legal backdrop, the shift to lower emissions technologies, changes in the market and reputational risks.

Physical risks

Risks resulting from climatic events and can be acute (i.e. event-driven) or as a result of long-term shifts in climate patterns.



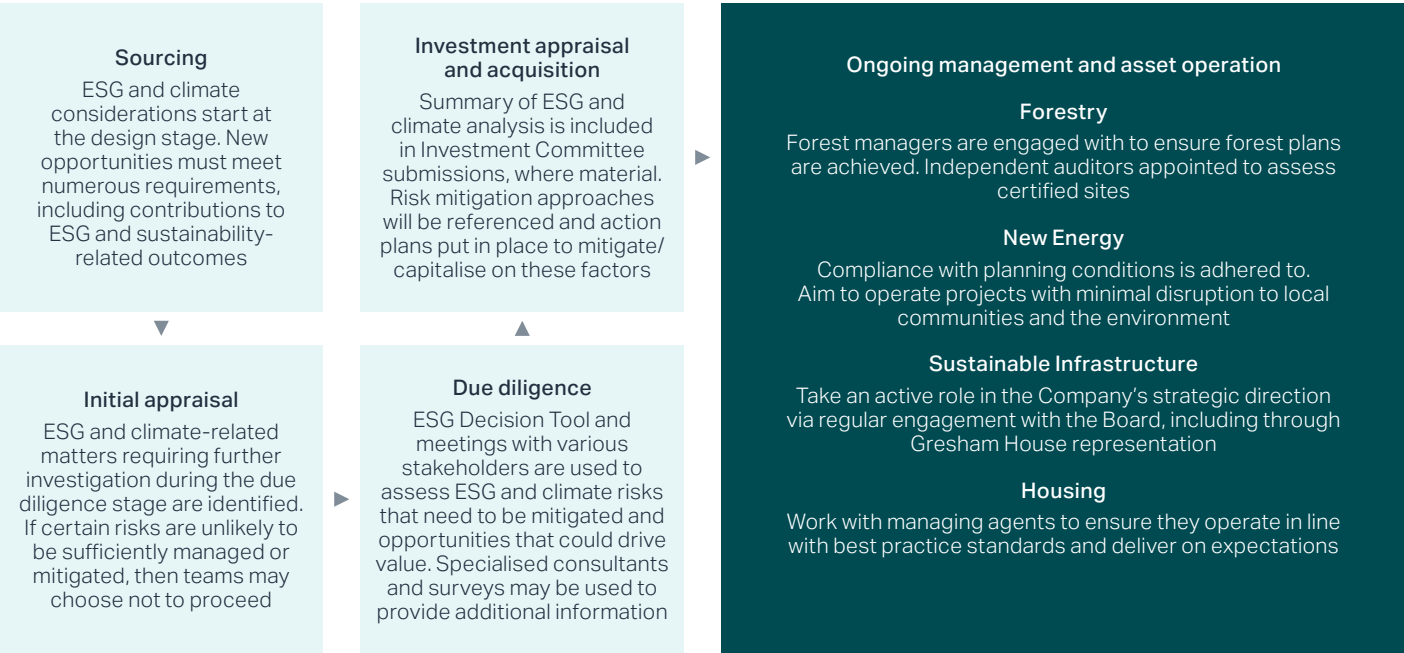
# Climate Strategy: Real Assets

With an investment time horizon of between 10-40+ years, Gresham House's Real Asset investments are well placed to provide long-term solutions to the issue of climate change.

Many of our Real Asset investments aim to provide additionality by constructing new assets that positively contribute to climate resilience and mitigation, thereby adding to the aggregate and supporting the decarbonisation of the UK's economy.

The division specific ESG Decision Tools are used to assist with the identification of various risks, including climate risks, prior to a proposed transaction, with additional climate risks considered alongside as part of broader risk analysis throughout the life of a transaction.

Figure 5: integration of climate-related factors into the Real Asset investment process



## Forestry

Gresham House's Forestry division is a real asset class that diversifies an investment portfolio and provides exposure to timber, underlying land value growth and carbon sequestration.

We seek attractive long-term returns through sustainable forest management on land owned by each fund on behalf of clients.

### Key 2023 statistics<sup>7</sup>

1.9mt CO<sub>2</sub>e carbon sequestered (2022: 1.9mt CO<sub>2</sub>e)<sup>8</sup>

6.4mn trees planted covering over 3,500 hectares (2022: 9.1mn trees)<sup>9</sup>

1.6mn tonnes certified timber sold, supporting the replacement of carbon intensive materials (2022: 1.2mn tonnes)

## Climate Opportunities

ESG and climate considerations contribute to investment analysis and financial modelling, decisions whether to acquire specific sites, ongoing forest management decisions and new product development.

Our ESG and climate-related commitments have been codified in our [Forest Charter](#). Specific climate change commitments include:

- Managing the long-term carbon stock of all forests and where possible increasing carbon sequestration of all forests over the period under management.
- Measuring the operational carbon footprint of all forests under management and reducing operational emissions over time where possible.
- Measuring and reporting on the carbon stored in standing stock and carbon dioxide sequestered, regularly reporting these metrics to stakeholders, in line with independent third-party standards.
- Not converting any high carbon stock areas (peatlands, wetlands and grasslands) of land purchased for afforestation, unless within local regulatory guidelines.

The role of productive forestry in contributing to the global net-zero transition is increasingly well understood.

Our Forestry assets offer solutions to key sustainability challenges:

- Timber can support the decarbonisation of residential and commercial construction through the production of renewable building materials.

7. All 2023 figures in this table reflect UK, Irish and Australian assets but do not include New Zealand assets.

8. In 2023, we reviewed our carbon methodologies and changed to align with the most current and widely accepted techniques and guidelines from the Intergovernmental Panel on Climate Change (IPCC)

9. Reduction in tree planting driven by lower levels of harvesting in 2022

- Sustainable forest management can also provide wider ecological co-benefits, such as carbon sequestration and storage, and biodiversity gains through improved habitat development and connectivity.
- Investment in sustainable forestry and afforestation, under strict sustainability certification standards, may help to contribute to the avoidance of deforestation of natural forest, ensuring that an ever larger portion of the world's future timber demand is met by harvesting trees grown in forests that are sustainably managed.

Over time, we will continue to evolve our investment process to benefit from a broad range of climate-related opportunities. These include exploring ways of diversifying our revenue sources to include other natural capital and climate-related services, including if and how biodiversity credits could be developed through traditional forestry approaches or more targeted land management, and the potential for mitigation of physical climate risks such as flood protection.

KPIs are used to track the progress that our assets are making against their ESG and climate-related ambitions, and to what extent climate-related risks are being managed effectively. Examples of climate-related KPIs that are monitored include:

- Total trees planted
- Carbon sequestration of forests (mtCO<sub>2</sub>)
- % forests certified
- Certified timber sold (tonnes)
- Area of land managed for biodiversity or conservation (%)
- Carbon emissions of our investments (tCO<sub>2</sub>e)

## Climate Risks

Examples of climate-related risks facing the division are outlined in Figure 6. These include:

- Increased risk of fires, storms and floods (physical climate risks), damaging forests and leading to lower output and reduced revenues. We commit to all forests being planned and managed to enhance their resilience to climate change, including through diversification of geography, species, age and end-product use. In the UK, we make use of climate scenario modelling to assist in developing temperate forests where current and future climates are supportive of the growing of softwood timber. More information on the role of scenario analysis within Forestry can be found in the Metrics & Targets section.
- Regulation and reputational risk arising from the stigmatization of the sector. Governments and local communities are increasingly pushing for their definition of climate-resilient forests, including through the planting of more native and diverse species. We play a very active role in engaging with governments and the local community on such issues, both in listening and responding to concerns and educating on the carbon and community benefits of productive forestry. More broadly we operate in geographies with strong legal systems that support land-based investments with stable political systems to support our long-term investment horizon.



## Case study: modern woodland creation at the Fasque Estate

In October 2021, Gresham House completed the acquisition of c.800 hectares (ha) of land for woodland creation on the Fasque estate, near Fettercairn in Aberdeenshire.

Since the acquisition, 336 hectares of native productive conifers (Scots pine) and 78 hectares of Norway spruce have been planted, whilst 47% of the land is being managed primarily for the conservation or enhancement of biodiversity. Fasque is the largest Scots pine scheme in the Grampians, aiding the reforestation of Scotland’s native pine forest.

Today, the site is a multispecies plantation that will provide an evergreen resource of sustainable timber production, biodiversity benefits, as well as income, employment and leisure for the local community. Over 1.1 million timber-producing trees have been planted on the scheme at Fasque estate since last year, 81% of which are native to Scotland. 220,000 tonnes of timber are expected to be harvested over the next 60 years from Fasque.

It is estimated that just over 450,000 tonnes of carbon will be captured over 60 years by the woodlands created at Fasque. Taking establishment emissions and timber harvesting into account, the planting scheme is expected to generate 128,270 carbon credits. This project has been registered with the Woodland Carbon Code.

Effective forest protection is essential to preserve and improve the range of ecological, environmental and social benefits associated with woodlands. Throughout the planting design process many opportunities were identified to maximise the protection of the forest:

- Scots pine seeds were picked for their performance in higher temperate climates, reflecting estimates on 2050 climate conditions.
- Riparian zones were planted to improve the hydrological functions as well as create habitat areas.
- Deer fencing was erected to protect young crops from grazing damage.
- Local pest controllers were engaged to shield crops from harmful pest damage.



Figure 6: example climate risks and opportunities for Forestry

Risks & Opportunities: Forestry					
Risk/ opportunity	Risk: policy & legal	Risk: physical	Opportunity: products and services	Opportunity: market	Opportunity: energy source
Description	Regulation leading to species restrictions and diverse planting requirements	Increased extreme weather events leading to fires, storms and floods	Demand for new sustainable timber products	Demand for new forestry services and natural capital markets, such as tourism	Increased demand for biomass leading to increased timber prices
Likelihood	Medium	Low	Medium	Medium	Medium
Potential impacts	Increased costs, reduction in revenues	Damage to existing assets, reduction in revenues	Increase in revenue and diversity of income	Increase in revenue, access to new markets and diversity of income	Increase in revenue and diversity of income
Time period	Medium-term	Long-term	Short- & Medium-term	Short- & Medium-term	Short- & Medium-term
Divisional commentary	We play a very active role in engaging with governments and the local community on such issues. We only operate in geographies with strong legal systems that support land-based investments with stable political systems to support our long-term investment horizon	Forests planned and managed to enhance their resilience to climate change, including through the diversification of geography, species, age and end-product use. We make use of modelling to select sites where current and future climates are supportive of the growing of softwood timber	We recognise the importance of homegrown timber to improve natural resource and reduce dependence on imports. Strategy aligns with national goals to increase tree cover and the promotion of timber as a low-embodied-carbon material for building construction	Division constantly exploring new revenue diversification opportunities. Natural capital services increasingly understood, valued and regarded as viable climate solutions	Increased demand for biomass adds diversity to timber products and supports a higher price. Some forest sites well suited to renewable energy projects and battery parks
Example KPIs/ trends to monitor	<ul style="list-style-type: none"><li>▪ Forest composition</li><li>▪ # community engagements</li><li>▪ # biodiversity assessments</li><li>▪ Public access to forests</li></ul>	<ul style="list-style-type: none"><li>▪ Long-term climate projections</li><li>▪ Rainfall/ temperature patterns</li><li>▪ Windblow and fire insurance events</li></ul>	<ul style="list-style-type: none"><li>▪ UK and global timber demand</li><li>▪ Revenues from forestry assets</li><li>▪ FSC certification of forests</li></ul>	<ul style="list-style-type: none"><li>▪ Revenue mix</li><li>▪ Diversity of forestry assets</li></ul>	<ul style="list-style-type: none"><li>▪ Biomass demand in the UK</li><li>▪ Sawmill output</li><li>▪ # assets with potential for renewable energy generation</li></ul>





New Energy

Gresham House’s New Energy strategy invests in three growth technologies supporting the shift from a world powered by high emitting finite resources to a rapidly evolving new energy system: Wind, Solar and Battery Energy Storage Systems (BESS).

We aim to support the decarbonisation of energy systems by investing in and developing new renewable energy generation and BESS assets and demonstrate additionality through developing new technology capacity over time.

Through our existing assets, current pipeline and intention to invest further in new renewables and battery storage assets, our strategy materially contributes to the UK’s net-zero Strategy and ambition to decarbonise the energy system.

Key 2023 statistics

- 418GWh renewable electricity generated by wind and solar assets (2022: 486.7GWh)
- 690MW operational battery energy storage capacity provided to the UK National Grid (2022: 550MW)
- 377MW battery energy storage capacity under construction (2022: 477MW)

Climate opportunities

In supporting the UK’s decarbonisation ambitions, our strategy is geared into several climate-related opportunities. These are focused around four core investment areas:

- Battery storage:** investments in battery energy storage systems designed to benefit from the opportunities presented by the transition to renewable energy technologies. Renewable energy technologies are inherently unpredictable and intermittent, creating a need for storage to balance supply and demand and to stabilise the network.
- Solar:** investments into ground-mounted and rooftop solar projects. Solar assets are now an integral part of the UK’s generating capacity. In the UK, solar generation amounts to around 4% of electricity supply on an annual basis but during the summer months output meets over a third of our electricity demand.<sup>10</sup>
- Wind:** investments in onshore wind assets. Wind assets are the most well-established renewable energy technology in the UK based on the amount of power generated. Given the UK’s plentiful wind resource, projects are economically attractive without a need for Government subsidy, though the Contracts for Difference scheme has historically offered strong support for the wind sector.<sup>11</sup>

10. BEIS, 2021

11. The Contracts for Difference (CfD) scheme is the UK Government’s main mechanism for supporting low carbon electricity generation. A CfD is a private contract between a low carbon electricity generator and a government-owned company that provides developers of projects with high upfront costs and long lifetimes with direct protection from volatile wholesale prices.

- Collocated renewable energy assets with battery energy storage: we believe that there is an exciting new opportunity for solar and wind assets to be collocated with battery energy storage systems. Collocation offers a way to support a cost-effective energy transition and to improve the risk-adjusted returns potential for our investors.

KPIs that are used to track progress against our climate-related ambitions include:

- Renewable electricity generated by wind and solar assets (GWh)
- CO<sub>2</sub> avoided through renewable electricity generation
- New renewable energy generation brought to the grid (GWh)
- Total battery energy storage operational capacity provided to the grid (MW)
- Battery energy storage capacity under construction (MW)
- Carbon emissions of our investments (tCO<sub>2</sub>e)

Climate risks

As outlined in Figure 7 on the next page, the division is exposed to several climate-related risks over the short-, medium- and long-term. Examples include:

- Government policy, including the risk that the UK government moves away from its net-zero ambitions in favour of further fossil fuel extraction and usage.
- The increased cost of raw materials as a result of short supply, energy price shocks and geopolitical events, amongst other factors. The cost of raw materials is closely monitored by the investment team and costs are agreed and fixed at the construction stage.
- Supply chain shocks linked to climate change leading to a negative impact on raw material pricing and transportation costs. A key long-term sustainability objective identified by the team is to determine best-in-class suppliers to work with and encourage more responsible supplier practices to reduce supply chain sustainability risks.

We use the services of third-party experts to estimate the impact of specific risk factors on energy prices over the short, medium and long term to create low, high and central case scenarios which are used within financial modelling, although the precise effect on power prices of any of the identified factors, and their timing, is uncertain. More information on scenario analysis can be found in the Metrics & Targets section.



Case study: delivering a two-hour battery at Grendon

Grendon is a newly built 50MW/100MWh battery storage site in Northamptonshire and is the first 2-hour operational project for Gresham House Energy Storage Fund (GRID).

2-hour batteries are able to support the grid during high or low renewable output over a longer period than shorter duration assets. They are an important part of the energy transition, allowing more renewable power to be stored and then released over a longer timeframe.

By storing electricity produced by excess renewable generation, the site can deliver power to 100,000 homes for a continuous 2-hour period.<sup>12</sup> Using this renewable energy rather than burning gas to produce electricity could save 13,140 tCO<sub>2</sub>e per year.<sup>13</sup>

12. 1 MWh is enough energy to supply the average power requirement for 2,000 homes for an hour – Ofgem <https://www.ofgem.gov.uk/sites/default/files/docs/2006/04/13537-elecgenfactsfs.pdf>

13. Assuming 2 cycles a day and emissions from natural gas are 0.18kgCO<sub>2</sub>e/KWh – BEIS 2022 <https://assets.publishing.service.gov.uk/media/62aee1f9e90e0765d523ca33/2022-ghg-cf-methodology-paper.pdf>. 2 x 100MWh x 0.18kgCO<sub>2</sub>e/KWh x 365 = 13,140,000kgCO<sub>2</sub>e.

This is the same amount of CO<sub>2</sub> generated as 4,530 return flights between London and Hong Kong.<sup>14</sup>

To increase the penetration of green energy on the UK grid more BESS projects need to be built to smooth the intermittency of renewables. GRID is set to commission Shilton Lane (40MW/80MWh), West Bradford, (87MW/174MWh), and Elland (50MW/100MWh) by HY2024. Additionally, upgrades of operational, shorter duration sites are to be carried out throughout 2024, adding a further 300MWh. Due to most of the infrastructure already being on site, augmentations will generate a smaller carbon footprint from construction and be quicker to build.

14. An economy return flight to Hong Kong is 2.9 tCO<sub>2</sub>e – BEIS 2021 <https://www.sgr.org.uk/living-targets/1-air-travel#:~:text=For%20example%2C%20using%20official%20UK,the%20lifecycle%20emissions%20of%20the>



Figure 7: example climate risks and opportunities for New Energy

Risks & Opportunities: New Energy					
Risk/ opportunity	Risk: market	Risk: physical	Risk: policy & legal	Opportunity: products and services	Opportunity: market
Description	Volatility in the cost of raw materials	Impact of higher temperatures and acute physical risks on asset performance	Changes to policy and regulation	Development and/or expansion of low emission goods and services	Access to new and emerging markets
Likelihood	Medium	Medium	Medium	Medium	Medium
Potential impacts	Increased costs	Decreased performance of assets due to higher temperatures, damage to assets from acute events	Increased operating costs (e.g., higher compliance costs), reduction in income	Increased revenues	Increased revenues
Time period	Short- & Medium-term	Medium-term	Medium- & Long-term	Medium- & Long-term	Medium- & Long-term
Divisional commentary	Recent geopolitical events could continue to lead to supply shortages, leading to price volatility. The cost of raw materials is closely monitored by the investment team and costs are agreed and fixed at the construction stage where possible	Potential physical risk factors identified as part of the initial acquisition process, design reviews, site inspections or during routine maintenance, and are mitigated via design changes. The geographical spread of the investment portfolio mitigates against local physical risk factors	Risk that UK Government strategy moves away from net zero ambitions. Potential reform of policy and legislation is consistently monitored. The division plays an active role in responding to regulatory consultations and is part of industry lobby groups	The division is focused on delivering the lowest emissions products and seeks to drive best design practices to extract the best efficiencies	The division is constantly evaluating new areas of the market including (e.g. abated gas, hydrogen, EV charging) and is aware of incentive schemes for some of these areas
Example KPIs/ trends to monitor	<ul style="list-style-type: none"><li>Cost of raw materials</li><li>Raw material costs as a % of operating costs</li></ul>	<ul style="list-style-type: none"><li>% assets in areas prone to extreme weather events</li><li>Average cost of asset insurance</li></ul>	<ul style="list-style-type: none"><li># community engagements</li><li># consultation responses</li></ul>	<ul style="list-style-type: none"><li>Operational carbon emissions (tCO<sub>2</sub>e)</li><li>Operational carbon intensity (tCO<sub>2</sub>e/£mn invested)</li></ul>	<ul style="list-style-type: none"><li>Revenue mix</li><li>Diversity of New Energy assets</li></ul>



Sustainable Infrastructure

Gresham House’s Sustainable Infrastructure strategies invest in future-proofed sustainable solutions for all aspects of our lives, from how we live, work, learn, travel, eat, stay healthy and protect nature.

We take a thematic approach to investing, allocating to the following sub-sectors in a diversified and holistic way to take advantage of the most attractive opportunities available in each: resource efficiency; decarbonisation; nature regeneration; waste solutions; digital inclusion; and health & education.

Key 2023 statistics

- 6.7mn litres used cooking oil processed into biofuel (2022: 4.3mn)
- 12,400 tonnes solid recovered fuel (SRF) diverted from landfill and turned into pellets (2022: 0)
- 469 total hectares supporting nature recovery completed in year (2022: 329)

Climate opportunities

ESG and climate opportunity monitoring is an integral part of the fund’s investment process; each prospective investment is assessed and evaluated both in terms of its financial contribution and the contribution it makes to the funds’ sustainability objectives.

- We have invested in a range of climate-related opportunities, such as:
- Waste Knot:** a waste processing facility that uses advanced manufacturing technology to turn non-recyclable commercial and industrial waste materials into high calorific value, Solid Improved Recovered Fuel (SIRF) pellets.
  - GH Bio Power:** a business that collects and processes used cooking oil. The recycled oil is then used to fuel generators to produce electricity, which earn revenues from government subsidies and the sale of power direct to on-site customers or to the grid at peak prices.
  - Fischer Farms:** owns and operates controlled environment agriculture infrastructure known as vertical farms, that grows leafy greens in specialised buildings, using hydroponics and LED lighting technology.
  - Environment Bank:** a business that creates landscape scale habitat banks from unproductive land. This is a new infrastructure asset class which creates and sells biodiversity net gain (BNG) to developers who require it to satisfy planning obligations in England, and/or to corporates who wish to become nature positive. Habitat banks thereby form part of the solution to the existential threat of biodiversity decline and climate change.

Case study: turning waste to energy at Waste Knot Energy

Investment overview

Gresham House’s Sustainable Infrastructure division first invested into Waste Knot Energy (WKE) in 2020. WKE will deliver several waste pelletisation projects, using advanced manufacturing technology to turn non-recyclable commercial and industrial waste materials into high calorific value, Solid Improved Recovered Fuel (SIRF) pellets.

These refined waste pellets can replace coal and pet coke in energy intensive manufacturing processes, such as cement and steel production. WKE charges a gate fee for accepting waste from third-party recycling plants, selling the pellets at a competitive price per megajoule of energy compared to coal or pet coke, whilst giving the customers significant environmental and carbon dioxide savings in their process.

Impact credentials

Assuming it operates at full capacity, WKE provides an enabling technology in the SRF value chain that produces a total carbon benefit of 795,828t CO<sub>2</sub>e. Over its assumed 30-year life that equates to savings of around 24 million tonnes of CO<sub>2</sub>e.<sup>15</sup>

The first facility is based in Middlesbrough and will process c.300,000 tonnes of non-recyclable SIRF waste per annum into c.250,000 tonnes of pellets.



15. Monksleigh, 2021. Assumed life of 30 years.



Transitioning from construction to operational

Over the past two years, management has faced many hurdles in bringing the project to this stage, notably around site design and planning. Over that period the deal team worked with the current management team to redefine the business plan and ensure WKE’s commercial viability.

As a result, most of these challenges have been successfully addressed, and the business is now delivering on the revised plan and timeline established at the beginning of 2023.

The business became operational in October 2023 and by the end of 2023 the plant had processed over 17,000 tonnes of SRF and sold 13,000 tonnes of pellets.

In 2024, the plant anticipates processing 90k tonnes of SRF and selling 69k tonnes of pellets. This entails a planned gradual increase, from 1,785 tonnes per month in January 2024, to 15,000 tonnes by December 2024. The plant aims to be at full production capacity by Q2 2025. Once fully operational, the team believes that it has the potential to generate EBITDA far exceeding the original investment case.

New investments are aligned with the division’s impact framework, which helps to structure how its impact is measured and monitored over time. Both positive and negative impacts for each proposed investment are outlined prior to a transaction, and associated KPIs and an active ownership plan drawn up to align its impact throughout its life with its original stated intention.

- Examples of climate-related KPIs that are monitored include:
- Low-carbon energy generated (MWh)
  - Carbon emissions avoided through low-carbon technologies (tCO<sub>2</sub>e)
  - Water savings (m<sup>3</sup>)
  - Hectares of biodiversity created
  - Carbon emissions of our investments (tCO<sub>2</sub>e)

Sustainability Policy

A core element of our investment process is a sustainability commitment made by its investee companies. Portfolio companies are encouraged to sign up to a set of policies as per the division’s investment terms. These include a Diversity, Equity & Inclusion (DEI) Policy and a Sustainability Policy. As part of the Sustainability Policy, investee companies must acknowledge that concern for the environment and broader sustainability agenda is integral to their activities and must declare that they are fully committed to taking all reasonable steps to ensuring that their business benefits the environment and wider society, including through mitigating carbon emissions.

Climate risks

- As outlined below, the division is exposed to several climate-related risks over the short-, medium- and long-term. Examples include:
- The risk that currently supportive political/regulatory regimes change, impacting the overall demand for a product or service. To address this medium-term risk, the division closely monitors political and regulatory trends and commentary at the asset level and is part of industry bodies that focus on attracting private capital into climate solutions.
  - The division has high exposure to input costs, such as energy, waste and waste oil. Over the short-, medium- and long-term, volatility in these input costs exacerbated by climate change could have a negative impact on revenue generation. The team factors long-term forecasts into its investment case analysis and monitors these over time. Where possible, both input costs and output revenue are contractually fixed.



Figure 8: example climate risks and opportunities for Sustainable Infrastructure

Risks & Opportunities: Sustainable Infrastructure					
Risk/ opportunity	Risk: policy & legal	Risk: technology	Risk: market	Opportunity: energy source	Opportunity: products and services
Description	Changes to policy and regulation leading to reduction in demand for goods	Risk of new technology failure or obsolescence in the future that cannot be mitigated	Volatility in the cost of raw materials	Use of lower-emission sources of energy	Demand for low-carbon products
Likelihood	Medium	Low	Medium	High	High
Potential impacts	Increased operating costs (e.g. higher compliance costs), reduction in income	Increased costs from retro-fitting newer technology or lower valuation on sale	Increased production costs due to changing input prices	Reduced operational costs through lower energy prices, reduced exposure to fossil fuels and carbon prices	Increased revenue through demand for lower emissions products and services
Time period	Medium- & Long-term	Short- & Medium-term	Medium- & Long-term	Short- & Medium-term	Short- & Medium-term
Divisional commentary	Political and legal risks are monitored at the asset level. Risk considered low given investments are designed to address climate-related risks	Considered where relevant in technical diligence and with ongoing support from environmental consultants	High exposure to input costs. Long term forecasts factored in to analysis, and monitored regularly by the investment committee. Where possible, both input costs and output revenue are contractually fixed	Investments are designed to use as much renewable energy as possible. KPIs monitoring energy use are reported to investment committee on a monthly basis	Carefully considered in initial investment case and typically a rationale for making the investment. The drive for low carbon products and services is a key driver for the division
Example KPIs/ trends to monitor	<ul style="list-style-type: none"><li># community engagements</li><li># consultation responses</li></ul>	<ul style="list-style-type: none"><li>% renewable energy consumed</li><li>% non-renewable energy consumed</li><li>Demand for product (e.g. tonnes produced / no. customers)</li><li>Carbon footprint of operations</li></ul>	<ul style="list-style-type: none"><li>Cost of raw materials</li><li>Raw material costs as a % of operating costs</li><li>% renewable energy consumed</li><li>% non-renewable energy consumed</li></ul>	<ul style="list-style-type: none"><li>% renewable energy consumed</li><li>% non-renewable energy consumed</li></ul>	<ul style="list-style-type: none"><li>Operational carbon emissions (tCO<sub>2</sub>e)</li><li>Operational carbon intensity (tCO<sub>2</sub>e/£mn invested)</li></ul>

Real Estate

Gresham House offers long-term equity investments into UK housing, through listed and unlisted investment vehicles, each focused on addressing different aspects of the UK’s housing crisis.

Our investments aim to deliver stable and secure inflation-linked returns while providing social and environmental benefits to our residents, the local community and the wider economy.

In Ireland, we provide investments in commercial property – office, retail and industrial properties in the greater Dublin area and major regional urban centres. The fund recognises the strong value of sustainability in improving and enhancing the value of our assets for clients, investors, tenants, and society.

Many of the climate risks and opportunities that we face are inextricably linked. For example, policy risks mandating the increase in the energy efficiency of the UK’s housing stock necessitate the division’s Energy Performance Certification (EPC) upgrade scheme. At the same time, the UK has seen an increase in demand for more energy efficient homes, which represents a significant commercial opportunity for the division to upgrade the energy efficiency of its homes.<sup>16</sup>

In the division’s Irish commercial property fund, potential reputational risks could arise from a perception that the fund is not moving fast enough to reduce its energy and carbon intensity. This represents an opportunity for the fund to improve the carbon intensity of its properties and work with tenants to improve energy efficiency practices within its units.

Key 2023 statistics

- 41% EPC A&B-rated properties (2022: 40%)
- 75% new build shared ownership homes that are EPC A (2022: 75%)<sup>17</sup>
- 30% operational Irish commercial property stock BER B+ (2022: 23%)

Climate risks and opportunities

Gresham House’s Real Estate division is taking action to mitigate several climate-related risks and capitalise on climate-related opportunities in several ways. Examples include:

- For Shared Ownership properties, ensuring all new builds have a minimum EPC rating of B and targeting A where possible. This compares to the expected requirement that all UK domestic properties in the private rented sector reach EPC C by 2028.
- Upgrading directly-rented EPC D rated UK Housing properties to at least EPC C by 2025, three years ahead of the government target.
- Within UK Housing, not building in areas of medium/high flood risk without sufficient mitigations being in place, in line with the commitments made in the Shared Ownership Environmental Charter.
- Within the Irish Commercial Property Fund, including green lease provisions in all new leases which include an obligation for tenants to provide core sustainability information with the manager to help improve the quality and quantity of sustainability and climate-related data available to the manager.

16. Buying into the Green Homes Revolution Report (santander.co.uk)  
17. This figure reflects forward funded shared ownership properties in ReSI LP



## Case study: improving the energy efficiency of ReSI plc’s retirement properties through “Project D”

Upgrading the energy efficiency of our homes plays a crucial role in our investment process. Improving our properties’ efficiency has a dual impact of reducing the environmental impact of our properties, as well as reducing energy costs for tenants, thereby improving demand.

ReSI plc is committed to upgrading the energy efficiency of its portfolio, as outlined in its Environmental Charter. A core pillar of this is “Project D” which aims to upgrade 100% of its non-exempt directly rented properties to a minimum of EPC C by 2025.

Directly Rented Units: During the year, a further 33 directly rented properties were upgraded from a D to a C, with 146 (78%) of the properties that were D rated at the beginning of Project D now having been upgraded to a C. The remaining non-exempt directly rented D rated properties are expected to be upgraded to a C by 2025.

**Housing Manager Flats (HMFs):** In addition to upgrading the directly rented units, ReSI plc has continued to make progress on upgrading the energy efficiency of the HMFs in its retirement portfolio. The HMFs are on license to a third party who is responsible for the maintenance of the properties, however ReSI has worked with the counterparty to improve the efficiency of the portfolio, evidenced by the percentage of HMFs with an EPC rating of D or below dropping from 25% in FY 2022 to 19% in FY 2023.

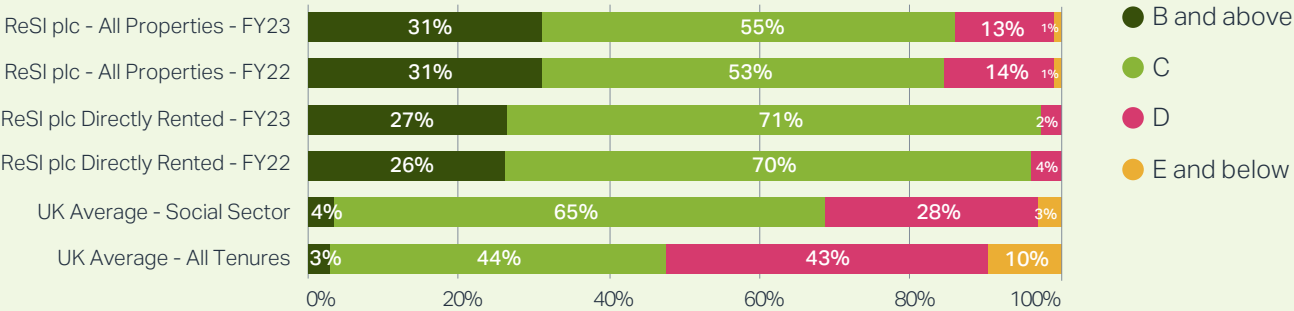
Properties have been upgraded through a combination of retesting and retrofitting works, such as replacing older heating systems and fitting insulating heat jackets on water heaters.

**Real-world outcomes:** As a result of the continued focus on energy efficiency improvements, the proportion of ReSI plc’s directly rented properties that are EPC B or C increased by 2 percentage points in 2023 to 98%. This compares with an average of 47% for all tenures, and 69% for the social sector in England.

The consideration of climate-related opportunities is contained within the division’s Sustainable Investment Framework. The framework is based on six core social and environmental factors and is used to identify which factors will influence the investment strategy and subsequent investment decision making.

Environmental and climate-related benefits are included in the Sustainable Investment Framework as a target outcome for all UK Housing investments and KPI data is collected against a number of energy and resource efficiency elements, such as the proportion of homes in a proposed project with renewable energy generation on site, the number of electric car charging points and the percentage of homes with building fabric scoring “very good” as part of the EPC process.

### Comparison to Prior Year and Wider Market



English Housing Survey, 2021 - 2022





# Case study: innovative financing solutions to support the delivery of shared ownership housing in the UK

ReSI LP aims to deliver quantifiable social and environmental impact by providing middle to low-income earners with an affordable route onto the housing ladder through shared ownership.

In December 2023, ReSI LP secured its first sustainability-linked loan with MUFG. The £30mn credit facility includes sustainability KPIs relating to the continued reduction of carbon emissions and the delivery of increasingly energy efficient homes. These include:

- 1 Reducing the carbon intensity of the portfolio (kg CO<sub>2</sub>e/ m<sup>2</sup>) in line with the requirements under the Science Based Targets initiative (SBTi)
- 2 Increasing the percentage of forward funded shared ownership homes that have an Energy Performance Certificate (EPC) of A

3 Increasing the proportion of schemes in development where embodied carbon can be accurately monitored

These KPIs align with the Fund's impact objectives, helping to create aligned incentives to achieve its sustainability targets.



Figure 9: example climate risks and opportunities for Real Estate

Risks & Opportunities: Real Estate					
Risk/ opportunity	Risk: policy & legal	Risk: market	Risk: physical	Opportunity: resource efficiency	Opportunity: energy source
Description	Changes to regulation requiring more energy efficient properties	Reduced demand for properties in favour of more energy efficient properties	Damage to properties through extreme weather events	Move to more energy efficient property	Use of lower-emission sources of energy
Likelihood	Medium	Medium	Low	High	Medium
Potential impacts	Increased expenditure on energy efficiency improvements	Reduced demand for properties leading to re-pricing of assets	Increased costs, write-offs and early retirement of existing assets	Increased demand leading to increased revenues and enhanced property values	Lower energy prices for tenants, reduced exposure to fossil fuels and carbon prices
Time period	Medium- & Long-term	Medium-term	Long-term	Medium-term	Medium-term
Divisional commentary	UK Housing portfolio future proofed by having energy efficiency rating above average. Green lease provisions included in all new commercial property leases to improve energy and carbon data collection	Increasing energy costs place financial constraints on residents. In UK Housing, this risk is mitigated through committing to delivering all new homes as a minimum of EPC B, with 80% of new homes funded in 2022 meeting EPC A	A key criteria in due diligence of new investments is the determination of whether they are located in areas prone to flood risk. Shared Ownership charter commits us to not building in areas of medium/high flood risk. The cost of property insurance is closely monitored as such costs will rise as a result of extreme weather events	UK Housing working with an external consultant to determine what level of carbon emissions can be reduced through retrofitting. A core pillar of the Environmental Charter is "Project D", which aims to upgrade 100% of non-exempt directly rented properties to a minimum of EPC C by 2025	UK Housing increasing the number of homes with renewable energy generation on site and other energy efficiency measures (e.g. heat pumps). Commercial Property working to retrofit existing buildings to ensure they continue to meet regulatory and market expectations
Example KPIs/ trends to monitor	<ul style="list-style-type: none"><li>Operational carbon emissions (tCO<sub>2</sub>e)</li><li>Operational carbon intensity (tCO<sub>2</sub>e/m<sup>2</sup> floorspace)</li><li>Breakdown of EPCs by property type</li></ul>	<ul style="list-style-type: none"><li>Breakdown of EPCs by property type</li><li># properties with renewable electricity generation on site</li></ul>	<ul style="list-style-type: none"><li>% properties in areas prone to flooding and other extreme weather events</li><li>Average cost of property insurance</li></ul>	<ul style="list-style-type: none"><li>Breakdown of EPCs by property type</li><li># properties with renewable electricity generation on site</li></ul>	<ul style="list-style-type: none"><li>properties with renewable electricity generation on site</li><li>Energy mix of tenanted properties</li></ul>



# Climate Strategy: Strategic Equity

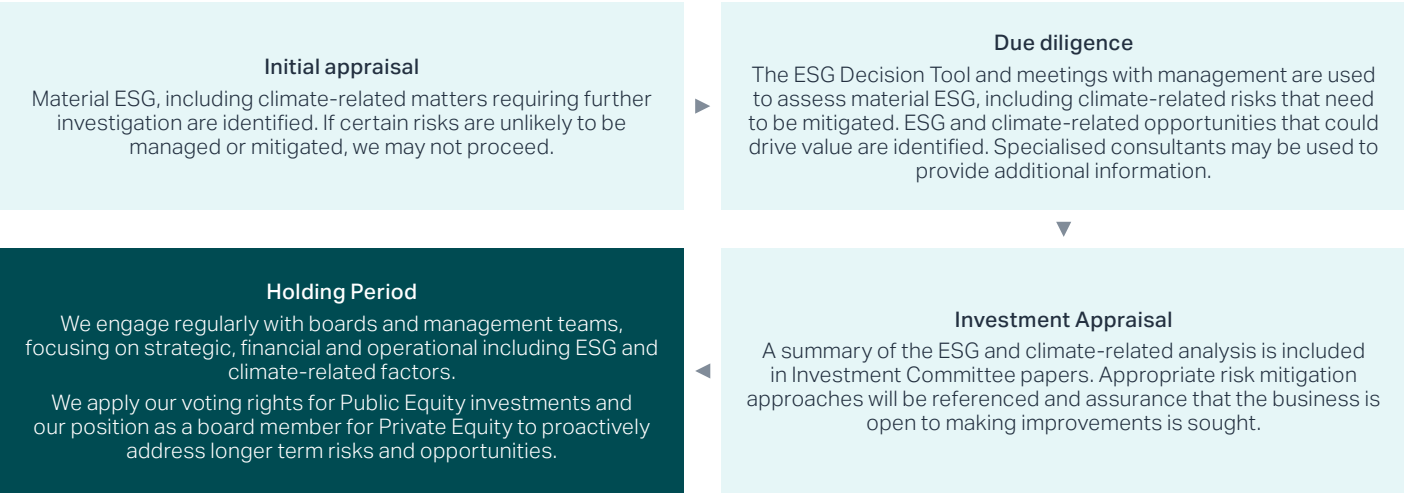
Gresham House’s Public and Private Equity teams target superior long-term returns by applying an active private equity approach, engaging with companies, applying rigorous due diligence and developing a deep understanding of each investment.

Governance is the most important ESG factor in the Public and Private Equity investment processes. Board composition, governance, control, company culture, alignment of interests, shareholder ownership structure, and remuneration policies are important elements that will feed into fund managers’ analysis and the company valuation.

Environmental (including climate change) and social factors are assessed as risk factors during due diligence to eliminate companies that face environmental and social risks that cannot be mitigated through engagement and governance changes.

## Integration of climate considerations in the investment process

Climate-related considerations are integrated into the lifecycle of each public and private equity investment as part of broader ESG analysis as follows:



## Climate-related opportunities

The Strategic Equity division’s investment strategy is primarily focused on companies operating in parts of the economy that it believes are benefiting from long-term structural growth trends and in sectors where the division has deep expertise and networks.

As a result, both the Public and Private Equity teams can invest in companies exposed to climate-related opportunities based on size, sector, financial strength and valuation.

For example, the Gresham House Global Thematic Multi Asset Fund looks to invest in companies that align with its sustainable themes, one of which is Climate & Energy, and also applies exclusionary criteria. For all new investments made by the fund (except for cash or cash equivalents, or sovereign bonds), a company note including an investment and sustainability thesis must be produced prior to investment. This includes an analysis of the thematic alignment of the security and includes detail such as the theme targeted and a description of how the asset aligns to the theme. One of the exclusion criteria of the fund is “Fossil Fuels Production and/or Exploration >10% Revenue”.

## Climate-related risks

Within Private and Public Equity, ESG, including climate factors, are considered as part of risk analysis but the divisions do not specifically target positive outcomes on certain environmental or societal characteristics. As well as risk analysis undertaken through completion of the ESG Decision Tool, research can be used to inform engagement objectives that the investment teams work with companies on throughout the holding period.

While our Public and Private Equity divisions do not typically invest in carbon intensive sectors, one of Gresham House Ireland’s funds has exposure to four companies involved in oil and gas exploration. The Sustainable Investment Team is planning to work with the relevant investment team to undertake additional research on these stocks to better understand their climate risk exposure and the viability of the stocks’ transition plans.

Being an active, long-term steward of our investments is an important part of being a responsible investor and therefore investment teams actively incorporate engagement and voting activities into their investment process over time. The ability to influence change at portfolio companies will partly depend on the proportion of the company we own.

Over the coming years we will endeavour to improve the level and accuracy of our climate risk analysis within our Strategic Equity division and look forward to reporting progress in future reports.

## Private Equity Engagement

We recognise the importance of engagement as an essential part of being effective stewards of the investments we make. One of the ways in which the Private Equity division engages with its portfolio companies on ESG, including climate-related matters, is through its annual ESG survey.

This survey asks investee businesses a range of questions based on the ESG VC framework and helps to identify an understanding of how portfolio companies think about ESG and climate-related issues, and which ESG and climate-related data is reported on and monitored. The results of the survey are used to build engagement plans for investee businesses based on specific ESG and climate-related matters.

The division also recognises the opportunity to educate investee companies on the importance of material ESG issues to their business. Alongside the Group’s Sustainable Investment team, it hosted a quarterly webinar series in 2023 to provide a toolkit for investors to better integrate ESG and sustainability into their businesses. This webinar series followed the structure of the TCFD and aimed to generate sustainable value creation through a better appreciation of climate risks and opportunities, among other ESG factors.

## Public Equity Engagement

In 2023, the UK Public Equity team reviewed and updated its approach to ESG engagement with portfolio companies. Whilst proactive engagements in areas such as management and board composition will continue to support investment performance, our review highlighted the need to broaden our ESG monitoring and engagement process to cover a wider variety of issues.

We sought to introduce an automated and repeatable process which would enable us to proactively monitor and engage with portfolio companies based on objective third-party data, spanning almost twenty ESG issues including ‘live’ carbon reporting and intensity, and progress on net-zero policy.

We process new data on a monthly basis using a proprietary scoring model, ranking our portfolio companies on their aggregate ESG ‘quality’ and ‘transparency’. We then generate red flags for certain companies and disaggregate drivers of ‘lower quality’ or ‘lower transparency’ to highlight possible areas of engagement.

In 2024, we are taking steps to further enhance the new monitoring and engagement process, introducing a wider variety of ESG metrics and sector benchmarking.



# Scenario analysis

We recognise the impact future climate conditions will have both in highlighting potential investment opportunities and futureproofing our assets and the returns that they are able to generate.

When identifying and evaluating the risks that we face, it is important that we understand how the climate will change over the short, medium and long term. This need is most apparent with Real Assets, where our typical investment horizon is over 10 years.

## The role of scenario analysis within Real Assets

### Transition Risk

Most of our Real Assets divisions will benefit from the opportunities afforded by the transition to a low-carbon economy. Central to those opportunities is the ability of investment teams to understand the likely impact of climate change on transitional areas such as policy, regulation and the cost of energy.

### Modelling energy prices in New Energy

Through the Gresham House Energy Storage Fund plc (GRID), we believe Gresham House’s investments in Battery Energy Storage Systems (BESS) are well positioned to benefit over the short, medium and long term by participating in the opportunities arising in the UK and overseas from the decarbonisation of energy usage and the increased penetration of renewable energy.

The division already benefits from climate-related opportunities arising from the transition to renewable energy technologies which are inherently intermittent, and which therefore create additional requirements for storage to balance supply and demand, which BESS can provide. This also presents wholesale trading opportunities for the division.

Over the coming years, it is likely that the wholesale energy markets will be significantly impacted by a number of climate-related factors. These include:

- Government policy (including carbon cost regimes and mandated plant closure)
- Penetration of renewables

- Development in future technologies designed to deal with climate-related matters (e.g. a move to a hydrogen-based energy system)
- Changing patterns of demand (including the impact of electric vehicles and heat pumps)

The division uses the services of third-party experts to estimate the impact of these factors on energy prices over the short, medium and long term to create low, high and central case scenarios. These scenarios, which factor in government net-zero commitments, a view on the likelihood of their implementation, and expected carbon prices, are then embedded within financial modelling.

### Physical Risk

Alongside the opportunities and risks presented by the transition to a low carbon economy, it is important for our investment teams to understand the likely impact of climate change on long term climate conditions and the severity and frequency of extreme weather events. Potential impacts could emerge through direct damage to our assets and reduced productivity, or indirectly through the supply chain due to the availability of certain raw materials and the health of natural assets. Investment managers need to be aware of the physical risks different asset types and locations may be exposed to so that strategies can be adapted to build resilience.

### Forecasting weather patterns in Forestry

The forecasting and modelling of climate patterns play a prominent part of the Forestry division’s investment process. The team aims to manage and develop its forests so that they are best positioned to address potential future climate-related risks such as changes in growing conditions, fires, flooding, or limited water availability. Climate predictions are used by the Forestry division in the following ways:

- To improve the way in which forests are planned and managed in order to enhance their resilience to climate change and to mitigate the risks posed by the negative impacts of a changing climate.
- To help select the tree species most tolerant to certain climatic conditions before planting.

Climate change poses a threat to commercial forestry around the world, where global warming will continue to shape the optimal geographies for growing commercial grade timber. However, in some regions a changing climate, leading to warmer and wetter forests, will be positive for growth rates.

Figure 10 shows how the suitable habitat ranges of different tree species could shift by the end of the century in a 2.7°C temperature rise scenario

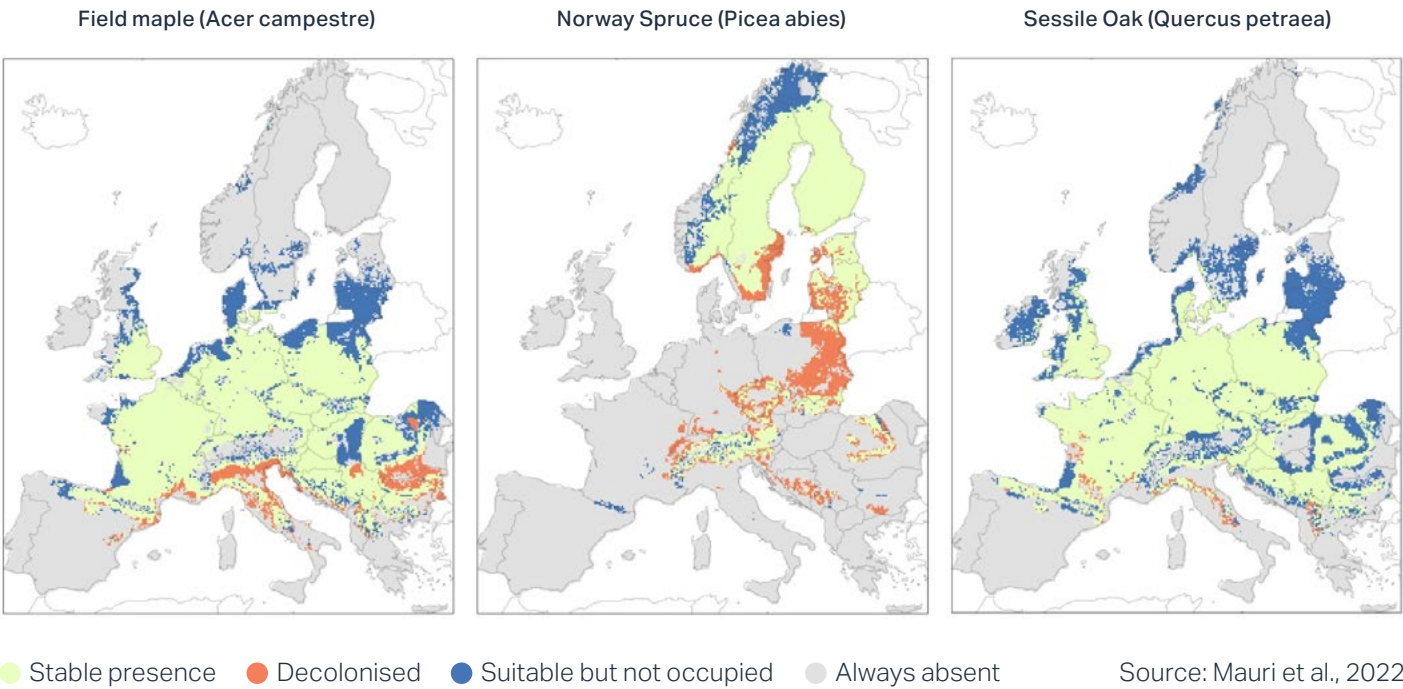


Figure 10 provides an example of how climate modelling could be used to inform forest management. Where a stable presence is shown, the habitat is expected to remain suitable from today to 2100. Where decolonisation is shown, habitats that are suitable today may become climatically unsuitable by 2100. Lastly, where suitable but not occupied areas are shown, the environment may gain suitable climate conditions but would require human intervention for the species to be present.

Regional climate projections are used in the selection of tree species for new planting. Climate considerations are also used in tree breeding, the process by which the underlying genetics of trees are enhanced to better suit its surroundings.

As an example of tree breeding, the team initiated the recent development of the use of Lutz spruce as an alternative to other spruces on drier sites in the UK. This species appears to be better adapted to drier, more continental conditions and the division is actively trialling the species where climatic moisture deficit is relatively high.

### Climate Modelling

To build on the approach investment managers currently employ to plan for physical climate risks, this year we began the development of a climate modelling approach to provide a quantified measure of the risk faced by our Real Assets - the Value at Risk (VaR). The reason for this is to be able to more precisely identify where and to what extent our assets are exposed to climate risks so that priority areas for adaptation of our strategy can be identified.

The first step in this process was determining the baseline climate conditions at our asset location. This encapsulated both extreme weather events (e.g. storms) and average climate conditions (e.g. average annual temperature) as of today.

Then, climate scenario analysis was used to determine what future climate conditions could look like using the Shared Socioeconomic Pathways (SSPs). These project future greenhouse gas emissions based on a range of socioeconomic variables such as GDP and population growth. The scenarios used for this analysis were;

- SSP2-4.5 to represent a likely, middle of the road climate scenario with an end of century temperature rise of around 2.7°C, and
- SSP5-8.5 to represent a worst-case, fossil fuelled development scenario with a >5°C temperature rise.

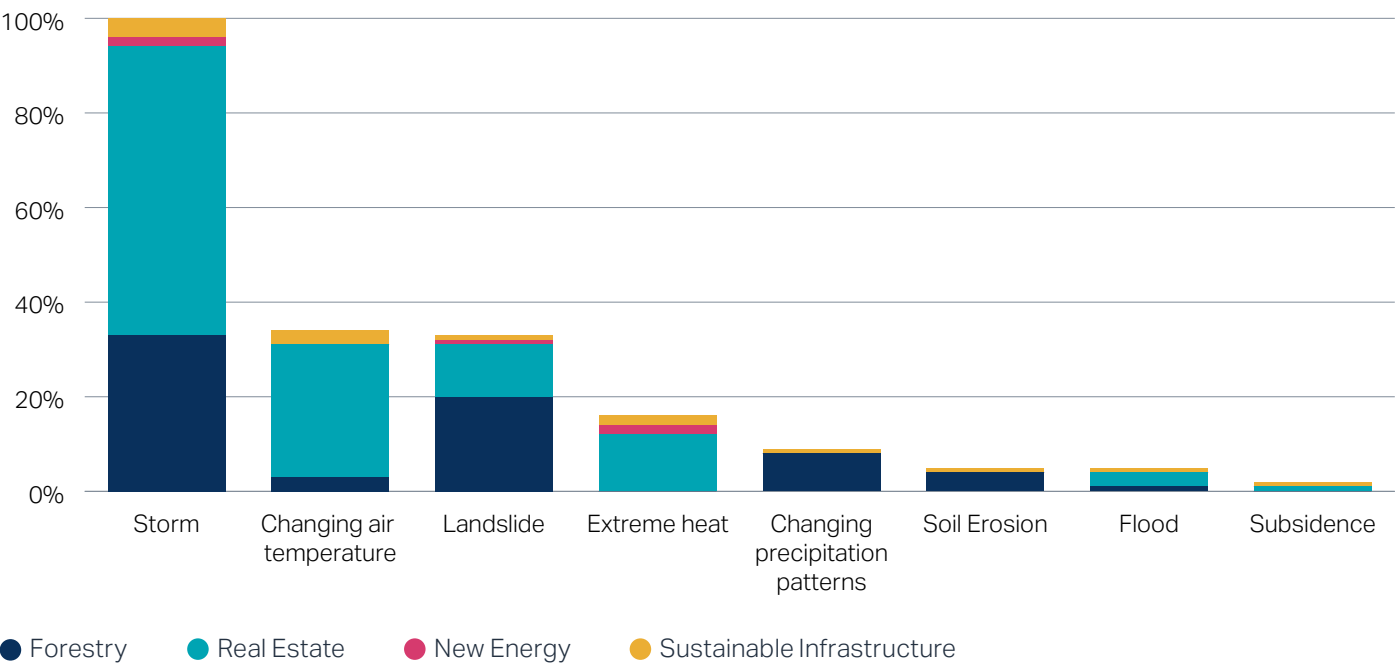
Damage curves were then used to calculate potential losses caused through asset damage and lost revenue in the baseline and climate scenarios for each of the hazards modelled.



The difference in the Net Present Value of each asset between the baseline and climate scenarios once losses have been taken into account gives an estimate of the climate VaR for each hazard.

This climate modelling exercise found that our Real Assets could be exposed to several natural hazards and changing climate conditions. The proportion of our assets that could be exposed to each hazard in a worst case scenario (SSP5-8.5) and the split by division can be seen in Figure 11.

Figure 11: Proportion of assets exposed to climate hazards and the split by division



A data trial was used to conduct the climate modelling, however for some of the hazards modelled, it was not possible to calculate the VaR.

For example, some hazards were only modelled for the baseline scenario (e.g. storms) so only the current levels of risk could be calculated, and some acute hazards did not use return periods so the damage could not be calculated.

We now have a methodology in place to quantify the physical risk faced by our Real Assets and we will continue to research different datasets that can be used to more accurately project hazards and calculate the damage caused so that climate VaR at the company level can be determined.

### The resilience of our strategy to future climate scenarios

We have identified four core mitigations to the physical and transitional effects of climate change on our business strategy.

- 1 Climate change is a core part of our strategy.** Our Corporate Sustainability Strategy (CSS) identifies climate change as a priority area and we recognise that the creation of stakeholder value is contingent on our delivery of services supporting climate change mitigation and resilience. Embedded within the CSS is the requirement for us to monitor and reduce our impact on the environment, notably through the reduction of the carbon emissions of our operations and our investments.
- 2 Many of our investment solutions will benefit from the transition to a low-carbon economy** given the climate benefits that they offer. Our role as specialists in sustainable alternatives means we are committed to assets that provide long-term solutions to the transition to a low-carbon economy.
- 3 The asset classes that the Group manages are well diversified** across different sectors of the economy. Our strategy covers a broad range of sectors, asset classes and geographies. This helps to manage volatility arising from potential external, climate-related events, and provides a stable path for our growth strategy.
- 4 Climate risk is considered prior to all proposed investments.** Each division's proprietary ESG Decision Tool asks investment teams to consider specific physical and transition climate risks prior to a proposed transaction. For our Real Assets divisions, this includes the recommendation to overlay a proposed investment's asset location into the Met Office's UK Climate Projections (UKCP). KPIs are used to form meaningful engagements with investee businesses and to track progress on how assets are taking advantage of climate-related opportunities and managing and mitigating climate-related risks over time.

As we continue to grow over the coming years, we will continue to evolve how we assess our resilience against future climate scenarios, most notably within our Strategic Equity division.

While the complex models at the heart of global temperature scenarios are becoming more accurate, their outcomes remain rather uncertain, driven by three factors:

- 1 Internal variability.** This is the measure of the variability of the climate system independent of human activities. This states that while overall temperatures will increase, these increases are not linear, and short-term fluctuations will be driven by internal variability which leads to forecast uncertainty.
- 2 Model spread.** Humans possess incomplete knowledge of the effect of the climate system on model outcomes. This means that running the same model with the same assumptions multiple times can still lead to different outcomes. This variability results in "model spread" uncertainty which again leads to forecast uncertainty.
- 3 Scenario spread.** This is a measure of the uncertainty about future emissions and atmospheric CO<sub>2</sub> capture. Representative Concentration Pathways (RCPs) describe different scenarios in terms of the evolution of CO<sub>2</sub> concentration over time; it is impossible to know what climate actions will be taken and what RCP scenario will be closer to the reality, and this leads to additional forecast uncertainty.

These sources of uncertainty in climate projections are discussed in more detail by the Intergovernmental Panel on Climate Change (IPCC) [here](#). While we use modelling and scenario analysis in some of our investment divisions to inform decision making, we recognise their limitations and therefore use them alongside other information that informs our investment analysis.



# Overview

Gresham House is aware of the potential impact of both physical and transition climate risks on the financial value of the Company, its assets and its investments.

Physical risks are those arising from the climatic impact of higher average temperatures (such as the increased frequency and severity of extreme weather events), whilst transition risks are those arising from the changes in technology, markets, policy, regulation, and consumer sentiment as a result of the transition to a lower-carbon economy.

Gresham House recognises that transparency around material climate-related financial information can help support investment decisions throughout the transition to a low-carbon economy. Reporting in line with the full recommendations of the TCFD and TPT will assist with the analysis, understanding and disclosure of relevant climate-related financial information.



# Identifying and assessing climate-related risks

The responsibility for climate-related risk management has been embedded into the activities of each business unit throughout the lifecycle of an investment.

## Enterprise risk assessment

The identification and assessment of climate-related risk takes place through the same risk identification process as other risks per our risk management framework. This framework assesses and manages Group-wide risks based on the likelihood of the risk materialising and the business exposures faced if it does.

Risk identification and assessment is a two-step process involving:

- Identification of the strategic objectives of the Group as a whole and supporting business processes; and
- Identification and assessment of the risk events that might impede the achievement of objectives or delivery of business processes. Risks are assessed on two dimensions, likelihood, and impact; these scores are then combined to obtain a total risk score.

Gresham House maintains a risk register which records all the key risks which are relevant to the Group.

## New product risk assessment

As part of the design of new products, fund managers are required to identify and assess if climate-related risks the fund may potentially be exposed to. The fund manager's assessment is subject to review and challenge from the Risk Management and Sustainable Investment functions and formally documented as part of the product governance committee workflow.

## Investment case risk assessment

Individual investment decisions are overseen in line with fund governance structures e.g. formal Investment Oversight committees, which review and challenge proposals in line with defined procedures which capture climate-risk.

The Gresham House ESG Decision tool is a key component of Gresham House's approach to ESG and climate-related risk integration and is applied to all investment divisions.

Figure 12: Risk management framework



The ESG Decision tool requires the investment team to analyse how a broad range of ESG risks, including climate-related risks, may impact upon a proposed investment. The outcomes of the ESG Decision Tool shape the due diligence process and provide rational ESG factors to be tracked, monitored, and managed over time by our investment teams. More information on the ESG Decision Tool can be found later in this section.



# Managing climate-related risks

Climate risks are managed in line with all other enterprise-related risks, and as such, for each material risk identified, controls and mitigating actions are documented, and risk owners acknowledge ownership for the maintenance and operation of these controls.

Business-unit risk owners have the day-to-day ownership, responsibility, and accountability for assessing, controlling and managing risks within their units.

Fund managers submit formal quarterly risk reports to the AIFM Risk Committee, chaired by the CFO & Head of Risk. The AIFM Risk Committee reviews the risks relevant to each fund’s investment strategy to which each fund is or may be exposed.

The Group Audit Committee receives regular reports from the CFO & Head of Risk, including periodic updates on risk trends, emerging risk and the latest evaluation of the Group Risk Register.

## Climate engagement with investee businesses

Gresham House operates predominantly in the private markets. This impacts upon the Group’s ability to analyse climate-related risks and opportunities within its investments given challenges with data availability. Over the last 12 months Gresham House has taken steps to improve the quality and quantity of ESG and climate-related data that it collects from its investee businesses.

Division-specific ESG KPI banks have been drawn up and finalised so that investment teams can improve their understanding of ESG issues within their investments. On climate, Gresham House has worked with expert carbon consultants to understand the carbon footprint and intensity of its investments and their sources and uses of carbon, all of which will improve future climate risk management processes.

Engaging with investee businesses to improve their disclosure and practices relating to climate-related risks is a crucial first step in helping to improve their ability to identify, manage and mitigate these risks.

Examples of division-specific climate-related engagements include:

- All portfolio companies in the **Sustainable Infrastructure** division are required to sign up to a sustainability policy, requiring them to mitigate any adverse environmental impacts, conserve resources, avoid emissions, and continually strive to improve their environmental performance.
- The **Private Equity** team undertakes an annual ESG survey of its investments, several questions of which are centred on climate change. Throughout the feedback process, the team has encouraged investee businesses to calculate and understand their carbon baseline and to take action to reduce their carbon footprint.
- The **Forestry** team has surveyed its woodland managers, sawmill and main nursery supplier to improve the quality and quantity of carbon-related data that they disclose.

### Risk time frames

We consider risks in the context of the following time frames:

- 0-3 years: short term
- 3-10 years: medium term
- 10+ years: long term

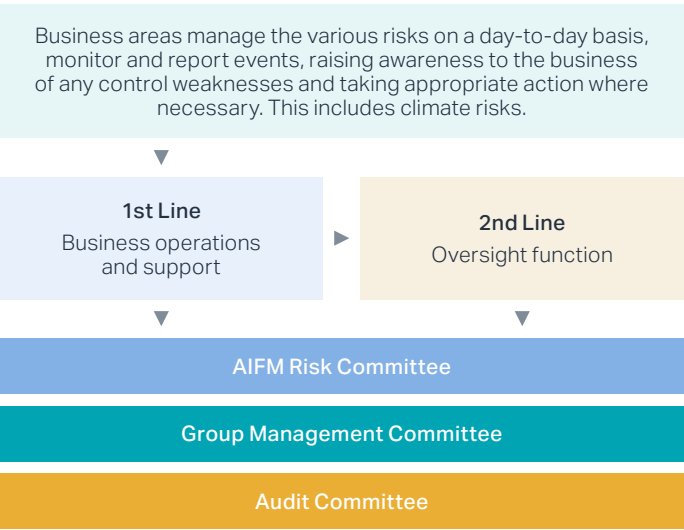
## Divisional climate risk management

Each asset division has its own ESG Decision Tool which helps support the identification of potential material ESG risks prior to investment. The Tool is based on the ten themes of Gresham House’s Sustainable Investment Framework.

The Tool focuses on material ESG risks, including climate risks, which can then be tracked, monitored, and managed over time. The tools will not tell the investment teams whether to invest or not, instead they aim to provide a rational and replicable assessment of key ESG risks which should be considered prior to investment. It is up to the investment teams to decide whether they are sufficiently comfortable with these risks to proceed with an investment.

For Gresham House’s Strategic Equity division, completion of the ESG Decision Tool is the primary way through which climate risks are identified. Where material climate risks are identified as part of this process, they are discussed with management teams and monitored throughout the life of the investment.

Figure 13: Two lines of defence model



Please note that Gresham House Limited has obtained ISAE 3402 certification for its internal controls systems.



Methodology

Group-level metrics methodology

Over the last few years we have looked to improve the quality and quantity of climate-related data that we collect and report on. For the first time in 2021 we undertook an exercise to understand the carbon emissions of our operations and our investments alongside expert carbon consultants, and this exercise has been repeated each year since.

In this section we disclose the scope 1, scope 2 and scope 3 greenhouse gas (GHG) emissions covering both our operations and our investments.

Greenhouse gas (GHG) emissions

**Scope 1:** direct emissions from owned or controlled sources

**Scope 2:** indirect emissions from the consumption of purchased electricity, steam and cooling

**Scope 3:** all other indirect emissions that occur within the value chain

Group consolidated emissions 2023

The table below summarises our Group consolidated emissions. This is Gresham House’s total carbon footprint including both Corporate and Investment (Category 15) emissions.

Group consolidated emissions	2022	2023
Total scope 1 GHG emissions (tCO <sub>2</sub> e)	86	108
Corporate operations - fuel use	86	108
Total Scope 2 (tCO <sub>2</sub> e)	38	29
Corporate operations - electricity (location based)	38	29
Total Scope 3 (tCO <sub>2</sub> e)	1,109,722	1,056,946
Corporate operations	238	439
Investment activities - scope 1,2 & 3	1,109,484	1,056,507

Divisional-level metrics

When discussing the carbon footprint of our investments, in addition to disclosing our absolute emissions, we report on three KPIs that will help us to manage our climate impact over the coming years:

- Weighted average carbon intensity (WACI)-measures a portfolio’s exposure to carbon-intensive companies, expressed as tCO<sub>2</sub>e/£mn revenue:

$$WACI (\frac{tCO_2e}{\$m\ revenue}) = \sum_{i=1}^n \frac{Investment_i}{Total\ Portfolio\ Value} \times (\frac{S1\&2\ emissions_i}{\$m\ revenue_i})$$

- Carbon emissions intensity- measures the volume of carbon emissions per million dollars of revenue, also known as the carbon efficiency of a portfolio, expressed as tCO<sub>2</sub>e/\$mn revenue:

$$Carbon\ Intensity (\frac{tCO_2e}{\$m\ revenue}) = \frac{\sum_{i=1}^n \frac{Investment_i}{EV_i} \times (S1\&2\ emissions_i)}{\sum_{i=1}^n \frac{Investment_i}{EV_i} \times (\$m\ revenue_i)}$$

- Portfolio carbon footprint- total carbon emissions for a portfolio normalised by the market value of the portfolio, expressed in tCO<sub>2</sub>e/\$mn invested.

$$Carbon\ Emissions\ per\ \$m\ invested (\frac{tCO_2e}{\$m\ invested}) = \frac{\sum_{i=1}^n \frac{Investment_i}{EV_i} \times (S1\&2\ emissions_i)}{Portfolio\ Value\ \$m}$$

The methods used for calculations are aligned with the Partnership for Carbon Accounting Financials (PCAF) Global GHG Accounting & Reporting Standard for the Financial Industry.<sup>18</sup> The calculations cover scope 1, scope 2 and, where possible, scope 3 of the investments.

An additional metric that we consider as part of our analysis is return on carbon. Return on carbon shows the revenue generated per tonne of carbon emitted from our investments. This figure further contextualises the carbon footprint of our investments in the context of the returns that were generated throughout the year.

18. Partnership for Carbon Accounting Financials, The Global GHG Accounting and Reporting Standard for the Financial Industry. First edition (November 2020).

Carbon footprint of our investments

Figure 14: Gresham House financed emissions

Metric	FY 2022	FY 2023
Scope 1 & 2 emissions (tCO <sub>2</sub> e)	141,040	135,086
Scope 3 emissions (tCO <sub>2</sub> e)	968,444	921,421
Emissions intensity (tCO <sub>2</sub> e/£mn invested) scope 1 & 2	21.1	21.7
Emissions intensity (tCO <sub>2</sub> e/£mn invested) scope 1, 2 & 3	165.7	170.0
Weighted Average Carbon Intensity (WACI) (tCO <sub>2</sub> e/£mn revenue) <sup>19</sup>	2017.3	3496.2
Return on carbon (£mn revenue/tCO <sub>2</sub> e)	0.012	0.009
Data quality score <sup>20</sup>	2.98	2.90

Investment emissions cover all asset divisions managed by Gresham House including Forestry, New Energy, Sustainable Infrastructure, Housing, Public Equity and Private Equity.

Scope 1 & 2 investment emissions decreased by 4% in 2023 compared with 2022. Within this, there were reductions within our Public Equity and New Energy divisions, while the most notable increase was driven by our Sustainable Infrastructure division which had several assets become operational in 2023.

Our scope 3 emissions decreased by 5% in 2023. Although there were increases in scope 3 emissions for Sustainable Infrastructure, these were countered by decreases across Private Equity and Public Equity Ireland. Sector average revenue intensities were used to calculate 100% of Private Equity’s emissions which may explain this decrease, as average emissions should be decreasing due to national net-zero action such as the decarbonisation of the national grid.

The Weighted Average Carbon Intensity (WACI) metric, which is sensitive to outliers, increased between 2022 and 2023. In 2022, WACI did not include Real Estate or New Energy which accounts for a large portion of this increase. As well as this, Sustainable Infrastructure’s WACI increased by 224% due to a number of investments becoming operational in 2023.

19. In 2022, WACI did not include Real Estate or New Energy which accounts for a large portion of this increase

20. In line with PCAF data quality scoring, 1 is most accurate and 5 is least accurate. The data quality score is for Scope 1 & 2 investment emissions

The methods used for calculations are aligned with the Partnership for Carbon Accounting Financials (PCAF) Global GHG Accounting & Reporting Standard for the Financial Industry.

Some of the scope 3 emissions estimates of our investments are uncertain and, in most cases, not complete, meaning they only cover selected categories. Gresham House operates primarily in the private markets, where data quality and availability are typically poor. As a result, the collection and quality of scope 3 emissions is a key area in which we will look to improve our carbon-related data over the coming years.

Forestry biogenic emissions and removals

In 2023, our forests sequestered more carbon than the carbon footprint of our investments. However, the emissions and removals cannot be claimed as offsets by Gresham House or our clients as these removals are already factored into government carbon accounts.

Forestry emissions	FY 2022	FY 2023
Total annual sequestration (tCO <sub>2</sub> e) <sup>21</sup>	-1,870,000	-1,874,000

In 2023, we updated our sequestration methodology to align with the most current and widely accepted techniques and guidelines from the Intergovernmental Panel on Climate Change (IPCC).

21. Total annual sequestration reflects the annual increase in carbon stock within standing forest inventory (biogenic growth). A negative figure reflects sequestration (removal) of carbon.



Divisional level KPIs

ESG and climate-related data play a prominent role in our divisions’ investment processes. For our Real Assets divisions, where many of our assets positively contribute to climate resilience and mitigation, climate-related KPIs play an important role in monitoring whether assets are performing in line with their stated intention.

These KPIs are intended to support the analysis undertaken by investment teams into their underlying investments. This greater quality and quantity of data enables more effective engagement and allows investment individuals to track the progress a particular asset is making towards its ESG and climate-related ambitions, and to what extent climate-related risks are being managed effectively.

The following climate-related KPIs are being collected across all of our Real Assets and Strategic Equity divisions:

- Scope 1, 2 and 3 GHG emissions (tCO<sub>2</sub>e)
- Carbon footprint (Scope 1 & 2, tCO<sub>2</sub>e)
- GHG intensity (tCO<sub>2</sub>e/£mn revenue)
- Operational energy consumed (kWh), percentage renewable (%)

For our Real Assets divisions, examples of additional climate-related KPIs that are being collected, tracked and monitored include:

Forestry

- Total annual GHG emissions sequestered (tCO<sub>2</sub>e)
- Area certified to a third-party forest management standard, % (Ha)
- Area managed for afforestation (Ha) (Cumulative)
- Number of trees planted annually
- Timber harvest volume (m<sup>3</sup>)
- Percentage of timber sold in m<sup>3</sup> that is certified (%)

New Energy

- Operational BESS capacity (MW)
- BESS capacity under construction (MW)
- Renewable energy generation (MWh)
- Total GHG emissions avoided (tCO<sub>2</sub>e)

Sustainable Infrastructure

- Low-carbon energy generated (MWh)
- Carbon emissions avoided through low-carbon technologies (tCO<sub>2</sub>e)
- Water savings (m<sup>3</sup>)
- Hectares of biodiversity created
- Carbon emissions of our investments (tCO<sub>2</sub>e)

Real Estate

- Average EPC rating of portfolio
- Operational energy consumed (kWh), percentage renewable (%)
- Percentage of buildings producing zero-carbon energy produced on site (%)
- Percentage and number of homes with access to electric vehicle charging

Operational metrics and KPIs

Over the past 12 months we have worked to significantly improve the scope of data used to calculate our operational emissions, including:

- Undertaking an employee commuting survey to better estimate our carbon footprint associated with employee commuting
- Evolving our expenses system to gather more accurate travel-related data
- Inclusion of homeworking in our operational emissions

All operational emissions were prepared by expert carbon consultant Carbon Responsible using the GHG Corporate Reporting and Accounting Standards, using UK Government Reporting and Conversion methodology and conversion factors on the Gresham House data.

Despite improvements to the scope and quality of data, 60.9% of operational emissions reported were estimated to some extent; this was largely due to employee commuting emissions which make up 52.2% of our operational emissions and are calculated fully via the use of estimations.

Corporate operational emissions source	FY 2022	FY 2023
Total carbon emissions (scope 1, 2 & 3) (tCO <sub>2</sub> e)	362.3	575.7
Scope 1 emissions (tCO <sub>2</sub> e)	86.2	108.2
Scope 2 emissions (tCO <sub>2</sub> e)	38.2	28.8
Scope 3 emissions (tCO <sub>2</sub> e)	237.9	438.8
Emissions intensity (tCO <sub>2</sub> e/£mn revenue)	4.5	6.4
Carbon intensity (tCO <sub>2</sub> e/full time employee)	1.5	2.6
Return on carbon (£mn revenue/tCO <sub>2</sub> e)	0.22	0.16

Corporate operational energy usage	FY 2022	FY 2023
Total energy use (scope 1, 2 & 3) (kWh)	642,463	679,531
Scope 1 emissions (kWh)	360,968	411,010
Scope 2 emissions (kWh)	189,074	182,548
Scope 3 emissions (kWh)	92,421	85,973

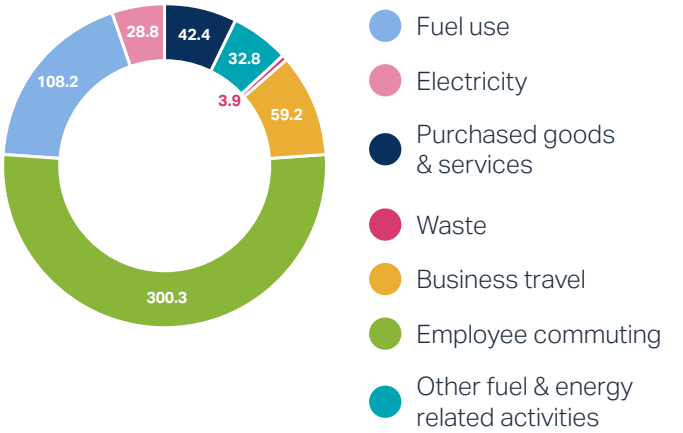
Overall, operational emissions increased by 59% compared to the FY22 baseline. The primary factor driving this increase in overall emissions was the expansion of reporting to include homeworking impact and refrigerant top-ups.

The inclusion of homeworking emissions accounts for 30% of the total emissions, refrigerants account for c.1% of the total emissions. An increase in operational activity is also responsible for the remaining increase in overall emissions across all scopes. For instance, a marked increase in scope 1 emissions by 26% was primarily driven by an increase in mobile combustion.

The increase in scope 3 emissions was mostly driven by the inclusion of homeworking, however, both employee commuting and business travel contributed to this increase in emissions.

The 25% reduction in scope 2 emissions this year was a result of our three largest offices switching to authentic renewable electricity suppliers.

Operational Emissions by Source





# Improving accuracy

## Improving the quality and scope of operational emissions data was the priority for 2023.

As well as calculating the carbon footprint for 2023 with high quality data, we also recalculated the footprint for 2022 in order to create a suitable and appropriate baseline for future emissions reductions work.

The measurement of carbon emissions impacts uses accepted conversion methodologies and accounting standards. These methodologies and supporting sector frameworks are continually improving, as more input data becomes available, enabling more granular and accurate measurement over time.

At Gresham House, we recognise that some of the sectoral datasets used to support our emissions impact are broad and accordingly we have and will continue to invest time and effort into improving existing methodologies to deliver investment and sector level emissions analysis to better inform our decision making.

# Forward looking targets

## We have not set forward reduction targets covering our investment and operations at this time.

We will look to set targets once we have completed further analysis of our emissions profile and our forward plans for the business.

We aim to set net-zero targets covering both our investments and our operations. We are currently in the process working with expert carbon consultants to draw up a proposed strategy and expect to formalise and communicate this in the coming year.

# Outlook

## We are committed to continue improving both the quality and granularity of our climate-related disclosures over time.

As part of our GH30 strategic plan, central to our Group strategy is our ambition to be the manager of choice for sustainable investment client solutions.

To meet this ambition, we must make sure that we continue to evolve and advance our Corporate Sustainability Strategy (CSS) over the coming years.

As detailed on [page 13](#), our CSS details our priority topics, core objectives to be achieved by 2025, and actions to be completed over the short and medium term.

Climate Change and Pollution has been identified as a priority topic covering our role both as an investor and business and employer. The following outlines some of our core Climate Change and Pollution actions that we will take between now and 2025 to support our climate ambitions.

## Gresham House as a Sustainable Investor

- Engage with investments across all divisions to support the improved measurement of their carbon footprint and establishment of climate change strategies

- Expand the climate data that is reported for all funds, including through climate accounting and scenario analysis
- Continue to assess the key climate-related risks across our investments and develop a process to reduce exposure or mitigate these risks
- Continue to assess key climate-related opportunities across our investments and develop processes that allow GH to allocate to these opportunities where possible
- Set science-based Net-Zero targets for each division/fund and regularly monitor progress against these targets

## Gresham House as a Sustainable Business & Employer

- Have a climate change mitigation plan in operation to address material climate-related risks and opportunities
- Set a net-zero target for our operational emissions, aiming to reduce our emissions as far as possible and set necessary policies to support the identified target
- Work with suppliers to support the achievement of their carbon emission targets
- Continue to identify, participate in and/or lead industry climate-related initiatives



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