Climate-related Financial Disclosures Report 2021

Federated Hermes Limited

www.hermes-investment.com
For professional investors only

Climate change has become a defining factor in companies' long-term prospects.

As an investment manager, we have a duty to our clients to take action to address systemic risks and opportunities – and the Task Force on Climate-related Financial Disclosures' focus and guidance on the financial impact of climate change are of particular importance as we collectively strive to keep 1.5°C within reach.

Foreword

At the landmark COP26 summit, which took place in Glasgow in 2021, we witnessed a renewed flurry of activity on the climate agenda. Governments, financial institutions and companies made pledges on decarbonisation, eliminating deforestation, increasing the number of electric vehicles, moving away from coal-fired power and financing natural capital solutions.

In the run-up to COP26, more than 300 companies committed to achieving net-zero emissions. However, data from the Climate Action 100+ Benchmark shows that while 52% of the world's largest emitters had net zero goals, only 20% had short and medium-term emissions reduction targets and only 7% had targets aligned with the Paris Agreement goals.[1] As we look forward to the rest of 2022 and into 2023, a critical focus for us is to use our position as one of the world's leading stewardship organisations to help turn these ambitious targets into action, on behalf of our clients.

We hope that the upcoming climate talks at COP27 in Egypt will demonstrate that the global climate process has not stalled nor lost ambition due to various global shocks this year. Climate integrity and a holistic view that incorporates issues around a just transition and nature will be imperative for the success of both COP27 and the discussions set to get underway at COP15 on biodiversity in Montreal later this year.

With this accelerating global momentum, Federated Hermes Limited intends to lend the full support of its stewardship and advocacy capabilities to help mobilise that transition. This document outlines our financial exposure to climate risk and how we are responding to rising expectations of our clients and updated regulatory requirements.

Saker Nusseibeh, CBE
Chief Executive

[1] Federated Hermes, 'Stewardship Report 2021', (April 2022).

Background

The world is in the middle of a climate emergency, with millions of people already grappling with the consequences. The US National Oceanic and Atmospheric Administration reports that two of the past three years consecutively (2019 and 2020) ranked among the warmest on record. The physical impacts of climate change are already becoming clear, with extreme weather events including acute, disruptive impacts such as the devastating wildfires in Australia and California, heatwaves in the Arctic and increasingly frequent and devastating typhoons and hurricanes. There are also more gradual ongoing chronic impacts such as rising sea levels, an increase in vector-borne disease and reductions in agricultural yields, along with more floods, droughts and other extreme weather events.

Climate change has caused substantial damage, and increasingly irreversible losses, in terrestrial, freshwater and marine ecosystems, and people least able to cope are being hardest hit.[2] These physical changes along with the urgent action needed to reduce and, in time, eliminate new greenhouse gas (GHG) emissions will require significant structural transformation of the economy, both at a global level and locally. To avert irreversible catastrophe for our economies and the natural world, the global economy must change its course. It has to rapidly shift from business as usual, and embrace risks and opportunities surrounding today's climate crisis.

These changes, if unchecked, will fundamentally affect our economies, our way of life and the value of investments we make on behalf of our clients. This also presents an unprecedented growth opportunity with low carbon sectors expected to grow by several multiples leading to value pools of $9-12tn of yearly revenues by 2030.[3]

To help do our part to change this course, in 2021, we set ambitious Net Zero Targets across our Operations and Investment portfolios.

Our enhanced focus on climate action aligns with the accelerating global momentum towards the low carbon transition, evident from ambitious, watershed announcements at COP26. Federated Hermes Limited (FHL) intends to lend the full support of its stewardship and advocacy capabilities to help mobilise that transition.

This document sets out how FHL incorporates climate-related risks and opportunities into our governance, strategy, risk management, and metrics and targets, in line with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD), and how we are responding to rising expectations of our clients and updated regulatory requirements.

Status of TCFD implementation

In terms of our own implementation of TCFD, we have identified several areas in the TCFD recommendations where we are fully implementing recommendations (those coloured green in the diagram below) and some where we are partially implementing recommendations based on the new guidelines issued in 2021 (those coloured amber in the diagram below).

In 2021, we focused on developing our interim net zero targets and methodologies to assess Paris Alignment. Going into 2022, we are focusing on enhancing our scenario analysis to better understand both transition and physical risk as well as developing methodologies to quantify our investments in climate solutions and avoided emissions.

[2] IPCC, 'Climate Change 2022: Impacts, Adaptation and Vulnerability', (2022).
[3] McKinsey, 'Playing offense to create value in the net-zero transition', (April 2022).

Figure 1: FHL performance against TCFD recommended disclosures

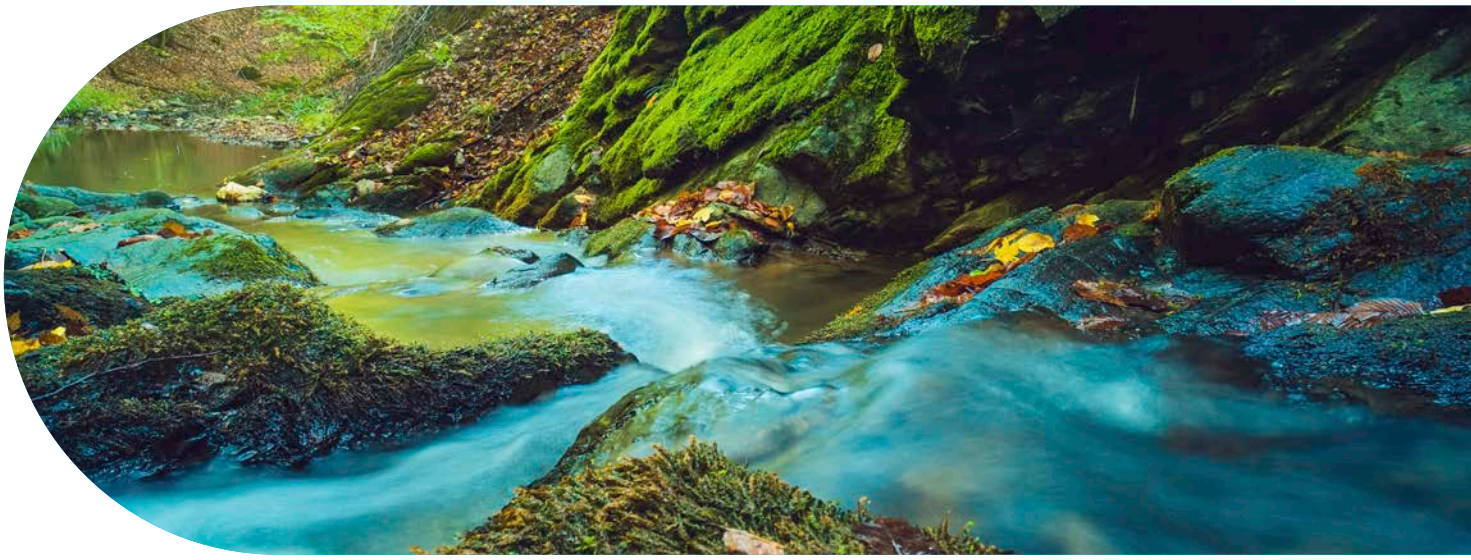
Governance	Strategy	Risk Management	Metrics and Targets
Disclose the organisation's governance around climate-related risks and opportunities.	Disclose the actual and potential impacts of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning where such information is material.	Disclose how the organisation identifies, assesses, and manages climate-related risks.	Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.
Recommended Disclosures	**Recommended Disclosures**	**Recommended Disclosures**	**Recommended Disclosures**
a) Describe the board's oversight of climate-related risks and opportunities.	a) Describe the climate-related risks and opportunities the organisation has identified over the short, medium, and long term.	a) Describe the organisation's processes for identifying and assessing climate-related risks.	a) Disclose the metrics used by the organisation to assess climate-related risks and opportunities in line with its strategy and risk management process.
b) Describe management's role in assessing and managing climate-related risks and opportunities.	b) Describe the impact of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning.	b) Describe the organisation's processes for managing climate-related risks.	b) Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.
	c) Describe the resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organisation's overall risk management.	c) Describe the targets used by the organisation to manage climate-related risks and opportunities and performance against targets.

Good disclosure – good coverage to date

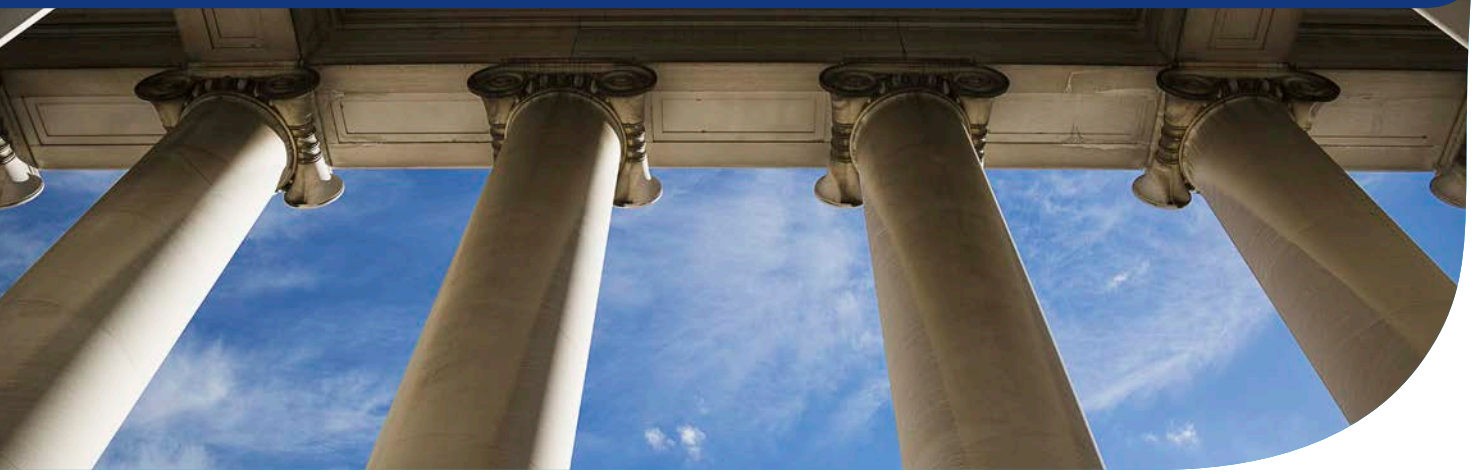
Limited disclosure – coverage to be increased, quality to be improved

No disclosure – Limited disclosure, methodologies in experimental phase

Source: TCFD, Federated Hermes Limited as at 30 September 2022



Governance



The responsibility for implementing our approach to climate risks resides with all personnel in our business, but we also have a number of structures and teams in place to ensure that we effectively discharge our stewardship responsibilities, including those regarding climate change risks and opportunities. Key governance functions include:

Board: FHL has a well-established governance structure that is led by the Board. Among the board's responsibilities is oversight of the firm's strategy, namely to be the world's leading provider of long-term holistic returns for investors, thus creating value for all stakeholders in the economic system. The board and Senior Management Team (SMT) review the firm's climate management approach – which applies mainly to our investment practice but also to management of risk as a corporate entity – on an annual basis and is kept up to date on the progress of implementation through updates from the Head of Policy & Integration and Head of Responsibility.

Governance Committee: This is an oversight committee responsible for overseeing the formulation and delivery of our engagement, voting and climate policy. The committee is accountable to and reports to our CEO. The members include the Head of Responsibility, Head of Investment, Head of International Client Group, Legal Director, Head of Enterprise Risk and Managing Director, Private Markets.

Among the board's responsibilities is oversight of the firm's strategy, namely to be the world's leading provider of long-term holistic returns for investors, thus creating value for all stakeholders in the economic system.

Responsibility Working Group (RWG): Meeting every quarter, the RWG is made up of senior representatives from across the business and is chaired by our Head of Responsibility. This group discusses a comprehensive range of topics that relate to the delivery of sustainable wealth creation for our clients and beneficiaries and shares best practice across the organisation, including on climate change.

During 2021, the group focused its work on tackling our own emissions and developing an enhanced business-wide climate change strategy, Climate Action Plan, which included interim targets validated by the Institutional Investors Group on Climate Change (IIGCC) and will be published in November 2022.

Climate Change and Nature Working Group (CNWG): Our CNWG is a cross-business initiative, including staff from investment management in public and private markets and representatives from the engagement, strategic and investment risk and business development teams. The group reports to the RWG and meets at least four times per year to continually review and strengthen our approach.

During 2021, the group focused its work on tackling our own emissions and developing an enhanced business-wide climate change strategy, Climate Action Plan, which included interim targets validated by the Institutional Investors Group on Climate Change (IIGCC) and will be published in November 2022.

In September 2022, we expanded the focus of this group to also consider the impacts of deforestation and biodiversity loss on climate change.

Real Estate ESG oversight: The Real Estate team have a Net Zero Working Group and an ESG Working Group with relevant representatives from the business to ensure the decision-making process is inclusive and transparent. External experts are also included in these as appropriate to ensure project decisions are made with the help of investment managers, delivery counterparts and the Real Estate ESG team.

Private Equity oversight: In the Private Equity team, the Investment Committee (IC) are responsible for all investment risks, including climate change risk. The Portfolio Review Committee assess portfolio-level ESG risks including climate change risks quarterly to inform GP engagement. The Private Equity team work with the Responsibility Office to ensure they are continually aligned with house commitments and policies.

Infrastructure oversight: The Head of Infrastructure, Infrastructure Investment Committee and the Hermes GPE LLP Executive Committee are accountable for all sustainability matters related to infrastructure. Hermes GPE LLP is our Private Equity and Infrastructure division. Day to day operations are overseen by the Infrastructure Management Committee (ManCo). Investment professionals have the responsibility for ongoing monitoring and management of ESG issues, with material risks and opportunities, alongside their progress, being reported to the relevant governance fora on a periodic basis throughout the year.

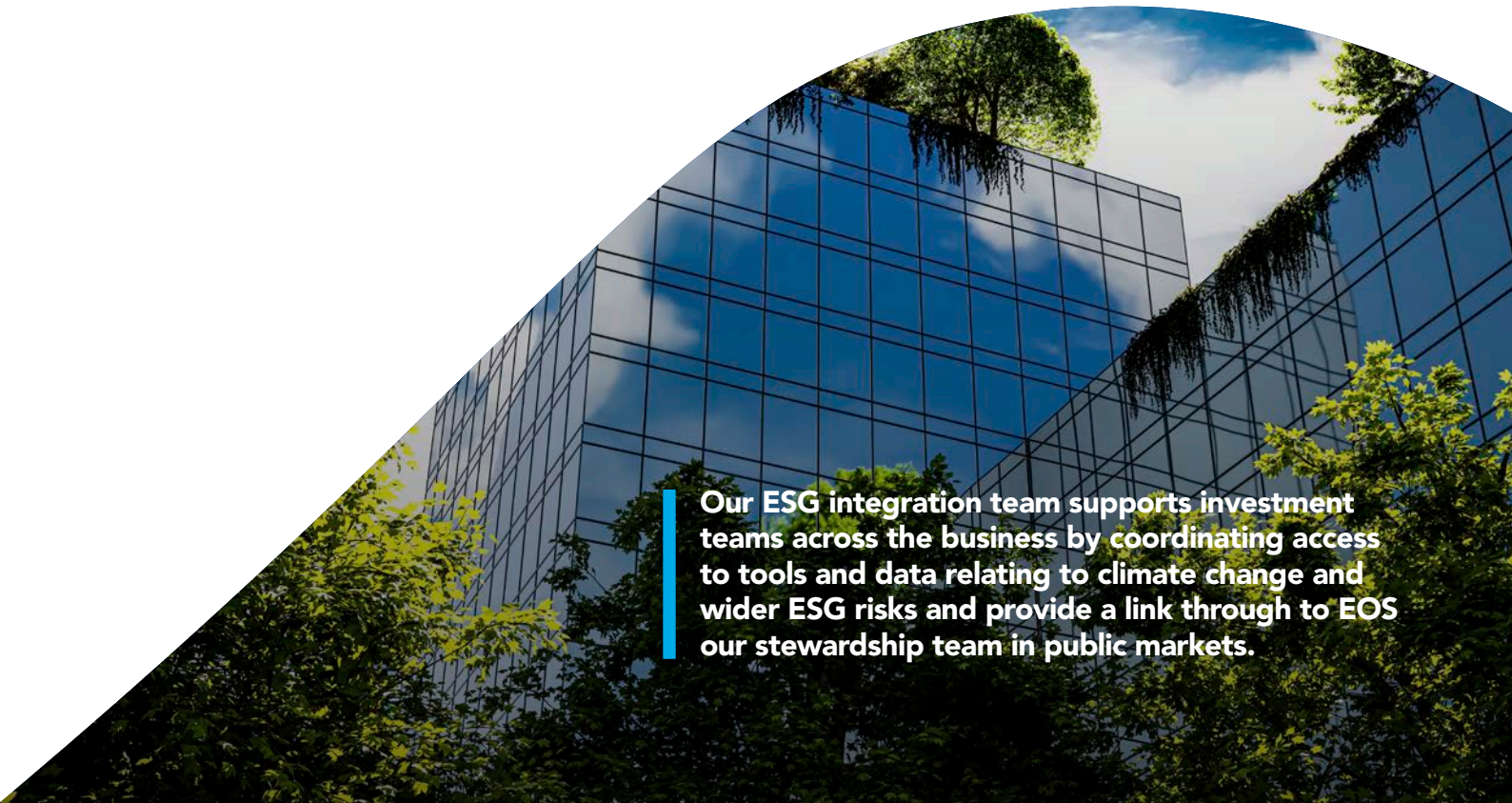
In addition to the governance structures outlined above, the following key business functions are particularly involved in delivering our climate approach:

Responsibility Office: Our Head of Policy & Integration chairs the Climate and Nature Working Group (CNWG) and is the climate change coordinator for FHL, leading on implementation and delivery of our climate change strategy and reporting progress to the FHL Board, the RWG and the Governance Committee. Our ESG integration team supports investment teams across the business by coordinating access to tools and data relating to climate change and wider ESG risks and provide a link through to EOS our stewardship team in public markets. Our Policy and Advocacy team engages with regulators and policymakers to advocate for an enabling environment that supports and incentivises the achievement of the goals of the Paris Agreement.

Portfolio Managers and Investment Analysts: Each of our investment teams across all asset classes is responsible for integrating climate change considerations into their investment decisions. Each team undertakes their own fundamental ESG research, including assessing climate risks and opportunities, and is accountable through the performance appraisal system for their part in delivering the FHL mission to generate wealth sustainably. Their work is supported by both the Responsibility Office and EOS.

Stewardship Team: Our stewardship team, EOS, boasts one of the largest stewardship resources of its kind in the world, representing $1.6tn of assets under advice (AUA as at 31 December 2021) and engaging with 580 companies in 2021. EOS, a wholly owned subsidiary, has an established Engagement Management Committee, which considers engagement quality, continuity and coverage in the interests of clients. EOS also has a Client Advisory Board (CAB) which contains client representatives who provide insight, advice and guidance on EOS' business strategy and service offering to ensure that the EOS service is and remains a client-focused offering. The team is composed of individuals with a diverse mix of backgrounds, skills and perspectives and has been at the forefront of the development and evolution of responsible investment practices globally. The EOS team leads our public-markets engagement activity.

Risk: In the second half of 2021, a dedicated Reputational and Sustainability Risk team was established to enhance the role of the second line of defence in providing independent oversight and challenge to our approach to corporate sustainability and responsible business management. The team have been involved in integrating ESG risk within the existing risk management framework, including the risk taxonomy, risk identification processes and developing key risk indicators which will enable the business to identify material ESG risks and monitor progress across all key climate-related commitments, including the implementation of sustainable finance regulation. The team also works alongside the Responsibility Office to oversee work to ensure that our business continues to, authentically and accurately, report on our ESG objectives and activities via a documented delineation of climate risk-related responsibilities for the first and second lines.



Our ESG integration team supports investment teams across the business by coordinating access to tools and data relating to climate change and wider ESG risks and provide a link through to EOS our stewardship team in public markets.

Strategy

Describing climate risk and opportunities

FHL recognises that climate change presents serious risk to the world at large and to our business – both as a corporate entity and as an investment manager. Our assessment of and response to the risks posed by climate change spans our asset and portfolio level analysis; our corporate and public policy engagement activities; and our operational risk management.

As a corporate entity, we rely on the services of a range of suppliers including information and communication technology (ICT) and data providers as well as the utility services that power our offices and, all importantly following the introduction of hybrid working, our homes. These are all potentially exposed to acute physical climate risks.

As an investment manager, understanding and responding to the range of potential risks and opportunities and generating performance for clients is fundamental for our business and so has been the major focus of our efforts to date. We understand these climate risks, both physical and transition, do not exist in isolation. They interact with other changes happening at the same time, such as technological innovation; changing consumer behaviour and demand; and the effect of local regulation versus geopolitical dynamics on infrastructure and supply chains.

As a result, our assessments do not sit in a standalone box, they are part of our fundamental view of sustainable wealth creation. As part of our integration of ESG issues into our investment processes and our wider business strategy, we assess and model future climate change and wider ESG policy and regulatory changes and their impact on our investment strategies. This is based on our internal expert knowledge and insights from third party studies and data providers.

As part of this process, we assess the transition, physical and regulatory risks from climate change across all our investment products through qualitative analysis of market and regulatory framework and future trends.

As an investment manager, understanding and responding to the range of potential risks and opportunities and generating performance for clients is fundamental for our business and so has been the major focus of our efforts to date.

In terms of physical risk, we have mitigation and emergency action plans for our Real Estate assets. We also have mitigation and emergency plans in place for our own buildings and assess contingency plans for key suppliers.

Transition risks are assessed on a qualitative and quantitative basis using a pragmatic approach that acknowledges that there are issues with the amount and quality of data that is available.

In terms of how we use data, we assess climate risks based on how they will affect us in the short (0-2 years), medium (2-5 years) and long term (5 years and beyond), as set out in the table opposite. Acute locational physical risk is an ever-present consideration. Beyond this in the near term, legal and regulatory change are the biggest risks. As time goes on and new markets and technology opportunities continue to open up, the risk of stranded assets increases. Acute and also chronic physical risks are also highly likely to increase – and affect all asset classes.

Transition risks are assessed on a qualitative and quantitative basis using a pragmatic approach that acknowledges that there are issues with the amount and quality of data that is available.

Figure 2: How we think about climate-related risks across different timeframes

Timeframe	Climate risk definition	Description of material climate-related issues
Short term	Risks that could cause impacts in 0-2 years from now, notably but not exclusively legal and regulatory risks and acute short-term physical risks.	Legal and regulatory change affecting licence to operate, supply chains or management practices in certain highly exposed sectors (e.g. fossil fuel extractive industries) or geographies (e.g. EU). Extreme weather events, including flood, drought and storms that cause business disruption.
Medium term	Risks that could cause impacts in 2-5 years from now, notably continued legal and regulatory but also technology and consumer demand-based market transformation risks and acute short-term physical risks.	Legal and regulatory change affecting licence to operate, supply chains or management practices in certain sectors or geographies. Technology and consumer demand-based market transformation risks and opportunities, obsolescence of certain products and services affecting certain sectors. Increased risk of stranded assets. Extreme weather events, including flood, drought and storms that cause business disruption.
Long term	Risks that could cause impacts in 5 years and beyond; includes legal and regulatory risks, technology and consumer-led market transformation risks and increasingly extreme weather events (acute risk) but also rising sea levels, rising sea-levels and associated floods, shifts in regional weather-related events (chronic risk).	In addition to the above the following are a consideration: Obsolescence and stranded assets across a range of assets, sectors and geographies due to regulatory changes and/or market transformation. Increasingly frequent extreme weather events impacting specific geographical locations and supply chain disruption affecting large number of sectors. Impact to infrastructure and real assets, ranging from business discontinuity costs, refurbishments and rebuilding costs, to obsolescence and destruction. Impact to insurance premiums or ability to insure assets in certain locations faced with chronic risk.

Source: Federated Hermes Limited, as at 30 September 2022.

This analysis highlights the significant legal and regulatory risks we need to consider as investors in the short term. Chiefly, this relates to regulatory changes and legislation that may affect an asset's licence to operate, supply chains and/or management practices in certain sectors that are highly exposed or geographies in which climate policy is tightening faster than in other jurisdictions (e.g. the European versus Asian markets).

In the medium term, there are also considerable risks associated with market transformation, which will occur as new opportunities emerge during the transition to a resilient and net zero carbon economy requiring a significant amount of capital to be reallocated towards new growth markets. There are also clear risks associated with the fact that companies will face higher operating costs from carbon pricing or taxes, or the costs of implementing new regulatory standards.

Also in the medium term, companies may increasingly have to pay higher insurance premiums or struggle to insure assets in certain locations at risk. Changes in market demand mean some products and services in certain sectors may become obsolete and, as the pressure to do so becomes unstoppable, some companies may even be regulated out of existence as they lose their social licence to operate.

In the long term, as extreme climatic events become more frequent, they may also cause assets to become stranded across a whole range of industries, assets and geographies. Extreme weather events could affect defined geographical locations or, in some cases, whole regions, and significantly disrupt the supply chains of a large number of sectors in the economy.

Our investment and stewardship teams look at these issues in detail as the implications of climate change for investor decisions will differ industry by industry. The automotive and power sectors, for example, both have significant value at risk from the transition to a more sustainable economy, but also significant opportunities – from electric vehicles and renewable energy, respectively. By contrast, the oil and gas sector will be one of the hardest hit, with little upside. Even if an oil company can achieve an economic return, it might reach a point where this is not in beneficiaries' interests to own its shares if the emissions from the production and use of its products continues to accelerate climate change as this creates a growing pressure on policymakers to ultimately regulate the industry out of existence.

The impact of climate-related risks and opportunities on our business, strategy, and financial planning

Board and SMT members are aware of and are engaged with the growing importance of climate change to our business, strategy, and financial planning. As a business we understand that, unchecked, climate change represents a systemic risk to financial markets, the global economy, and our ability to create sustainable wealth for our clients and their investors. Of particular concern to us is the fact that even if transition risk is managed within our portfolios of investments, unmanaged physical risk could still destroy value through business operation or supply chain interruption caused by factors outside the control of our investee companies. For this reason, we understand we must look at first and second order effects of climate change risk. We take the view that we should do all we can to contribute to the conditions in which global efforts to limit warming to 1.5°C are successful and that public and private investment to create resilient infrastructure and societies is delivered.

In thinking about our business risks, as a corporate entity, these notably relate to investment performance, changing client expectations, business reputation and operational risks.

As investors, on a day-to-day basis the management of climate risk and opportunities that arise from the transition to a resilient and net zero economy is led by our investment, engagement and advocacy teams with this work supported and coordinated by the Responsibility Office and the CNWG.

Our strategy has four key elements: Awareness, Integration, Engagement and Advocacy.

Figure 3: Key elements of FHL climate strategy

Source: Federated Hermes Limited, as at 30 September 2022.

CASE STUDY

Infrastructure

With support from a leading consultancy, Environmental Resources Management ("ERM"), our Infrastructure team undertook 5 months of deep dive work focused on scenario analysis for individual assets and risk management. Using two physical and two transition scenarios, the team initially created a portfolio risk heat map, before conducting a financial driver analysis and stewardship priorities for individual companies where material potential risk was identified. All analysis was undertaken in collaboration with the investee companies using actual operational and financial data.

	TRANSITION		PHYSICAL	
SOURCE	World Energy Outlook (WEO) **International Energy Agency (IEA) scenarios**		The Intergovernmental Panel on Climate Change (IPCC) **Representative Concentration Pathways (RCPs)**	
SCENARIO	**Sustainable Development Scenario (SDS)** Small decline in energy demand, but **quickly declining emissions**	**Stated Policies Scenario (SPS)** Aligned with **current NDCs** Growth in energy demand, but **emissions are flat**	**RCP4.5** Implementation of **mitigation policies** **Paris Agreement** aligned	**RCP8.5** Emissions increase out to the **end of century** High emissions scenario – **'business as usual'**

As anticipated, transition risks are more prevalent and quantifiable in the short term, in particular carbon pricing and revenue exposure to highly carbon intensive industries. The most prominent physical risks being increased storms and fluvial flooding in the medium term and increases in heat in the longer term. Several material transition opportunities were also identified, including increased demand for sustainable products and services and contingent participation in a future market for negative emissions.

Using the outputs of the deep dive analysis, the team have reviewed their stewardship approach with the relevant businesses to date and set priority focus areas and objectives. The team expect to continue to update their climate stewardship objectives annually, as risks and mitigation evolve over the duration of the holding periods, including refreshing the scenario analysis periodically to reflect the most up to date net zero scenarios.

Risk management

Our assessment of, and response to, the systemic risk of climate change spans our top-down investment risk and asset-level analysis, our engagement activities and our operational and strategic risk management.

In this section we describe how we identify, assess, monitor and manage climate-related risks, and how this is integrated into our overall risk management processes.

We integrate consideration of climate-related risks across all of our investment strategies. Through our advocacy and engagement work we seek to play our part in mitigating climate risk at both a systemic and asset level.

We aim to understand both a company's contribution to climate change and its exposure to related risks and opportunities, which should allow us to play a positive role in encouraging firms to generate lower emissions and reduce the risks arising from climate change.

Our integrated approach to managing climate risk and opportunities is based on our belief that we can create positive feedback loops between investment and stewardship. This should help reduce climate-related risks and maximise the opportunities for the companies and assets in which we invest.

During 2021 we further developed our corporate level risk management framework to consider sustainability risk. This includes enhancements to the Risk Management Framework to set formal risk appetite statements under Brand and Corporate Sustainability Risk for Climate and ESG Risks, alongside associated key risk indicators and integration within relevant risk policies.

Investment risk management

Awareness

We continue to monitor the evolving landscape of climate-related risks and opportunities. Keeping teams abreast of developments is an ongoing task. It is achieved through internal information sharing, discussion and debate across and between teams but also through more formal initiatives such as our Sustainability Investment Centre (SIC). The SIC supports the development of our firm's responsible investment capabilities. It facilitates monthly conversations between teams across the business to pool in the best ideas in the sustainable space and supports our focus on long-term sustainable wealth creation.

The ESG Integration team within the Responsibility Office also works very closely with the investment teams to help identify material ESG issues that are specific to the investment manager's strategy. The ESG Integration team organises sector-level knowledge-share sessions between EOS and the investment teams and also works with the investment teams to develop frameworks which assess the materiality of ESG risks at the company level. Finally, the ESG Integration team obtains data from third-party providers, which is overlaid in our proprietary tools by insights gleaned from our engagement with the company, and is also used by analysts and engagers in their company research and portfolio analysis.

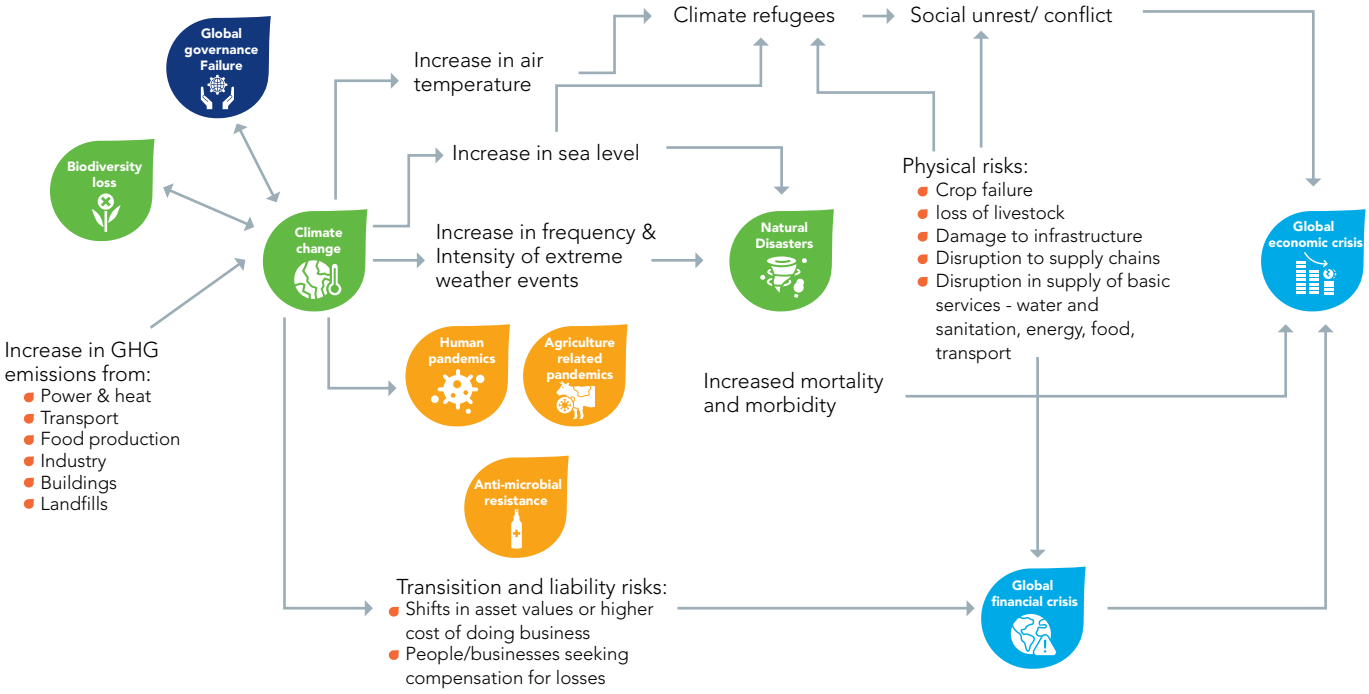
Risk Identification

The systemic nature of the risks posed by climate change require a tailored approach to risk identification and mitigation. To truly address such a systemic risk, collective and coordinated action will be required to provide systemic solutions. Asset managers, working in conjunction with other stakeholders, must join forces to mitigate these systemic risks and to ensure a well- functioning financial system.

We seek to take an integrated systems-based approach and prioritise and respond to the risks that are most likely, impactful and interconnected in nature. The key systemic risks we take into consideration across our investment risk, engagement and advocacy work are informed by the latest academic research from the World Economic Forum Global Risks Report and the Centre for Risk Studies at Cambridge University.[4] The figure below illustrates the interconnectedness of climate change, our top engagement and advocacy theme, with a range of other issues.

[4] University of Cambridge and Citi GPS, 'Systemic Risk: Systemic Solutions for an Increasingly Interconnected World', (April 2021).

Figure 4: Cambridge University diagram of the cascading effects between systemic risks



Source: SYSTEMIC RISK: Systemic Solutions for an Increasingly Interconnected World (cam.ac.uk) as at April 2021

This systems-based approach informs all four elements of our strategy – awareness, integration, engagement and advocacy.

The Investment Office is responsible for the daily oversight of market risk across Federated Hermes Limited, as well as the oversight of the underlying portfolio managers' adherence to their pre-defined/client-agreed investment processes.

The Risk team has also been highly effective in providing a second line of risk management as new issues emerge.

Risk prioritisation

Taking an active approach is a central part of our investment proposition. We consider all material investment factors, including those relating to material ESG issues such as climate change.

While the most pressing material risks are those that will crystallise in the short term, we are long-term investors that strive to deliver sustainable wealth creation for our end investors. This means that our definition of materiality is necessarily wider. We believe that a wider range of risks will ultimately become material over a longer timeframe and that we need to engage proactively to mitigate them.

Climate change is one of the key medium- to long-term risks that we factor into our investment analysis and engagements, and we also recognise that it poses risks over shorter timelines. Climate risk alone may not necessarily be the sole driver of an investment decision however, they do form part of the investment process to determine the level of risk for issuers, their assets and if the company sits within an industry that carries significant climate risk, we will be engaging with the company to understand their long term transition commitments as well as short and near term targets to understand if they are in line with the Paris agreement. Given our net zero commitment, we will be monitoring the progress at fund level towards increasing the proportion of Paris-aligned investments through engagement to understand implications for our firm level targets. The information we gather through stewardship enables us to develop a more comprehensive view of both the climate risk and opportunities a company is exposed to and to factor this into valuations and investment decisions. Such assessments are not a one-off but rather form an ongoing feedback loop. Monitoring this information informs our engagements, while engagement insights inform our investment decisions. Our fundamental research benefits from our ongoing dialogue with investees, as well as that between our public-markets investment teams and stewardship arm. We invest time and resources to encourage companies to strengthen their governance of climate change related issues, give our views on strategy to implement business models that are aligned with the Paris agreement and encourage companies to take a long-term view on identifying and mitigating transition risk. The insights we glean from these interactions help us to better understand a company's complex strategic challenges – something that ultimately helps us serve our clients.

All our investment activity is supported by our dedicated Investment Office and Responsibility Office, both of which report directly to our CEO. Regular meetings are held between the two offices and with the investment teams to ensure proper coordination and integration of ESG factors and engagement insights. However, it is the responsibility of our investment teams to effectively integrate ESG and engagement information into their investment processes and ultimately our fund managers have discretion on investment decisions. This ensures that ESG factors including climate considerations are fully integrated into investment analysis and decision making.

Public markets – Integration

Our experience suggests that a systematic engagement approach, combined with tried and tested methods of escalation such as collaboration or shareholder meeting interventions, is needed to accelerate change at companies, such as those failing to prepare for the low-carbon transition. Driving change through engagement is one side of the coin – effective integration of stewardship insights into investment decisions is the other.

All of our strategies at FHL integrate climate considerations and engagement insights into their investment processes and decision making. We believe in developing processes that are relevant to the investment strategy, and therefore, the method of this integration can vary by investment team. Climate-related data and engagement insights can be a component of a screen, a source of ideas, an input into fundamental analysis or an adjustment to valuation drivers and/or a portfolio construction factor.

To support all our investment teams we continue to add tools and datasets and participate in research to better understand and continue to refine our process of integrating climate risk management into every stage of the investment process from inception of new strategies through to day-to-day portfolio management. Integration is facilitated by a range of tools (proprietary and third party) and information, including from our own engagement activities.

The primary means through which we monitor and measure the climate-change exposure of our investment portfolios is through our proprietary carbon tool, which measures a fund's carbon footprint relative to its benchmark and calculates its carbon efficiency/intensity. As well as providing a carbon heatmap, the tool enables portfolio managers to stress-test the resilience of our portfolios to a range of carbon prices, identify whether high-emitting companies in the portfolio are being engaged with or whether engagement needs to be initiated, and understand the progress on any climate or wider environmental engagements already underway.

The information also helps increase our investment team's awareness of carbon-related risks, which can lead to updated valuations and potentially change investment decisions.

Figure 5: Carbon footprint – portfolio dashboard

Source: Federated Hermes Limited, as at 1 September 2022. For illustrative purposes only.

During 2021, we launched our environmental tool. Our environmental tool assesses both portfolios and companies on their carbon, water and waste performance. It also looks to quantify the environmental cost of the impact via the following six lenses; carbon, water, waste, air pollutants, land/water pollutants and natural resource use. In addition, we have incorporated the temperature alignment of portfolios and companies alongside exposures to carbon intensive sectors; namely fossil fuels, mining and thermal coal.

Figure 6: Environmental Tool – Portfolio dashboards

Source: Federated Hermes Limited, as at 1 September 2022. For illustrative purposes only.

Through these tools, along with additional EOS engagement information, the public-equities and fixed-income teams have access to third-party ESG data, as well as insights on engagement carried out by EOS with investee companies and the broader investable universe. These sources are a valuable input to the investment process, as well as to the ongoing monitoring of and engagement with companies.

We also use other external tools, including the Trucost climate data, and are currently exploring tools providing data on implied temperature rise and transition and physical risk across various scenarios. We are also expanding our analysis in the next year to look at our exposure to deforestation risk and the impact of our investments on biodiversity.

The Responsibility Office meets with each of the investment teams, on a quarterly basis, on various ESG topics including an analysis on the portfolio's exposure and understanding the progress on mitigating these risks and/or how they have been integrated into the investment process. To date, we have had

conversations with the teams on their carbon exposure as well as the transition targets and progress of their investee companies. This is also an important lens through which we identify companies for engagement.

We believe that ESG-aware investors should not rely on ESG data alone. The information provided by companies may not be comparable with peers. In addition, it is often backward looking, updated infrequently and with a time lag. As such, engagement activities and voting information can be used by our teams to provide a forward-looking view of a company's performance on climate issues. As well as accessing EOS' engagement portal – which includes the engagement history and progress against live objectives – and discussing specific companies with the relevant engager, portfolio managers can, and are encouraged to, attend engagement meetings with the engagers. The benefit of these joint meetings is substantial and results in more robust engagement that focuses on the relevant and material ESG risks and opportunities. Our investment teams also regularly discuss salient ESG issues with company management directly.

Our Responsibility Office is tasked with monitoring and overseeing every investment team's integration approach. To that end, the Responsibility Office meets with every investment team on a quarterly basis to review the portfolio holdings from an ESG point of view and flag, if necessary, particular holdings which our third-party ESG data vendors might have highlighted as controversial. As such, the Responsibility Office and the investment teams regularly use our proprietary ESG tools, including our carbon and environmental tools described above, to review the ESG performance and engagement coverage of our holdings.

Whilst many of the tools and data providers we use are shared across our public markets strategies, some of our strategies layer additional approaches on top of this:

- **Biodiversity Equity Strategy:** The strategy aims to achieve long-term capital appreciation by investing in a concentrated portfolio of companies that are best in class and are providing solutions to avert loss of and support restoration of biodiversity. The team have extensively researched the major regional and global threats to biodiversity and have defined six investable themes: land pollution, marine pollution and exploitation, unsustainable living, climate change, unsustainable farming, and deforestation. Each of these themes has multiple sub-verticals that are aligned to specific UN Sustainable Development Goals (SDGs).
- **Impact Opportunities Equity Strategy:** The strategy aims to generate long-term outperformance by investing in companies succeeding in their core purpose: to generate value by creating a positive and sustainable impact that addresses the underserved needs of society and the environment. It is driven by thematic research focused on megatrends and the team's nine impact themes,[5] as well as bottom-up fundamental analysis. Our thorough analysis of impact and financials ensure a high bar for positive impact alongside investment potential. Our proprietary impact database quantifies company impact to ensure traceability and accountability, allowing us to monitor progress and report to clients.
- **Climate Change High Yield Credit Strategy:** The strategy aims to outperform the global high-yield market through high-conviction investment in companies with strong fundamentals that also demonstrate the potential to decarbonise and transition to a low-carbon world. The team seek companies that have the willingness and ability to make a positive impact on the planet, whilst excluding companies involved in activities believed to be unsustainable or unethical. To determine a company's progress towards decarbonisation and the materiality of its impact, the team begin by analysing an aggregate of historical climate change data and scores. They then supplement the forward-looking perspectives of our credit analysts and engagers, including engagement insights. This enables them to assess each company's climate-related risks and its progress towards decarbonisation and potential impact. Designed by the Sustainable Fixed Income team, our bespoke framework – the Climate Change Impact (CCI) Score – conveys a company's willingness to decarbonise, the potential to reduce its carbon footprint and the materiality of that decarbonisation path. These scores are key to issuer selection and sizing within the strategy. Dedicated engagers in the Fixed Income team, supported by EOS, seek positive action on climate change. The strategy will not hold a company's credit where engagement on climate change transition has failed.

EOS is leading or co-leading engagement with over

25 companies as part of the **Climate Action 100+ Initiative**

- **SDG Engagement Equity Fund and SDG Engagement Credit Fund:** Our SDG Engagement Equity Strategy and SDG Engagement High Yield Credit Strategy seek to achieve a meaningful social and/or environmental impact as well as a compelling return through investing in and engaging with companies to drive positive change in line with the relevant SDGs. The SDGs provide an ideal framework to identify ex-ante potential for creating positive societal and environmental change through engagement to create more impactful and profitable companies. Given the added focus on engagement for these strategies, we have dedicated engagers based in the relevant investment teams who focus solely on these strategies and work closely with EOS to ensure a consistent approach. All investments are formally reviewed by the lead manager and lead engager, while the relevant analysts and team members also provide input every six months. These meetings investigate whether the original engagement thesis is still valid and also measure progress towards any specific objectives.

[5] The team's nine themes are: Energy Transition; Circular Economy; Water; Health and Wellbeing; Education; Financial Inclusion; Future Mobility; Food Security; Impact Enablers.

Public markets – Engaging on climate change

We believe that the purpose of investment is to create wealth sustainably over the long term and that investing responsibly is the best way to sustain long-term outperformance and contribute to beneficial outcomes for investors, companies, society and the environment. We aim to generate sustainable wealth creation for the end beneficiary investor, encompassing both investment returns and their social and environmental impact. As a result, our engagement is outcomes-driven and focused on ensuring that the companies we invest in are creating wealth sustainably. We are able to engage on particular issues over multiple years to encourage fundamental change within our investee companies. We believe that this approach delivers the best results for our clients and end beneficiaries.

We adopt a systematic approach to identifying companies for engagement. We select companies and tailor the intensity of engagement based on the size of our investment, materiality of the risks and issues and feasibility of achieving change through engagement. Our public markets dialogue with investee companies is primarily conducted through in-person meetings, calls, letters or emails, either directly or as part of a collaborative group. We see value in both direct and collaborative engagement, and it is the combination of both which helps us to influence issuers and borrowers and to carry out effective stewardship. Any collaboration is done in line with applicable rules on antitrust, conflicts of interest and acting in concert. More information on how we prioritise and conduct our engagements is available in our Stewardship Report 2021 (see in particular Principle 9).

Engagement is a crucial element of our approach to managing climate change risks and opportunities – and climate is one of four engagement priority themes in EOS' public-markets engagement programme (alongside human and labour rights, human capital and board effectiveness and ethical culture). Part of EOS' horizon scanning exercise in 2021 included a review of how to identify and embed the most important systemic risks into our engagement plan and prioritise our engagement action. We also consider how our engagement can support companies to play their part in achieving the SDGs.

Climate change continues to be the biggest single issue of concern for long-term investors. The required pace of transition poses many risks to traditional business models through new forms of competition, regulation and physical risks, as well as offering opportunities. The emphasis of our engagement is on matching long-term commitments with a Paris-aligned strategy and targets. We also support action to ensure that published financial accounts and political lobbying are similarly aligned.

Our Climate Change Expectations for investee companies set out very clearly our rationale for believing climate change is a material issue – and six key expectations of companies that range from setting science-based targets to having a positive public policy position on the issue and committing to disclosing in line with the TCFD.

As signatories of the commitment to Eliminating Commodity-Driven Deforestation and the Finance for Biodiversity Pledge, we also recognise the urgent need to address nature-related issues such as deforestation and biodiversity loss if we are to successfully mitigate climate change. In early 2021 we published a white paper, Our Commitment to Nature, which set out our engagement priorities and expectations for sustainable land use. Our white paper highlighted the extent to which investors' and companies' current approaches to nature are unsustainable. It made the business case for action and outlined how investor engagement with companies is a key route by which biodiversity loss can be halted and reversed.

We continue to call on companies to commit to having a net-positive impact on biodiversity throughout their operations and supply chains by 2030 at the latest. We expect this goal to be accompanied by strong governance, effective measurement, an impactful strategy, and regular disclosure. We have also looked at the role that marine ecosystems play in regulating our climate and providing key services, and identified key engagement themes. We also delved deeper into the sustainable food systems theme through an EOS Insights series. This highlighted how the food system is currently a principal driver of biodiversity loss, even though biodiversity and ecosystem services underpin farming and food production.

We use our own proprietary carbon and environmental tools to systematically assess which of our holdings are exposed to material climate-related transition risks. Where the risk is significant, we intend to add the companies into our engagement programme.

We track the progress and the achievement of our public market engagements using our four-stage milestone strategy. When we set an objective at the start of an engagement, we also identify recognisable milestones that need to be achieved. Progress against these objectives is assessed regularly and evaluated against the original engagement proposal.

Milestone 1: Our concern is raised with the company at the appropriate level

Milestone 2: The company acknowledges the issue as a serious investor concern, worthy of a response

Milestone 3: The company develops a credible strategy to achieve the objective, or stretching targets are set to address the concern

Milestone 4: The company implements a strategy or measures to address the concern

Our milestones are specific and measurable, which helps us identify progress towards achieving the objective. An engagement objective can take up to three years to complete, depending on factors that include the nature of the issue and how receptive the company is to engagement.

We have received accolades for our work in this area: in a recent report by InfluenceMap we were awarded an 'A+' grade for our climate change engagements and noting in particular, our voting support for shareholder resolutions on climate change was 86% in 2021.

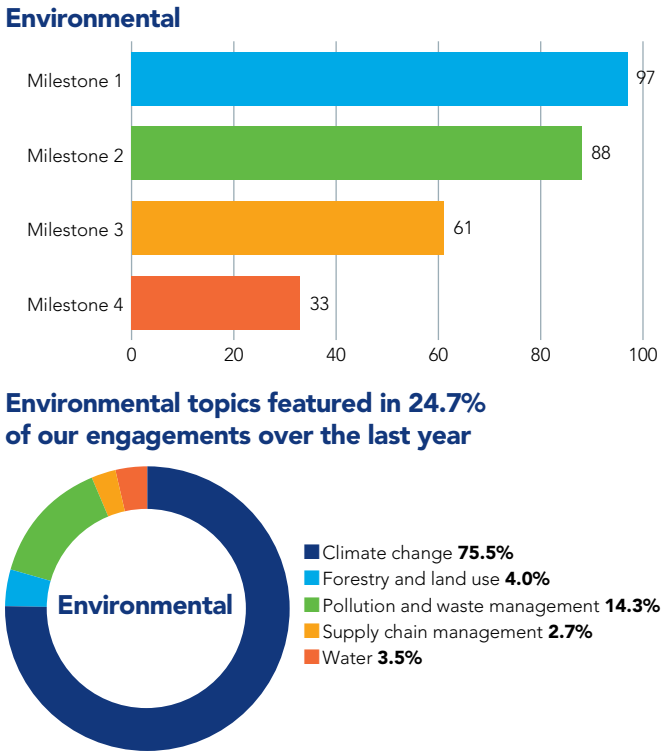
In 2021, 29% of all EOS engagements – on behalf of both third-party clients and FHL – were related to environmental topics. For FHL investments specifically this was 25%. The bar charts below show completed milestones during 2021.[6]

So, for example, 163 environmental objectives (or 97 for FHL investments only) saw Milestone 1 completed during 2021. 73 environmental objectives (or 33 for FHL investments only) were fully achieved during 2021.

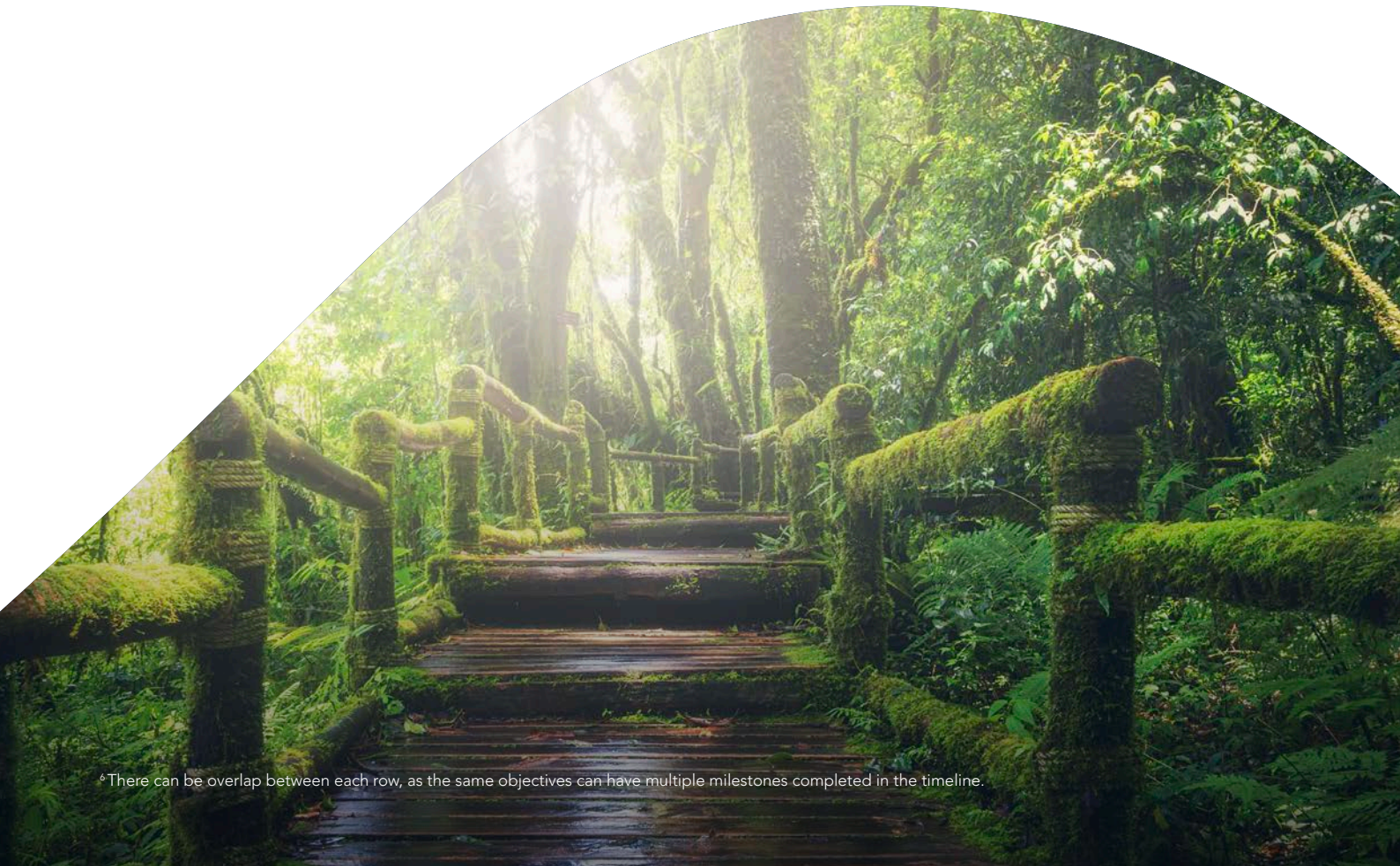
Figure 7: EOS Engagements on environmental topics on behalf of all clients (including FHL)

Source: Federated Hermes Limited, as at 31 December 2021.

Figure 8: EOS Engagements on environmental topics on behalf of FHL only



Source: Federated Hermes Limited, as at 31 December 2021.



[6] There can be overlap between each row, as the same objectives can have multiple milestones completed in the timeline.

CASE STUDY

SDG Engagement Equity Strategy – Eagle Materials

Eagle Materials is the largest domestic-only producer of cement, aggregates and wallboard in North America. As of Q4 2021, Eagle Materials represented 16% of the Federated Hermes SDG Engagement Equity Fund's total carbon footprint. This figure, while high, is perhaps unsurprising given cement manufacturing is estimated to represent c.8% of total global emissions.[7]

Over the period of our investment, we have met with Eagle's management on numerous occasions to discuss issues of interest and have been encouraged by the progress made. We had long contended that their position as the most cost-efficient producer in North America was testament to their commitment to do more with less. While there remains scope for further progress, Eagle has already delivered meaningful improvements. Notably, the company's previously lagging ESG disclosures are now broader and richer. Before this year, the company's last sustainability report was back in 2011 – we are confident that these disclosures will now be annual rather than once a decade. Eagle's disclosures this year evidence their sound practices, aligning them to – or even placing them above – domestic peers in the building materials sector. The company is now catching up with international cement manufacturers. More pertinently, the company's carbon intensity of production, as of 2020, was 0.72 tons of CO_2 per ton of cement. While higher than international peers, it nonetheless suggests that when it comes to efficiency, Eagle's facilities are collectively in the top quartile of cement plants in the US, where the median carbon intensity is 0.78. There is still significant scope for progress, and we are pleased to note that the company is on the case.

We have been focusing our engagement on alternative fuels, clinker substitution, thermal efficiency and carbon capture, as well as setting science-based targets for GHGs in line with the Paris Agreement.

Eagle Materials has been in dialogue with the US Department of Energy and others for some time. Pleasingly, the company was able to announce, in Q4 2021, a collaboration with Chart Industries to test their Sustainable Energy Solutions Cryogenic Carbon Capture ('CCC') technology at their Central Plains facility in Sugar Creek. The project will scale the CCC system to a capacity of nominally 30 tons of CO_2 per day, with the intention of demonstrating that the system captures more than 95% of CO_2 and produces a CO_2 stream that is more than 95% pure. Notably, Chart Industries' CEO and President, Jill Evanko, has suggested that the company's CCC model increases cement production costs by just 24%, compared to 38%-130% for other systems, therefore offering some hope for potential commercial scalability.

We intend to continue to engage with Eagle Materials on identified central issues. We hope to see further progress made in the coming year with respect to explicit target setting around, for example, alternative fuel utilisation. Fundamentally, we are hopeful that the company will continue to take a leadership position within the industry, raising collective ambitions and in turn accelerating the progress towards net zero.

[7] Fast Company, 'Cement is responsible for 8% of global emissions—but it doesn't have to be', (19 November 2021).

For Listed Equities, our voting and engagement are co-integrated as part of our overarching approach to stewardship. As such, our voting decisions – as well as EOS' recommendations to third-party clients on voting decisions – are informed by the insights and experience of engagement with the investee company. More information on our approach to voting is available in our Stewardship Report 2021 (see Principle 12). EOS has had a formal climate change voting policy in place since 2019 targeting climate-change laggards and we strengthened this again in 2021. We continued to use the Transition Pathway Initiative (TPI) assessment, setting a threshold of Level 4 for all European companies, coal mining companies or oil and gas companies, or Level 3 for all other companies. We also identified several other areas where we believed a company's actions were materially misaligned with the goals of the Paris Agreement, including companies contributing to coal expansion and deforestation.

While we can be robust in our dealings with companies, the aim is to deliver value for clients, not to seek headlines which could undermine the trust that we believe should otherwise exist between a company and its owners. As a result, we generally prefer to conduct engagement privately, rather than taking a public route when seeking change at companies. In our experience, working constructively with boards and management in private is the most effective way to achieve positive change, as it allows us to build trusted relationships with companies, which results in more open and frank discussions.

However, on the occasion that we should not be able to achieve success by our usual methods of conversations behind closed doors, we may escalate our engagement by choosing to speak publicly at the company's annual general meeting (AGM) to garner additional investor support and add further pressure. When doing so, we would normally notify a company in advance. We may also vote against (or EOS may recommend voting services clients vote against) a resolution or management/the board at a company's AGM – we consider this choice carefully as we only want to use this technique if our usual engagement has consistently stalled, and we are not confident that the company is taking any action to address our concerns. Similarly, we have demonstrated a willingness to use the full range of rights that we have at our disposal, including the tabling of resolutions at shareholder meetings when necessary or collaborating with others to co-file shareholder resolutions.

CASE STUDY

Climate Action 100+

We continued to play a leadership role in the collaborative engagement initiative Climate Action 100+ (CA100+) which represents $68 trillion AUM and 700 investment houses and their representatives as at 31st March 2022. We lead or co-lead engagements at over 25 of the 167 focus companies across Europe, North America, and Asia.

As an indication of effectiveness, according to analysis by research company BNEF, 111 of the Climate Action 100+ focus companies have set a net zero or equivalent target, compared with five prior to January 2018 when the initiative was launched. BNEF estimates that in 2030, the net zero targets set by these 111 focus companies will reduce greenhouse gas emissions by 3.7bn metric tons of carbon dioxide equivalent annually.

In the run up to COP26, over 300 companies committed to achieving net zero emissions. However, data from the Climate Action 100+ Benchmark shows that while 52% of the world's largest emitters had net zero goals, only 20% had short and medium-term emissions reduction targets and only 7% had targets aligned with the Paris Agreement goals. The emphasis of our engagement is therefore on matching long-term commitments with a Paris-aligned strategy and targets.

We also support action to ensure published financial accounts and political lobbying are similarly aligned. The political lobbying and public policy advocacy conducted by companies directly, or through the trade associations to which they belong, can have a significant influence on the structural policy environment. We ask companies to assess their industry memberships and identify any areas of climate policy misalignment. For example, after three years of specific engagement by EOS, BMW, a company where EOS co-leads for CA100+, published its first policy in relation to its trade association memberships. This describes how the company monitors the climate policy positions of its trade associations and its new, proactive approach to membership that seeks to influence the positions taken by these organisations.

Climate Action 100+ (continued)

At the COP26 Federated Hermes Fringe Festival held by Federated Hermes Limited, think tank Carbon Tracker hosted a panel event on climate accounting, highlighting that 80% of auditors do not provide evidence that climate is considered in the audit reports of carbon-intensive public companies, despite the materiality of climate change to these businesses. We have raised this topic across our engagement programme companies and, in November, we signed a letter to the Big Four audit firms asking that material climate risks be included in company audits. The letter also warned that investors would consider voting against the reappointment of the auditor if this was not addressed.

While CA100+ is focused on 167 of the world's biggest corporate emitters, it is vital that decarbonisation is achieved across the entire economy. In 2021 EOS contributed to the new CA100+ Global Sector Strategies workstream, which will provide transition roadmaps for key sectors and identify the priority actions that companies, industries and investors should take. The aim is to help transform entire sections of the economy that require coordinated action. EOS contributed to the first Global Sector Strategy Reports on the steel sector and the food and beverage sector, highlighting the cross-sector actions needed to reach net zero. We also co-lead on the shareholder resolution sub-group and the utility sub-group, where we use our influence to drive wider action among our peers.

We believe that escalation of engagement will be increasingly important to ensure that companies make the necessary changes at the pace required. Collaborating with other investors is also critical to driving change. EOS have been at the forefront in using escalated engagement techniques, including:

- Helping to lead the drafting of, and co-filing, the first and only CA100+ resolution in Europe at BP's annual shareholder meeting[8] in 2019, which resulted in a significant shift in strategy towards becoming a net zero company.
- Co-filing a resolution at Berkshire Hathaway[9] in 2021 demanding improved climate reporting, which gained support from a near 60% majority of the independent vote. In conjunction with California Public Employees' Retirement System (CalPERS) and Caisse de dépôt et placement du Québec ("CDPQ"), we filed a shareholder proposal at Berkshire Hathaway, hoping to trigger a dialogue with the company on climate change. We co-lead on Berkshire Hathaway for CA100+. The proposal asked Berkshire Hathaway's board to publish an annual assessment addressing how the company manages physical and transitional climate-related risks and opportunities. Tim Youmans, the EOS lead for North America at the time, spoke at the 2021 shareholder meeting on behalf of the proposal. While the company has performed well historically, simply asking shareholders to 'trust' the company on its capital deployment decisions without climate risk being adequately disclosed is concerning. For example, Berkshire Hathaway Energy is now the largest US power company without a net zero goal. Berkshire Hathaway insiders, including the chair and CEO, Warren Buffett, control 35% of the company's voting power. With Berkshire Hathaway opposing the shareholder proposal, it was defeated, but when adjusted for non-insiders, the vote results were close to 60% in favour of the proposal.
- Recommending a vote against the election of the responsible director for climate change at over 100 laggard companies in the 2021 voting season, including The TJX Companies Inc and Umicore.[10] This also included not supporting four 'Say on Climate' votes at major companies, due to material misalignment with the Paris goals. 2021 can be seen as a tipping point for investor engagement and voting on climate change, with the emergence of 18 'vote on transition' proposals at companies spanning oil and gas, construction, aviation, and consumer goods.
- Making statements at nine annual shareholder meetings in 2021 and asking live questions at six. In our role as CA100+ co-lead and lead, this included making a collective statement at Total's meeting and leading a delegation of eight institutional investors at LyondellBasell's meeting, which involved the use of a legal mechanism under Dutch law to require a discussion on climate change at the chemicals company's shareholder meeting.

These examples relate to EOS' entire AUA, which includes third-party assets, as well as Federated Hermes Limited's assets. In previous years, engagement has mainly focused on the biggest emitting sectors, such as oil and gas, utilities and steel. In 2022, we will widen this to include vital sectors such as food and agriculture, the apparel industry and its supply chain, and banks, which need to align their lending portfolios to 1.5°C, in step with investors.

[8] BP was not a Federated Hermes Limited holding at the time of the meeting.

[9] Berkshire Hathaway was a Federated Hermes Limited holding at the time of the meeting.

[10] The TJX Companies Inc and Umicore were Federated Hermes Limited holdings at the time of the meeting.

Private Debt

In private markets, ESG data is often less readily available. As such, the teams are heavily reliant on their due-diligence process and have developed their own frameworks for assessing ESG risks within their investments.

The Private Debt teams consider ESG behaviours when carrying out credit analysis for each potential investment. ESG considerations are tabled at the Private Debt Investment Committee and are considered as part of the research presented for all new transactions. Material ESG issues will often form part of engagement with the company prior to investment and once invested.

For our Direct Lending team, the key is to identify meaningful ESG risks (both current and potential) before investing. Due to the difficulty of divesting and the capped upside, it is important to manage the downside ex-ante. The Direct Lending team undertakes enhanced due diligence on industries that are deemed controversial, such as energy, chemicals, forestry and agricultural commodities, manufacturing and mining and metals. They also undertake transaction-specific ESG analysis by carrying out an assessment on ESG risk for every investment opportunity. In addition, the team focuses acutely on the sensitivity of the company's cashflows to sudden damage that could arise from the identified potential ESG risks. With that in mind, the Direct Lending team will evaluate if investors are adequately remunerated for the ESG risk(s) of the transaction. We have recently developed a modelling tool to help us estimate Scope 1 carbon emissions for companies that do not disclose their carbon emissions. The team have been using this to estimate carbon emissions for their holdings to form part of their investment analysis as well as use it as a tool for engagement to improve disclosures by the company.

Real Estate

Our Real Estate business has embedded climate risk management throughout their asset management and investment processes since 2006. The focus has been primarily on mitigating the environmental impact of our operations and developments.

This includes an initial screening, where the team assesses the risks and opportunities for value-add from ESG characteristics. It covers specific ESG issues like climate change, with a particular focus on flood risk and mitigation. This is then followed by a responsible investment due diligence for any new acquisitions, where surveyors and environmental consultants collect relevant data on the buildings to identify risks and opportunities. The findings from this then inform the asset-management plans and processes.

The team has developed internal tools and standards, the Responsible Property Management Standard and the Design Innovation Standard which sets out a series of guidelines and principles for our project and development managers to follow. This ensures a consistent, start-to-finish approach to sustainable refurbishment and development, making use of key RIBA Stages.[11] The approach also follows BREEAM

CASE STUDY

Direct Lending

Our Direct Lending team reviewed the opportunity to lend to a Nordic-based manufacturer of road marking materials. The company produces products that are used in infrastructure such as roads, car parks, cycle paths and public access areas. Customers include road and state authorities, municipalities and building contractors. We had the opportunity to support a transformational acquisition to expand the borrower's geographic footprint, product specialisms, customer base and manufacturing capabilities. As part of the due diligence process, environmental reports were commissioned that identified some deficiencies with respect to ESG practices. Through this analysis we were able to identify areas of improvement for the company and have built specific undertakings into the loan documentation to mitigate associated ESG risks and improve the company's ESG characteristics. By building this into the documentation, we have an agreed plan that is measurable and timebound and failure to deliver the plan would trigger an Event of Default and mandatory prepayment of the loan. Examples of agreed actions include investment in health and safety equipment, introduction of health and safety practices/ programmes for workers and improvement in environmental reporting standards.

As with our direct-lending investments, it is important for our Asset Based Lending team to identify risks that may impact on a borrower's ability to repay their loan. We have integrated our responsible property investment (RPI) principles and programme into the debt-investment procedures. This is done as follows: A Underwriting and due diligence: The focus of our responsibility programme is on ensuring a strong due diligence process, including assessments of ESG and climate risks and opportunities before agreeing new loans. A Loan origination and documentation: The business plan agreed is included in the loan documentation at the loan-origination stage. This includes all mitigation activities identified and detailed in the asset business plan, asset refurbishment plans and/or planned and preventive maintenance programmes.

Management and monitoring post closure, asset upgrade finance: We collect and manage the sustainability information we hold on the borrowers and the underlying assets. Where we provide capital for refurbishment in accordance with the business plan, refurbishment agreements include a review of our responsible refurbishment guide and minimum requirements.

[11] The Royal Institute of British Architects (RIBA) Plan of Work organises the process of briefing, designing, constructing and operating building projects into eight stages and explains the stage outcomes, core tasks and information exchanges required at each stage.

principles,[12] which adopt sustainable methods of construction to deliver an operationally efficient and sustainable building or refurbishment.

The Real Estate team reports portfolios' exposure to climate risk on the surveys submitted to GRESB portal every year. Specifically, we disclose details on the resilience of strategy to climate-related risks, transition and physical risk identification.

In 2019, we joined the Better Building Partnership Climate Change Commitment (along with 22 other signatories) with the aim of achieving net zero emissions across our Real Estate portfolios by 2050. In 2020, we set our most ambitious commitment yet – to become net zero carbon by 2035 across the managed assets in our UK Real Estate portfolio.[13] Please see the Metrics and Targets section of this report for more details.

Infrastructure

Our Infrastructure team engages actively with our portfolio companies in our capacity as shareholder, board director and committee member on their approach to climate change. We see significant opportunity in the transition to a net zero economy, including both 'greening' our existing infrastructure and allocating capital to transition solutions, such as renewable energy generation.

As a primarily minority shareholder, we see the integration of sustainability considerations into governance and strategy from the top down as the most effective means by which to catalyse whole business efforts. At a number of our portfolio companies, our roles at board and committee level have enabled us to successfully collaborate and influence sustainability strategy.

During 2021, we engaged with 100% of our Infrastructure portfolio companies, with c.38% of our ESG-related interactions related to climate change.[14]

We aim to identify emerging systemic ESG risks which will likely affect, or are already affecting, every asset in our portfolio and undertake portfolio thematic reviews on such matters, which help us gather comprehensive risk management information. Climate change, TCFD and Net Zero was one of four themes in 2021 (the others being Mental Health and Wellbeing; Diversity and Inclusion; and Natural Capital and Biodiversity).

[12] BREEAM is the Building Research Establishment (BRE) Environmental Assessment Method, first launched in the UK in 1990. It sets best practice standards for the environmental performance of buildings through design, specification, construction and operation.

[13] We have developed this pathway using the UK Green Building Council's Advancing Net-Zero Framework and aligning the 2035 target with our clients' stated objectives and targets. The pathway has a phased approach. The first phase aims to address managed assets in the UK, looking at the publication of detailed targets and timelines. Subsequent phases will seek to address the wider international portfolio and consider the specific challenges relating to the occupied areas of the residential assets. Our Real Estate clients' pathway to net zero excludes our corporate office and related activities, our Real Estate Debt capability and funds where we only have an advisory role. All of these will have their own targets and net zero strategies and we intend to look to align our managed-asset portfolio's pathway.

[14] Based on a sample of all sustainability engagements that were tracked for Q3 2021.

CASE STUDY

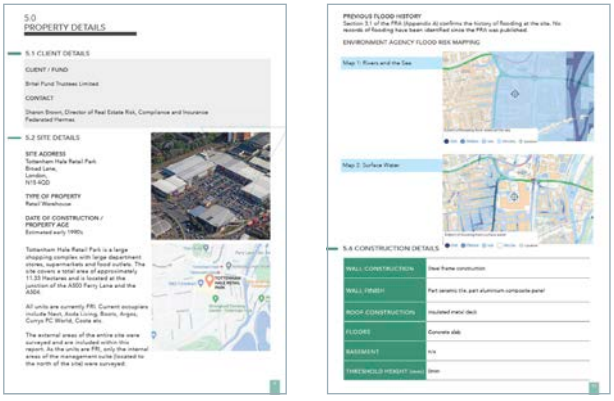
Managing flood risk in Real Estate portfolios

Factoring climate risk at every stage of our assets' life cycle helps us to reach a holistic view of the risk profile of an asset we invest in and operate. We assess, monitor and manage the physical climate risk at asset level and the transitional climate risk at fund level. We undertake annually comprehensive assessments of climate change risks and opportunities within our portfolio by assessing the level of exposure on physical and regulatory risks. Working with external experts we expanded our flood prevention programmes to include extreme weather events which helped us to understand the capital value at risk of our portfolio under future scenarios.

We use various tools to identify the current risk of each asset which include a bespoke climate risk online portal, Environmental Agency's risk maps and external partners for thorough analysis. The initial assessment is followed by the development of asset-specific strategies which consist of mitigation plans in case of emergency. We follow a systematic process for the assets that have been identified as high-risk where our investment managers liaise with property managers to implement detailed plans to reduce the risk. For instance, in one of our retail parks with a risk of flooding, the Real Estate team developed the property's Flood Resilience Report with specific recommendations that would mitigate future flooding. Those actions include:

- Watertight building services
- Non return values on drainage
- Air brick flood covers
- Rising building services
- Development and communication of flood management plan
- Air bricks flood covers required
- Rising building services

Figure 9: Example of a property flood resilience report

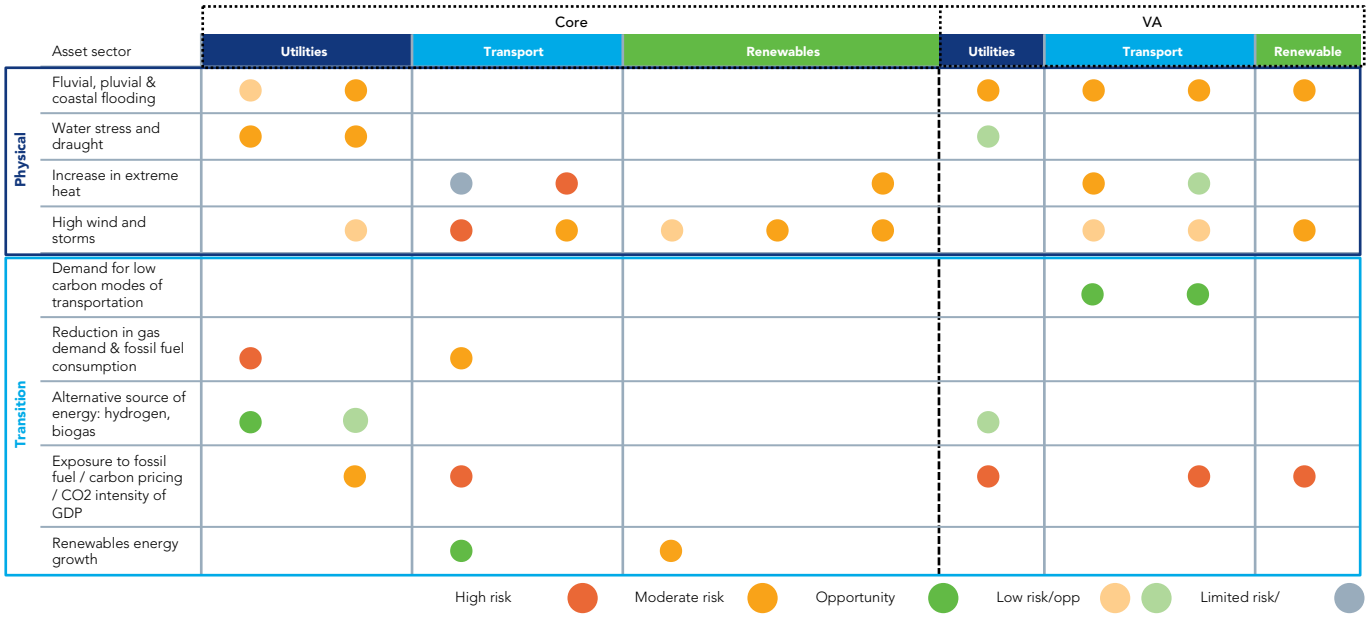


Source: Federated Hermes Limited, as at 30 September 2022.

In 2021, we undertook 5 months of deep dive work in partnership with climate adviser ERM, focused on scenario analysis for individual assets and risk management of identified risks.

The table below illustrates the primary risks identified across our Core and Value Added strategies and different sectors. As anticipated, transition risks are more prevalent and quantifiable in the short term, in particular carbon pricing and revenue exposure to highly carbon intensive industries. The most prominent physical risks being increased storms and fluvial flooding in the medium term and increases in heat in the longer term. Several material transition opportunities were also identified, including increased demand for sustainable products and services and contingent participation in a future market for negative emissions.

Figure 10: Primary risks and opportunities identified across Core and Value Added strategies and different sectors



Source: Federated Hermes Limited, ERM as at 31 December 2021.

Using the outputs of our deep dive analysis, we have reviewed our stewardship approach with the relevant businesses to date and set priority focus areas and objectives. An illustrative example is below. We expect to continue to update our climate stewardship objectives annually, as risks and mitigation evolve over the duration of our holding periods, including refreshing our scenario analysis periodically to reflect the most up to date net zero scenarios.

Figure 11: Focus on mitigating transmission risk with clear governance framework to address physical risk

Climate change related risks and opportunities

- **Risks**
  - Transition: High risk of inclusion in the **UK ETS** in near term, resulting in the payment of a defined monetary sum per quantity of CO2 emitted
  - Physical: Moderate risk of **fluvial flooding** from increased rainfall to 2050, resulting in damage and reduction in availability
  - Physical: Moderate risk of damage, downtime and H&S implications from increasing frequency of **storms and high winds**
- **Opportunities**
  - ✓ Transition: Contingent potential revenue from **market in negative emissions**. Potential growth in demand for low carbon activities

FHI stewardship

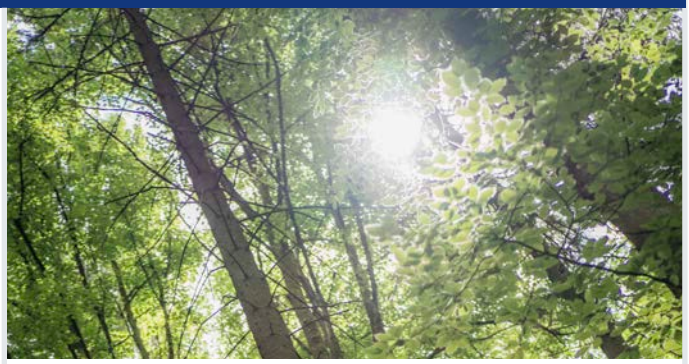
- **Approach and key engagement activities to date**
  - Sustainability Committee member
  - Early input on transition risk assessment and support for decarbonisation strategy approved by board in 2021
  - Ongoing input and oversight of emission abatement cost and solutions modelling and feasibility
- **Next steps to address opportunities/risks identified**
  - Board level consideration and approval of investment in decarbonisation solutions
  - Promote increased focus on physical risk adaptation and associated mitigation processes via Sustainability Committee Chair

Source: Federated Hermes Limited, as at 31 December 2021.

CASE STUDY

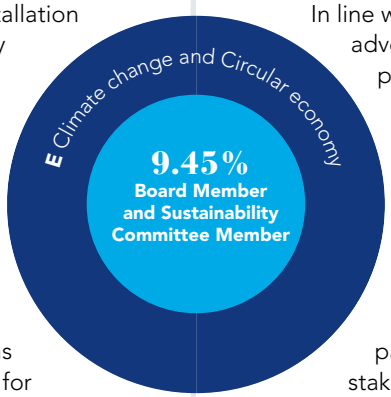
Viridor

As board and ESG Committee member at Viridor, our focus has been collaboration with the business and our co-shareholder on the three main pillars of the company's sustainability strategy – Climate Change (Net Zero), Circular Economy and Corporate Culture (people), elements of which represent the most material sustainability risks and opportunities for the business. We are additionally focussed on monitoring the achievement of improvements in health, safety and wellbeing performance by the executive team (a focus area identified in due diligence).



Climate change

In 2021, Viridor launched its Net Zero strategy. In line with our support for ambitious decarbonisation targets, Viridor is targeting Net Zero by 2040 and net negative emissions by 2045, to be achieved partially via the installation of carbon capture facilities at its most highly emitting energy from waste facilities. Since the launch of its strategy, supported by the ESG committee and Viridor has achieved an 11% reduction in its scope 1 emissions, a 31% reduction in scope 3 emissions and undertaken a programme of carbon capture trials and advocacy, resulting in the inclusion by BEIS of the waste sector in those sectors eligible for the first carbon capture support mechanisms in the UK. Viridor has since submitted a bid for its Runcorn facility to be included in the first wave of carbon capture roll out, as part of the Hynet cluster in the North West of England.



Circular economy

In December 2021, Virdor launched a circular economy strategy focussed on its role in increasing recycling and reprocessing of plastics, including hard to recycle plastics. In line with this strategy, the company is advocating for a ban on certain types of plastic, a ban on plastic export for recycling and the creation of a more stable market for investment in state of the art processing infrastructure for the limited plastics that remain, which would have operational, financial and environmental benefits to the company and broader society. We are supporting the company on an ongoing basis, including by participating in forums alongside aligned stakeholders including plastics NGO, WRAP.

Private Equity

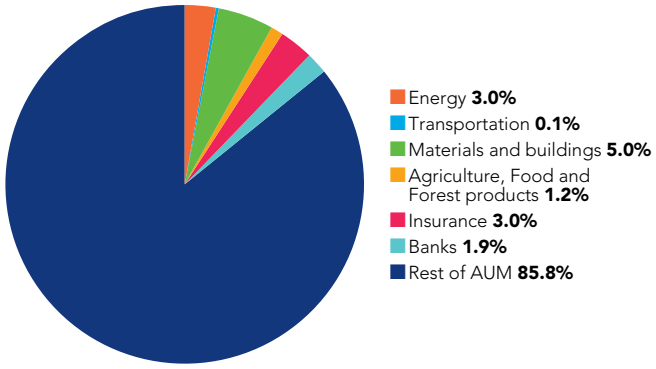
Federated Hermes' Private Equity investment strategy is guided by a thematic investment framework that identifies structural long-term trends we expect to shape the landscape of global economic activity over the next 15 years. This framework is naturally aligned to the UN's Sustainable Development Goals. 'Net Zero Economy', one of the target megatrends, underwent significant expansion in scope and substantiation in 2021 to reflect a more purpose-driven goal of investing for value in the cross-sector foundations of a carbon neutral economy.

The 'Net Zero Economy' focuses on investments relating to sustainability and the energy transition. This megatrend will capture opportunities that are arising from the convergence of technological progress and demand for new solutions to reduce the impact of human activity on the planet. We summarise our current thematic thinking below:

- Given the extraordinary significance of climate change across business, consumers and government since our original introduction of the sustainability theme in the early 2010's, we have holistically reviewed our target sectors in light of the required transformation of the economic system to achieve carbon neutrality;
- The transformation to achieve net zero outcomes cuts across traditional sectors to encompass companies within 'next generation' energy, the future of food and mobility sectors to the broader production and consumption cycle, including ESG metrics measurement and technology;
- We expect the increasing demand for net zero-aligned products coupled with the competitive advantages of more sustainable supply chains, will create a rich vein of opportunities to be addressed by the private equity market, which this megatrend intends to capture.

In addition to investing in the net zero megatrend, this top down thematic approach guides investments into areas with lower ESG risks, including lower climate change risks. This is evidenced by the fact that fewer than 15% of our direct investments are in sectors that according to the TCFD guidance are likely to be most affected by climate change.

Figure 12: Private equity investments in high risk sectors[15]



Source: TCFD, Federated Hermes Limited as at 31 December 2021.

Advocacy: delivering positive industry-wide change

We believe that policymakers have a key role to play in determining the investment risks and opportunities created by climate change. We engage constructively with regulators and policymakers globally to address environmental, social and other market failures that may prevent the financial system from operating in the best interests of its ultimate asset owners.

Our Responsibility Office has two staff members working full-time on public policy. This includes the Head of Policy and Advocacy, whose team works with experts across our firm to ensure advocacy work is well informed, relevant and impactful.

EOS also has a comprehensive programme of engagement with legislators, regulators, industry bodies and other standard-setters to help shape capital markets. Our investment teams contribute their expertise through collaboration with the Responsibility Office and EOS, as well as direct involvement in external industry initiatives. The result is an advocacy policy that aims to lead rather than follow the policy debate. Given the global nature of our investments, this work spans asset classes and geographies.

We often engage directly with regulators and policymakers and aim to be a progressive and constructive voice in the debate. We engage on regulation relating to the investment industry and the assets in which we invest. We contribute to policy discussions both directly and in collaborative fora and initiatives. We are a member of many industry bodies and initiatives around the world and are co-founders of a number of them. Through these initiatives we engage with others both within and beyond the investment industry to promote responsible investment, including ways that the industry and our investees can respond to market-wide and systemic issues such as climate change. Colleagues from across the business – including the Responsibility Office, EOS, Risk and the investment teams – take on advisory roles in many of these organisations to share our practical expertise.

In 2021, we carried out extensive advocacy work on climate-related issues.

Throughout 2021, we participated in public consultations and meetings with government officials, financial regulators, stock exchanges, industry associations, and other key parties to contribute to the development of policy and best practice to facilitate the transition to a net zero carbon economy. The aim is to protect and enhance value for our clients by improving shareholder rights.

We have advocated for a number of changes to public policy and market best practice, including asking governments to commit to more ambitious climate targets. In our public policy engagement with the UK and European governments we have called for, among other things, tougher GHG emissions targets to 2030 and 2050 and for a new fiscal stimulus to deliver a low-carbon and resilient economy. We continue to advocate for mandatory TCFD disclosures for companies, through engagement with the US Securities and Exchange Commission, the European Union and the UK government.

At COP26 we set out our expectations of policymakers, calling for the following:

- Countries to make more ambitious commitments, called Nationally Determined Contributions (NDCs), to reduce their emissions in line with 1.5°C. These NDCs should have clear short- and medium-term commitments over the vital period to 2030, to help cut global emissions by 40-60% from today's baseline by 2030. Advocacy around deforestation and other sectoral pledges helped to shrink the 2030 emissions gap by a further 9% on top of NDC commitments.
- Developed nations to meet and go beyond the existing pledge of $100bn per annum dedicated to helping developing nations to accelerate their energy transition and adapt to the growing physical impacts of climate change. While the $100bn per year climate finance pledge was still not met, due to increased pressure, it is projected to be reached by 2022-2023 (COP27) and we have already started to see a greater emphasis on adaptation in the most vulnerable regions.
- Finalisation of the Paris Rulebook (the rules needed to implement the Paris Agreement), including Article 6, which covers international carbon markets. This would enable nations to trade emissions allowances and create offsets, unlocking financial flows and market efficiencies to streamline decarbonisation and target the least-cost carbon reduction opportunities first. While this was successfully achieved, further policing of integrity will be required to ensure credits are used appropriately.

As a pioneer in responsible investing, FHL was an active participant at COP 26 in November 2021. We hosted a two-day event called the Further, Faster conference, which addressed the three interlinked emergencies of Climate, Nature and Social Injustice. Further, Faster was hosted by our CEO, Saker Nusseibeh, and brought together world-leading experts in these fields to set 'How much? By when?' objectives to deal with these emergencies and to put a cost on them. The conference concluded with a Financial Industry session that proposed solutions for how these objectives could be funded and how the industry might need to transform itself to be fit for this essential purpose. Our event was attended by approximately 150 clients, members of the media and other industry participants and was streamed live over the two days with recordings also available on our Climate Change microsite.

[15] This chart includes the non-financial sectors identified by TCFD as high-risk, as well as insurance companies and banks as the financial sector is also a key area of focus for TCFD given the complexity of climate risk for financial companies. FAQ - TCFD Knowledge Hub (tcfdhub.org)

In March 2021, Climate Action 100+ published its first assessment of focus companies against the Net-Zero Company Benchmark, a standardised framework for evaluating company progress. EOS contributed to the benchmark through its collaboration with IIGCC – for example, on the inclusion of a test for capital expenditure alignment. We have also contributed to the policy group of the Glasgow Financial Alliance for Net Zero (GFANZ) as a taskforce member and will actively support country level engagements over the course of 2022.

Throughout 2021, we advocated for better public policy frameworks on nature-related issues through our work with the Finance for Biodiversity Foundation and other collaborative initiatives. Halting and reversing tropical deforestation will be essential if we are to avoid the consequences of severe climate change and biodiversity loss. Deforestation and forest degradation, mostly driven by beef, palm oil, soy and other agricultural commodity production, has continued despite the immense value of tropical rainforests. We are working as part of the PRI Sustainable Commodities Practitioners Group to explore how the finance sector can effectively address deforestation and within the Investors Policy Dialogue on Deforestation in Brazil to reverse this trend in the Amazon rainforest, engaging with relevant government authorities and associations to promote sustainable land use and to improve company disclosure and management of the various ESG risks associated with soy and cattle.

Corporate risk management

Risk Function Activities

Across 2021 we have embedded climate change risk management at the Group entity level in a more systematic way. In August, we introduced a dedicated Reputational and Sustainability Risk team to enhance the role of the second line of defence in providing independent oversight and challenge to our approach to corporate sustainability. Assurance is undertaken by all three lines of defence, with the first line Responsibility Office also overseeing that our business continues to, authentically and accurately, disclose our ESG objectives and activities in order to manage the associated reputational risks and enhance our approach to internal assurance.

The Risk team has integrated sustainability risk within the existing risk management framework to enable the business to identify and manage material ESG factors that impact our business taking an 'outside in' perspective, across our value chain. This includes embedding sustainability and climate change risks into our risk taxonomy, embedding ESG into emerging risk identification and reporting and setting Risk Appetite Statements for sustainability-related risks, including metrics and thresholds to be used in monitoring risk levels the business is willing to bear.

Our suite of Risk Policies consider sustainability risk where it is related to, and a driver of, established risk categories within this framework. The Board will be overseeing the implementation of our Climate Action Plan by the Responsibility Office through first line reporting and Risk will provide an independent opinion via risk Management Information and reporting.

DEEP DIVE

UK Climate Financial Risk Forum

A key focus of our advocacy work over the past two years has been as a member of the UK Climate Financial Risk Forum (CFRF). The CFRF, co-chaired by the Financial Conduct Authority (FCA) and the Prudential Regulation Authority (PRA), builds capacity and shares best practice across financial regulators and industry, to advance our sector's responses to the financial risks from climate change. The CFRF plays a critical role in supporting firms as they get to grips with some of the more challenging aspects of climate change mitigation and adaptation by providing guidance by industry, for industry. Our CEO has chaired the Disclosures Working Group (DWG) of the CFRF for two years during 2020 and 2021. In the first year of the forum's work, we led the development of practical guidance published in June 2020 on how financial institutions can best disclose climate-related financial risk. The outputs of the first session have already been used widely both within and beyond the UK and referenced by the FCA as a useful guide for firms wishing to go beyond minimum regulatory disclosure standards.

In our second year as Chair, the DWG published further guidance in a cross-Forum report on data and metrics, including a dashboard of recommended 'use cases' that firms should keep in mind when selecting metrics for disclosure. The DWG also produced a briefing paper on managing legal risks associated with climate disclosure, particularly in relation to forward-looking metrics such as scenario analysis outputs and emissions projections. Finally, we produced a case study describing how our climate approach has evolved over time. Our leadership of this group has enabled us to develop stronger relationships between regulators and our peers, allowing us to keep abreast of developing best practice, and to help us to further our grasp of the collective challenges and opportunities facing financial institutions in this area. We are continuing to support the work of the Disclosure, Data and Metrics Working Group and have also joined the newly formed Transition to Net Zero Working Group in 2022.

In addition, in 2021 the Central Bank of Ireland ("CBI") established a dedicated Climate Change Unit and its own consultative forum. Federated Hermes via its subsidiary, Hermes Fund Managers Ireland Limited, has been elected as a member of the CBI Climate Forum and is an active contributor.

As part of FHL's transition to the ICARA regime, a number of stress testing and non-financial scenarios have been developed, in order to test the robustness of the group's regulatory capital against a variety of internal and external threats and harms. This also included specific sustainability risks (e.g. loss of reputation from greenwashing and failing to act in line with ESG commitments). In addition, we continue to integrate physical climate risks within BCP assessments and scenarios.

Sustainability-related standards and regulation

Horizon scanning for developing sustainability regulation and maintenance of pipeline of sustainable regulation has been established to augment the existing Compliance Team regulatory horizon scanning process. Horizon scanning for sustainability-related standards forms the basis of a new Sustainability Standards Triage Group (chaired by Risk) where implementation actions are discussed and addressed. This ensures that activities to comply with requirements are implemented and coordinated across the business. The Sustainability Standards Triage Group determines whether a new sustainability regulation or external standards requires the support and expertise of our Business Change team in order to implement it. A recent example of this is the SFDR Programme which was established in 2021 to ensure that we meet our European regulatory requirements to consider sustainability risk (including MiFID II developments).

Membership and participation in industry working groups (for example, the Irish Funds ESG Policy Legal and Regulation Working Group) is an effective channel to bring insights and early-indicators of regulatory/policy change to the business, as well as to learn from and share best practice with peers.

Development over 2022 and beyond

To ensure the business can measure, monitor, manage and mitigate the financial risks from climate change in line with risk appetite statements, development of entity climate risk-related scenario analysis is a priority for 2022 and beyond. This will include:

- Inclusion, as part of future ICARA reports, of all material exposures relating to the financial risks from climate change. This will aid the business' understanding of the impact on solvency and liquidity positions using a range of scenarios relating to different climate transition paths, and a path where no transition occurs;
- Using scenario analysis to forecast value at risk under different climate scenarios, assess the corporate entity's overall resilience to physical and transition risk, including the potential impacts on inflows and revenues, and further include climate change impacts as an input into the firm's business strategy and business planning cycles. This will ensure that risks arising from climate change are monitored, managed and owned across the business and considered over a range of business planning time frames.

This, and other development work to further manage the climate-related risks to our subsidiaries, will be overseen by the Risk Team across 2022. The involvement of both Risk and Compliance teams in the Climate and Nature Working Group (CNWG) and the Environmental Management System (EMS) Working Group continues to have a pivotal role to play in building awareness across the business, capturing all three lines of defence at the corporate entity level.

Identification, assessment and management of corporate GHG emissions

Addressing our environmental responsibilities as a firm, EMS works with a specialist third party consultant to set and deliver our environmental goals and improve our sustainability. EMS actively promotes sustainability in the office by educating and encouraging staff to reduce our environmental impact.

The system we use to measure and manage our impact is ISO14001: an internationally accepted standard demonstrating an organisation's commitment to continual improvement of their environmental management system. We first achieved this certification in 2010 and retain it to this day – in recognition of the rigour of our on-site environmental management programme.

Under the EMS we had three strategic objectives in 2021:

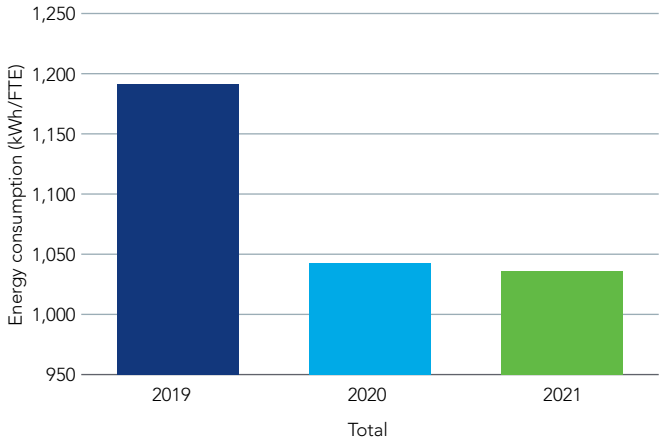
	Strategic Objectives for 2021	Measure of Success	Result
1	Achieve a successful ISO14001 surveillance audit for the EMS at 150 Cheapside.	Upheld certification to ISO14001 following surveillance audit in May 2021.	Achieved –Re-certification maintained until August 2022.
2	Work with the building management team to better understand the building's and FHL's own impacts and contribute to efforts to reduce these where possible.	Evidence of meetings with building manager.	Achieved –FHL holds regular meetings with the building management team and a quarterly data sharing programme has been put in place for the reporting of its utilities and waste data. Recommendations are also made to the building manager where improvements could be made to common areas and shared services, e.g. fan coil units in tenants' demise and power quality investigations.
3	The EMS Group is tasked with developing initiatives with a specific focus on environmental benefits.	Evidence of implementation of initiatives with a specific focus on environmental benefits	Achieved – Proposals from the EMS group are discussed at the quarterly EMS meetings (see minutes) where decisions on whether / how to implement them are made.

In addition, the EMS had eight management objectives in 2021:

	Tactical and Operational Objectives for 2020	Measure of Success	Result
1	Reduce FHL's operational electricity consumption for its occupied space at 150 Cheapside by 5% per FTE in 2021 compared to 2019. (2019 selected due to atypical consumption year in 2020)	Reduced electricity consumption at 150 Cheapside.	Achieved – Electricity consumption has reduced by 13% compared to throughout 2020 and 2021.
2	Compliance with SECR.	Make a public disclosure within their annual directors' report of energy use and carbon emissions. Report using a relative intensity metric e.g. tCO_2/annual revenue. Provide a narrative on energy efficiency actions taken during the reporting period.	Achieved – disclosure of compliance featured within 2022 financial report. The statement was produced in line with reporting and industry standards.
3	Reduce waste to <400kg per FTE.	Improved recycling rates and decreasing total waste amounts.	Achieved – Waste has significantly reduced since 2019. A trend of reduction was seen in the months leading up to lockdown, which then caused a dramatic drop of almost 90%. Waste consumption has not reverted back to pre-Covid levels yet, but shows signs of increasing to half of normal consumption.
4	Maintain recycling rate >70%.	Reduction in the number of reprints and absolute paper usage.	Achieved – Paper consumption has reduced significantly due to the impact of lockdown. Improved printers have been installed which monitor the occurrence of reprints and cut down on accidental paper use. Consideration has been given to how the reduction in printing seen during lockdown can be maintained. Several options are available and will be trialled when employees return to the office.
5	Continue to monitor business travel across all departments and modes of transport where possible. Work with the new travel provider to receive more detailed information on each department's travel with a view to reducing it in future.	Continual monitoring and reporting of business travel activities and emissions.	Achieved – A travel policy has been drafted to incorporate the impact of carbon emissions into the travel booking process. The user is encouraged to avoid, reduce or mitigate travel. Business travel emissions have reduced by 99% since 2020. Carbon offsetting equivalent to $100/tonne will be calculated and added to the traveller's teams' travel budget at the time of booking.
6	Socialise the travel policy and drive engagement.	Robust travel policy which minimises unnecessary travel.	Achieved – The travel policy has been socialised, however the impact of Covid on travel restriction has meant that the impact of the travel policy engagement is uncertain.
7	Continued promotion of the work being undertaken by the business to manage its environmental risks and the firm's EMS performance in key areas.	Communications to stakeholders.	Achieved – The Federated Hermes Environmental Management System has been uploaded to the corporate SharePoint. This allows for greater transparency and engagement with the wider business.
8	Ensure that continued involvement in and support for the EMS Group is included in all Group members' annual personal objectives.	Evidence of EMS Group within objectives of members.	Achieved

We are proud to have met the vast majority of our objectives and retained our ISO14001 EMS standard for another year. As the charts below show we have also exceeded the targets we set for ourselves on reducing electricity consumption, waste production and recycling.[16] It should be noted that non-recycled waste from within the City of London is taken to an Energy-From-Waste Facility where it is processed to produce electricity. Travel emissions have also fallen. While pleased we are also not complacent. We understand much of this progress has been due to occupancy reduction with staff working from home and ongoing travel restrictions in 2021. However, we have seen real behaviour change and a positive impact of the change in working routines and the updates to the Travel Policy. For example, the number of travel bookings has not reverted back to 2019 levels despite several eases in lockdown.

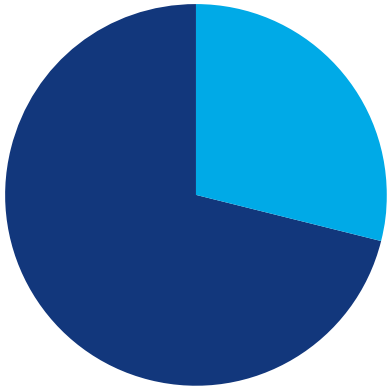
Figure 13: Energy consumption (kWh) per full time employee (FTE) at 150 Cheapside offices in 2021



Source: Federated Hermes Limited, Cushman and Wakefield as at 31 December 2021

Energy consumption in 2021 (1,036 kWh per full time employee (FTE)) represented a 1% reduction from 2020 (1,043 kWh/FTE), and a 13% reduction from 2019 (1,191 kWh/FTE).

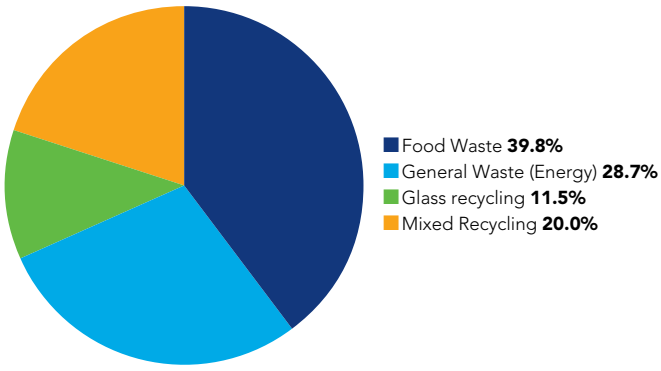
Figure 14: Recycled vs non-recycled waste (kg) (150 Cheapside) in 2021



	Recycled	Not Recycled
Volumes of Waste (Kg)	81,054	21,979
Proportion of Waste	**71%**	**29%**

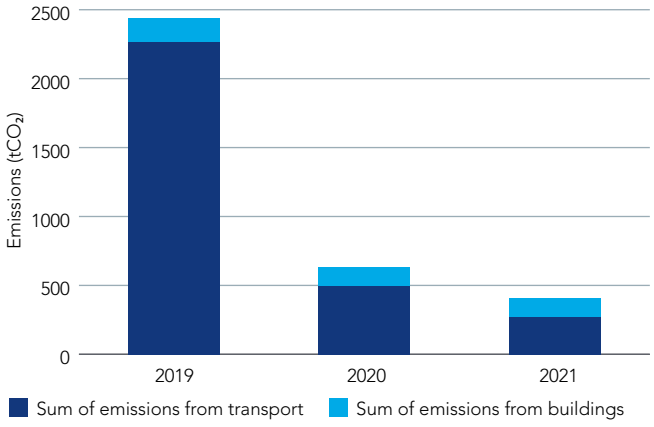
Source: Federated Hermes Limited, Cushman and Wakefield as at 31 December 2021

Figure 15: Proportion of waste per disposal type at 150 Cheapside Offices in 2021



Source: Federated Hermes Limited, Cushman and Wakefield as at 31 December 2021

Figure 16: Travel and Building (150 Cheapside) emissions in 2021[17]



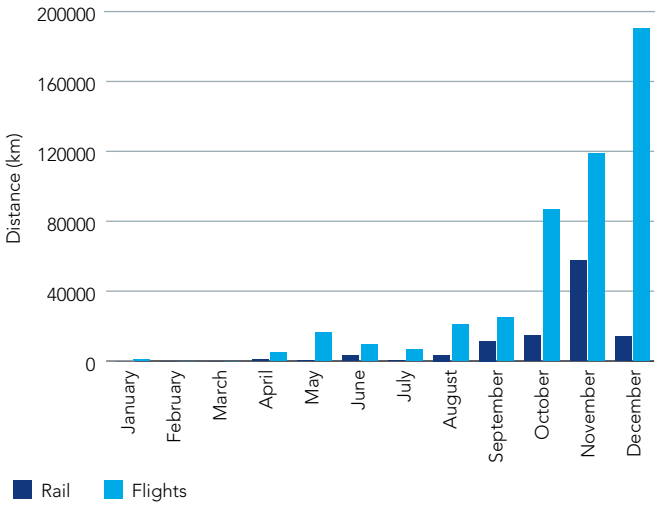
Year	2019	2020	2021
Emissions from Transport	2,100	360	134
Emissions from Buildings	168	136	136
Total Emissions	2,268	496	270

Source: Federated Hermes Limited, Reed & Mackay as at 31 December 2021

[16] Figures 13-15 capture data from our London office (150 Cheapside) only and do not include our other offices or Hermes GPE.

[17] In Figure 16, the building emissions data is for our London office (150 Cheapside) only and does not include our other offices or Hermes GPE. The travel emissions data in Figures 16 and 17 includes colleagues from both 150 Cheapside and our other offices outside the UK, but does not include Hermes GPE.

Figure 17: Total Distance of Corporate Travel in 2021



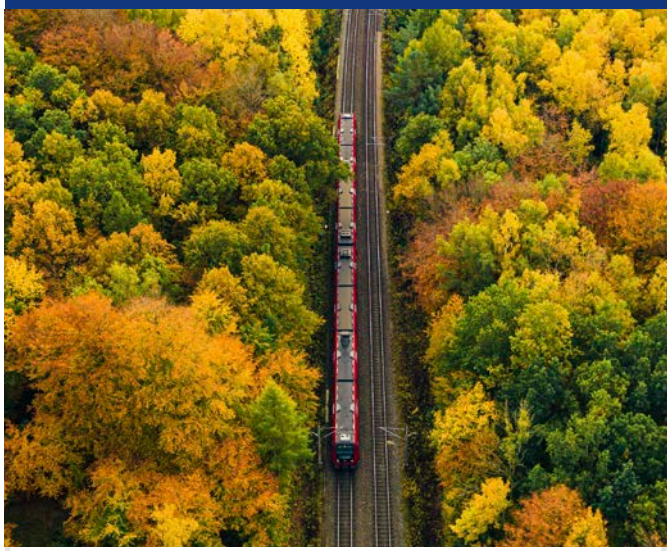
Distance (km)	2020	Proportion of total
Distance travelled by rail	105,254	18%
Distance travelled by airplane	479,389	82%
Total distance	584,643	100%

Source: Federated Hermes Limited, Reed & Mackay as at 31 December 2021

As well as measuring its GHG emissions, FHL offsets its operational carbon emissions by working with Trees for Cities. For every tonne of GHG emissions that the business generates from its day-to-day operations and its business travel, verified carbon offsets are generated by planting trees. In the period November 2021 to March 2022, Trees for Cities will plant 1,324 trees to offset the 496 tonnes of CO_2e the firm emitted in 2020. We remain in contract with Trees for Cities for a further two years and will plant trees in 2022-23 to offset the CO_2e generated in 2022. In addition, in October 2021, our employees volunteered with Trees for Cities and Wilder Communities to create a green corridor in East London as part of a community project.

CASE STUDY

Travel Policy Review



In 2021 we made further updates to the firm's travel policy following enhancements made in 2020 to operationalize carbon controls through a new avoid-reduce-mitigate hierarchy. For 2021 onwards, FHL committed to a 50% reduction of our 2019 CO_2 emissions through travel up to 2030.[18]

Internal targets and metrics have been established so we can track our progress year on year through monthly monitoring. The business has established an overall carbon cap for 2022 and each department has a carbon allowance which will be distributed according to the needs of that specific business area and this is monitored throughout the year by quarterly reports to the EMS Committee. We will also be monitoring the mileage of our travel. While we will continue to work with Trees for Cities and other partners to offset our operational carbon emissions, we will not use offsets to meet our carbon reduction target.

This carbon cap rollout builds on existing guidance to employees to consider carbon efficiency, prioritise essential travel only and consider alternatives to air travel and to multiple trips where possible. We continue to request that our employees considering business travel on behalf of the firm should undertake the following assessment, based on an avoid-reduce-mitigate hierarchy:

- **Avoid:** Consider whether the objective the journey seeks to fulfil can be achieved through other means, for example using audio-visual conferencing facilities, telephone or email.
- **Reduce:** If the journey is necessary, can it be combined with other upcoming meetings or site visits perhaps.
- **Mitigate:** Where travel cannot be avoided, we will mitigate through offsetting our carbon emissions, as we currently do.

[18] Our travel policy, targets and metrics apply to colleagues in our London office (150 Cheapside) and our offices outside the UK. Hermes GPE are not included.

Metrics and Targets

Throughout 2021 we further developed our corporate Climate Action Plan, with new interim targets and metrics to help us manage climate-related risks and opportunities over the near, medium and long term; our Climate Action Plan will be published alongside this Climate-related Financial Disclosures Report in November 2022.

In this section we set out some detail on the range of metrics as well as firm-level targets we use to manage climate-related risk within our investment management activities.

Targets

Scopes 1 & 2 operational emissions reduction targets:

We are already a net zero company in terms of our own Scope 1 and 2 operational emissions – as well as our corporate travel emissions by air and rail – and have been so since 2016 through offsetting residual emissions.

Our operational emissions targets are reviewed annually and are based on data captured in the Federated Hermes Environmental Management System (EMS) and Streamlined Energy and Carbon Reporting (SECR) methodologies. Our 2019 baseline was:

- Absolute energy consumption: Scope 1 – 1.13 tCO_2e; Scope 2 – 202.1 tCO_2e
- Energy Intensity: 0.39 tCO_2e/FTE[19]

We are targeting a further reduction in our energy intensity (based on our Scope 1 & 2 operational emissions per FTE) of 25% by 2030 relative to the 2019 baseline. Using an intensity metric as the basis of our operational emissions target allows us to track progress whilst allowing for changing office space and FTE numbers, which in turn will have a direct impact on office size, energy consumption and emissions. As a result, the growth path of our organisation will be monitored closely and we will work with our external environmental consultants combined with the internal knowledge base via our EMS to maximise efficiency gains and ensure that the targets remain fit for purpose.

The 2019 energy intensity baseline was based on the electricity and gas consumption and FTEs for 150 Cheapside (London), Gutter Lane (the London offices of HGPE) and estimates for MEPC offices only. Going forward, our tracking of progress against our targets will include FTEs from our other offices and estimations for gas and electricity consumption in these additional offices.[20] We have used location based emissions factors – in line with SECR methodologies – to calculate the emissions associated with our energy consumption on site and corresponding energy intensity. This means that any use of renewable energy is not represented in these metrics, as they are based on the average emissions intensity of the grid, although our landlords source 100% renewable electricity for our head office (150 Cheapside). Reductions in our energy intensity will therefore result from energy efficiency measures and grid decarbonisation.

[19] Energy intensity for our offices is calculated by dividing energy consumption by the number of FTEs. This is calculated on a monthly basis and averaged over the year.

[20] FHL has used the main requirements of the GHG Protocol Corporate Standard (revised edition) as a basis to report operational emissions. Data was gathered at site level to compile the carbon footprint. The International Energy Agency (IEA) and DEFRA UK Government Conversion Factors for GHG Company Reporting have been used to convert activity data into tCO_2e emissions. For measuring progress against our targets, actual data will be prioritised, however in instances where this is not available, consumption data will be estimated using the following methods: Average daily consumption for any unknown period within the same reporting year, substituting actual consumption for known periods in place of those missing, apportioning building level consumption data based on the company's leased floor area, or the 2021 CIBSE Guide F Benchmarks where no data was available (using the associated asset type's benchmark and multiplying this by the occupied floor area of the assets).

Scope 3 operational emissions reduction targets:

One of the key risks identified by EMS and the CNWG in relation to climate is reputational risk from operational emissions, notably travel emissions. As a result in 2021 we established ambitious reduction targets for employee travel. We have committed to reducing our emissions from business-related travel by 50% from a 2019 baseline (1,558 tCO_2e) by 2030[21], whilst establishing internal mechanisms to monitor annual progress including an overall annual carbon cap, department-specific metric-tracking, mileage monitoring and updated guidance within our Travel Policy.

From 2022, enhancements to our responsible supplier management process have been embedded, including a revised Supplier Code of Conduct which better considers the ESG credentials of our third party suppliers and integration of environmental and social considerations within the supplier due diligence process.

We have committed to reducing our emissions from business-related travel by

50% from a 2019 baseline (1,558 tCO_2e) by 2030[21]

Our Investments

In addition to our operational emissions, our targets also cover Scopes 1 and 2 of our financed emissions and, where possible, Scope 3, either where it is reported by the company or where we deem it a priority for estimation because it is material to the sector or accounts for 40% or more of total emissions. The approach we have adopted requires that our investments include an increasing proportion of companies that are planning decarbonisation in line with 1.5 °C pathways. These pathways will use science-based methodologies for the distribution of emissions reductions between sectors and geographies and therefore account for the fair share of emissions reductions required from different companies.

Our approach to achieving our commitment to the Net Zero Asset Managers (NZAM) initiative – through which we have committed to net zero by 2050 at the latest – is focused on ensuring its achievement delivers decarbonisation in the real economy. We have therefore set portfolio-coverage type targets that will drive engagement with portfolio companies to achieve decarbonisation at the company level and not just the portfolio-level, as an inseparable part of our fiduciary responsibility.

We also aspire to develop a tailored methodology for the holistic assessment of positive climate impacts from our portfolios and will look to set a target for increasing such impacts in the future. We will in the meantime continue engaging with investees to increase green revenue and investment into climate and nature-based solutions between now and 2030.

[21] Our travel policy, targets and metrics apply to colleagues in our London office (150 Cheapside) and our offices outside the UK. Hermes GPE are not included but will look to include them in the future.

The path to net zero

Turning commitment into action

As the climate crisis accelerates, the question remains: what can we do to remain on track?

Achieving net zero is the only way forward and, unfortunately, time is not on our side. That's why, as stewards of our clients' capital, the global financial community must act - and **we must act now.**

We believe we have a responsibility as an industry, and indeed as a business, to allocate capital in a way that mitigates exposure to climate risk and helps deliver the goals of the Paris Agreement[22]. So, how do we get there?

Taking the first step

Our climate goals

We need to start planning for this future now, even if we do not have all the answers today.

Federated Hermes Limited has committed to achieving net zero by **2050** but we will try our best to get there sooner.

As we strive to reduce our portfolio emissions, we have set the following **interim milestones**[23]**:**

In public markets, we are aiming to align...

- 25% of AUM and financed emissions to 1.5°C by 2025
- 50% by 2027
- 80% by 2030

In Real Estate, we are working toward a...

- 25% reduction in energy intensity by 2025
- 40% by 2030
- 66% by 2035

... And achieving **net zero** in terms of development and operations and debt by **2035.**

For Infrastructure, we are looking to achieve 100% Paris-alignment of assets by 2025.

Engagement roadmap

Helping companies along the journey

Becoming fully net zero means focusing on our stewardship.

Across our assets, both in the public and private space, we pledge to engage with the most material emitters that are misaligned or exposed to significant transition risk, to help them reach the **1.5°C target.**

[22] Article 2.1c of the Paris Agreement, sets out the objective of "(c) Making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development."

[23] While we hope to cover all asset classes over time, our interim target currently applies to all our assets under management except for private equity, direct lending, sovereign debt, FX, cash, indices and, ABS, CLOs and CDOs issued by companies.

Map the route

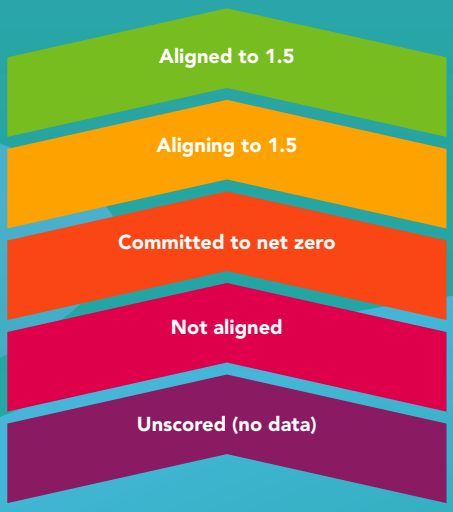
We believe we can achieve these goals in three ways:

1. **Reducing our financed emissions** by asking our investee companies to set credible targets and strategies validated by the latest climate science. We seek to increase engagement to **90% of financed emissions by 2025.**

2. **Taking a proactive and industry-specific approach** by prioritising the following sectors: **forest, land and agriculture, banks, buildings, iron and steel, cement, chemicals, transport, oil and gas, and power generation.**

3. Increasing investment in solutions by raising the proportion of thematically managed assets with an explicit Paris-alignment goal.

Companies will be placed into different categories, based on alignment:



The development of an in-house Paris-alignment methodology has allowed us to assess the extent to which a company's climate change ambitions are sufficiently ambitious and in line with the Paris-alignment goals. We will report progress on an annual basis.

The road ahead

With the annual UN Climate Change Conference (COP27) just around the corner, we must continue to build momentum not only as a firm, but at an industry-wide level.

Leveraging our engagement and voting capabilities are the key to energising the ambition and action of our portfolio companies as we continue to support wider advocacy efforts.

To learn more about our net zero commitments and Climate Action Plan, please visit this link.

We have reached a critical juncture in the net zero journey. The time for action is now.

Public Markets

Our public market interim targets:

25% of in-scope AUM and financed emissions to be 1.5°C aligned by 2025: 50% by 2027 and 80% by 2030.

We are targeting that over 90% of financed emissions across public markets will be subject to direct or collective engagement and stewardship actions by 2030 (from 80% at the end of 2022).

By targeting 80% of the assets within portfolios to be aligned to these pathways by 2030, the vast majority of portfolio emissions will be decreasing in line with 1.5°C pathways that substantially incorporate the IPCC's requirement for a 50% global reduction in CO_2 emissions by 2030. We have targeted 80% to allow for 20% portfolio rotation into new companies which require further engagement to achieve this.

To achieve these ambitious targets, in-depth engagement will be focused on the top emitters. We will prioritise the following sectors: forest; land and agriculture; buildings; iron and steel; cement; chemicals; transport; oil and gas; and power generation. We will also seek to raise awareness regarding our climate expectations with all investee companies where climate change is considered a material risk and no credible target has been set by the company.

Real Estate

Our Real Estate targets:

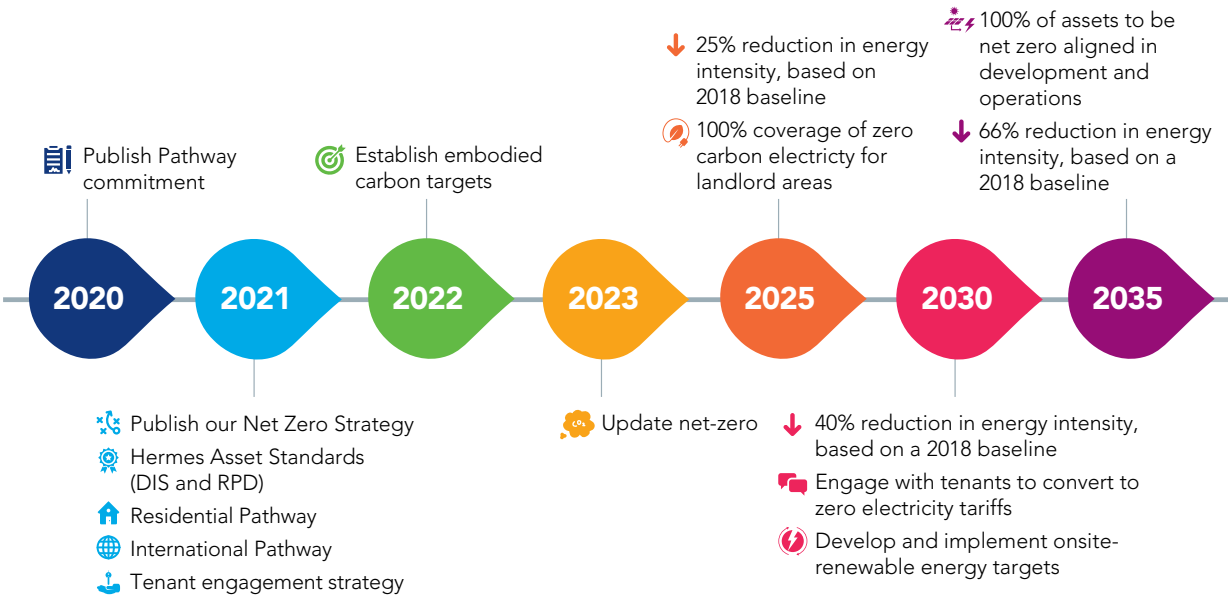
25% reduction in energy intensity by 2025, 40% by 2030 and 66% by 2035.

Net Zero commitment for Real Estate development and managed assets operations and for Real Estate Debt by 2035.

In 2019 our Real Estate business signed up to the Better Building Partnership Climate Change Commitment, which requires signatories to deliver net zero buildings by 2050 in line with the Paris Agreement. In 2020, our Real Estate team made even more ambitious targets.

Following this commitment, our Real Estate team in 2021 issued the Net-Zero Pathway document which sets out both the targets and approach to reaching net zero emissions across the managed assets (approximately £4.05bn worth of assets) included within our £6.1bn UK Real Estate portfolio.[24] Our international, Real Estate Debt and Residential portfolios fall into the second phase of this approach and the pathway for these will be determined after a detailed gap analysis is carried out as a part of the implementation.

Figure 18: Real Estate approach to net zero for UK managed assets



Source: Federated Hermes Limited, as at 31 December 2021

[24] Figures as at December 2020.

Our approach to reaching net zero is proactive and pragmatic. By taking a proactive approach in developing and operating net zero buildings, we intend to reduce the risks of having stranded assets, declines in asset value and potential so-called 'brown penalties' (a higher cost of capital for carbon-intensive buildings). Striving for net zero by 2035 also presents opportunities for market leadership: to generate income resilience for our clients; support and retain our tenants; and provide long-term value to our stakeholders.

We aim to deliver on this aspiration in four specific areas:

1 **Decarbonisation.** Remove the use of fossil fuels, increase energy efficiency, use green tariffs, and reduce embodied carbon in our new development and major refurbishments. This should support improvements in local infrastructure and emphasise best-practice innovation.

2 **Deliver energy efficiency.** Reduce energy use intensity by 66% in the years to 2035 against a 2018 baseline.[25]

3 **Stakeholder engagement.** Work with occupiers, suppliers, and other stakeholders to successfully transition to net-zero alignment.

4 **Utilise offset opportunities.** Use credible, permanent carbon-removal methodologies for residual carbon utilising schemes, such as natural-capital solutions for carbon sequestration to address embodied carbon.

We continue to develop and implement initiatives across our real-estate portfolio that are designed to reduce carbon emissions and to improve efficiencies in our built environment portfolio, making use of new technology and best practice gleaned from our active engagement in peer-group benchmarking.

The pathway above covers our UK managed portfolio. Due to varied level of complexities in data visibility in some parts of our portfolio, we have proposed a phased approach to our net zero pathway. The pathway for our international portfolio, Debt portfolio and Residential portfolio will be part of the second phase which will be determined after a detailed gap analysis is carried out as part of the implementation. Our corporate office and related activities fall under the firm-level net zero commitment and funds where we have only an advisory role are excluded at this stage and will be subject to their own targets and net zero alignment strategies.

Infrastructure

Our Infrastructure interim target:
100% Paris-alignment of assets by 2025.

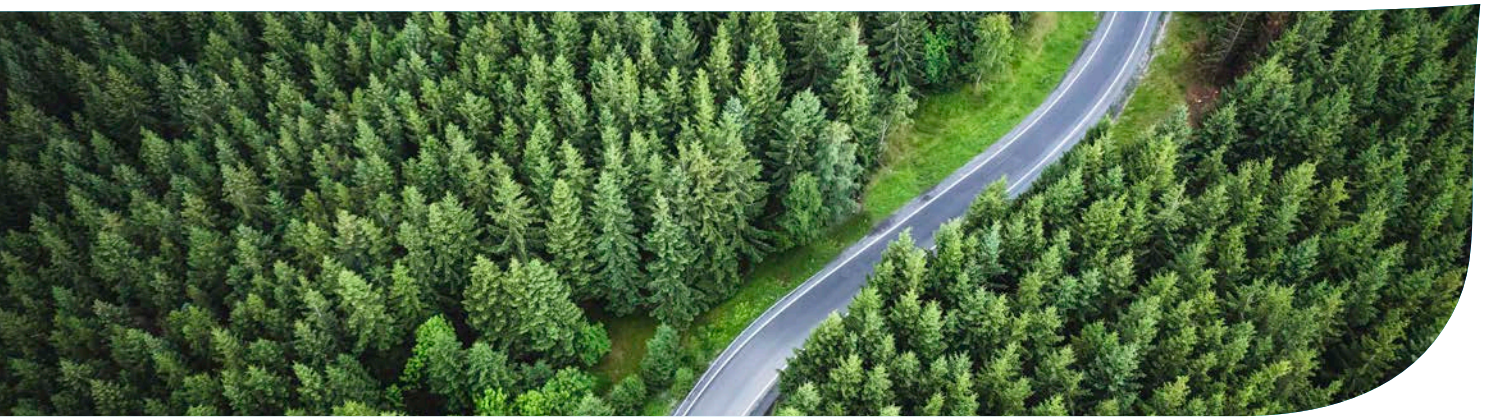
In our 2021 engagement, the Infrastructure team used a short form version of our Paris Alignment test in which companies were scored and classified as Aligned, Aligning, Committed to Aligning and Not Aligned, to form a baseline for future engagement. While we see a reduction in emissions as a necessary part of transition risk management, we also see the central role infrastructure investments can play in the decarbonisation of the broader economy and, in doing so, support jobs and local growth.

In some cases it is clear that the path to net zero is highly policy dependent. In such instances, our stewardship includes supporting such companies in their advocacy where their positions align with our broader expectations and climate change committee recommendations. We expect to roll out a more comprehensive test in 2022, which includes climate impact, the just transition and Paris-aligned advocacy, likely increasing the percentage of companies which can be considered Paris Aligned overall, while remaining consistent with IIGCC guidelines.

Metrics – coverage

We undertake carbon footprinting for the following assets:

- For Listed Equities and Fixed Income, we have been measuring portfolio-level carbon footprint since 2015. Coverage is now at 99% for Listed Equities and for Credit coverage is 81% of securities that are in scope for ESG data (see below for list of securities that are out of scope).
- For Real Estate investments, we have measured the physical risk exposure and the carbon footprint based on energy usage of our direct investments since 2006 and publish performance against carbon reduction targets annually. Coverage is 100% of all landlord-controlled areas. It does not include full repair and insurance (FRI) leases or internal repair and insurance (IRI) leases where tenants purchase their own energy.
- For Infrastructure, we engage 100% of our underlying assets, collecting data on climate risk and opportunities and transition strategies as well as the carbon footprint. Data coverage is 97% of the infrastructure portfolio.
- For Real Estate Debt, we have measured the carbon emissions of 100% of total Real Estate debt AUM.



[25] UKGBC, 'Net zero carbon: energy performance targets for offices', (14 January 2020).

Across all our strategies we aim for high carbon data coverage. For Public Equities, Credit, Real Estate and Real Estate Debt we estimate where there are gaps in reported data from the company. We rely on third-party data providers for our estimated data. The above coverage levels include estimated data for Public Equities and Credit, Real Estate and Real Estate Debt (the breakdown of reported and estimated data is disclosed below). Our Infrastructure funds only use reported data from the company.

For our Public Equity and Credit funds, 100% of the emissions for our AUM where we have emissions data (whether reported or estimated) is included in the metrics reported in the following section. The remaining 1% of Listed Equity and 19% of Credit includes securities that are not covered by the third-party data provider that we use for our emissions data. These securities are included in our AUM for the purpose of calculating metrics reported in the following section, which impacts our carbon footprint calculations for these asset classes.

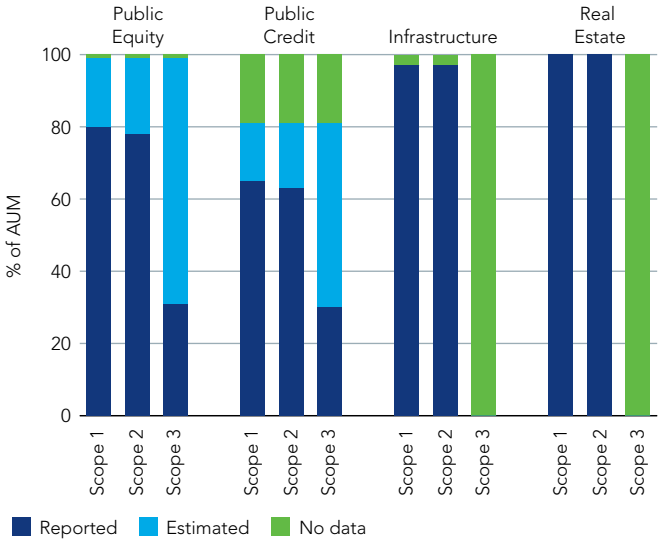
The below chart shows the breakdown of reported versus estimated data for each scope for each asset class. Our Infrastructure and Real Estate funds do not currently report on scope 3 emissions due to inconsistency of reporting. Our Real Estate Debt funds do not currently report on scope 1 and 2 due to lack of data in this space.

For our Public Equity and Credit funds,

100%

of the emissions for our AUM where we have emissions data (whether reported or estimated) is included in the metrics reported in the following section.

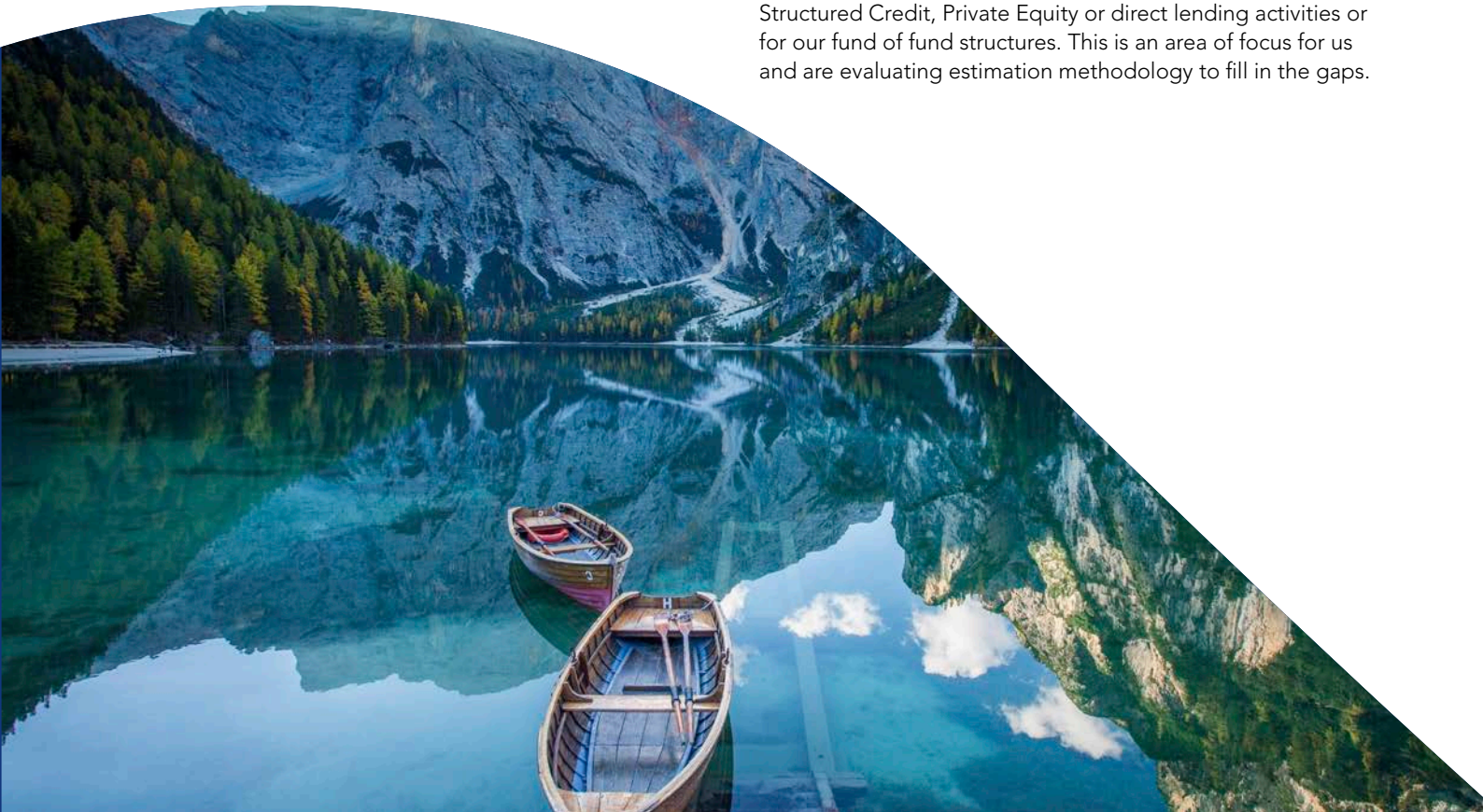
Figure 19: Breakdown of reported, estimated and non-disclosure of carbon emissions data across scopes 1, 2 and 3 across all asset classes where we undertake carbon footprinting (Public Equity and Credit, Infrastructure, Real Estate and Real Estate Debt).



Source: Federated Hermes Limited, as at 31 December 2021. Please note: Real Estate Debt has been omitted from this chart. For Real Estate Debt we have access to a mixture of scope 1 and 2 emissions data, where 40% is reported and 60% is estimated.

We are continuing to work on improving our carbon emissions data coverage across our Public Equity and Credit funds. During 2021 we developed our own internal issuer hierarchy to improve data coverage in the Public Credit space. We also developed our own internal baseline methodology which excludes certain securities which we will not apply ESG data to (cash, FX, long CDS, index or pooled product, sovereign, derivative where underlying is government entity). This makes up 5.2% of our total Public Equity and Credit AUM (excluding cash and FX exposure).

We are not yet able to measure the carbon footprint of our Structured Credit, Private Equity or direct lending activities or for our fund of fund structures. This is an area of focus for us and are evaluating estimation methodology to fill in the gaps.



Metrics

Looking beyond carbon footprinting, we use data, metrics and targets from various sources in order to understand the company's exposure to risks and opportunities arising from climate change. These have been selected on the basis of what is most appropriate to our business and to the asset classes we manage – a selection is disclosed here. FHL invests across a number of different asset classes and there is no single carbon metric that can be reliably aggregated across asset classes to give a view on our carbon intensity. We have tweaked the methodology for some of the asset classes where we believe revenue is not a useful indicator of intensity. For our Real Estate and Real Estate Debt portfolios, the standard practice within the industry including INREV (European Investors in Non-Listed Real Estate) and EPRA (European Public Real Estate) reporting, as well as the definition of reporting under GRESB (Global ESG Benchmark for Real Assets) uses the complete buildings in the footprint rather than the return on the amount of equity invested, as the revenue can differ widely depending on the type of occupier and the nature of the assets usage (such as industrial versus office).We have calculated the weighted average carbon intensity across our asset classes where data is available and used the below metrics to account for size:

- Public Equity and Credit and Infrastructure – per million revenue
- Real Estate – per square meter and per million gross asset value (GAV)
- Real Estate Debt – per square meter

Figure 20: Weighted average carbon intensity of all asset classes where we undertake carbon footprinting (Public Equity and Credit, Infrastructure, Real Estate and Real Estate Debt)

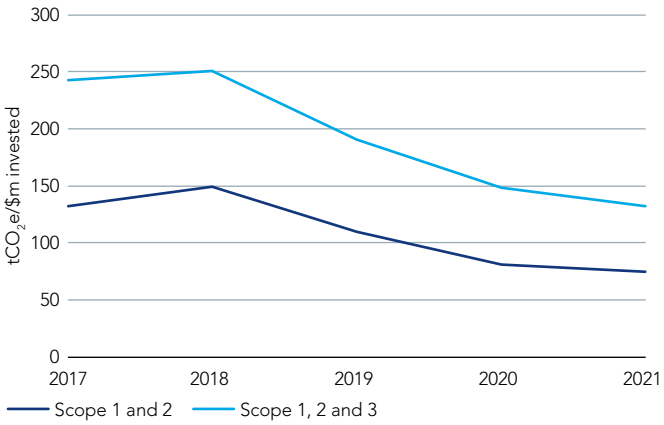
Asset Class	Coverage	Unit	Scope included	WACI
Public Equity and Credit	All	tCO_2e / $mn revenue	1,2 1,2,3	112.4 228.6
Infrastructure	All	tCO_2e / £mn revenue	1,2	478.2
Real Estate	All	tCO_2e /£mn GAV	1,2	4.6
	Offices – Landlord controlled (excl. occupier if submetered)	$kgCO_2e$ / m²	1,2	26.4
	Shopping Centres	$kgCO_2e$ / m²	1,2	7.9
	Offices – consumption (incl. occupier)	$kgCO_2e$ / m²	1,2	30.7
Real Estate Debt	All	$kgCO_2e$ / m²	3	58.1

Source: Federated Hermes Limited, Trucost, Carbon Intelligence, Verco as at 31 December 2021.

Public markets

Within public markets – Listed Equities and Credit – we have seen aggregate carbon footprint decline by circa 45% since a peak at the end of 2018 to year end 2021. 2018 is the year we introduced the carbon tool and this improvement seems to indicate its impact in helping our investment managers integrate, respond to, and manage transition risk within their portfolios. We use the market capitalisation ownership and enterprise value including cash (EVIC) method for calculating the carbon footprint of Equity and Credit assets. We hope this decline will continue over the next few years as more companies begin to set credible carbon reduction strategies.

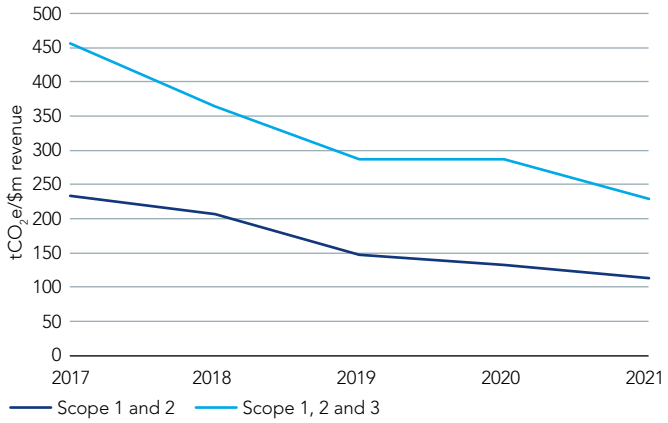
Figure 21: Carbon footprint (tCO_2e/$m invested) of Corporate Credit and Equity in FHL shareholder and participating funds (scopes 1 and 2, and scopes 1, 2 and 3)



Source: Federated Hermes Limited, Trucost, as at 31 December 2021.

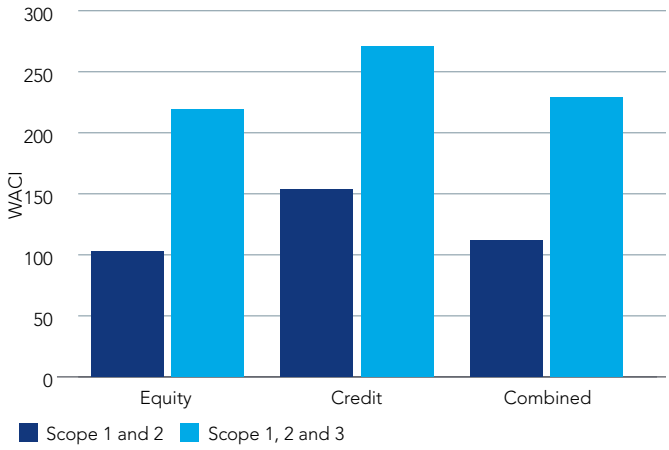
In addition to tracking our carbon footprint, we also track the WACI of our Public Equity and Credit portfolios as shown in Figure 22. The analysis includes scope 1, 2 and 3 emissions.

Figure 22: Weighted average carbon intensity (tCO_2e/$m revenue, weighted by the proportion of each holding in the portfolio) of Corporate Credit and Equity in FHL shareholder and participating funds.



Source: Federated Hermes Limited, Trucost, as at 31 December 2021.

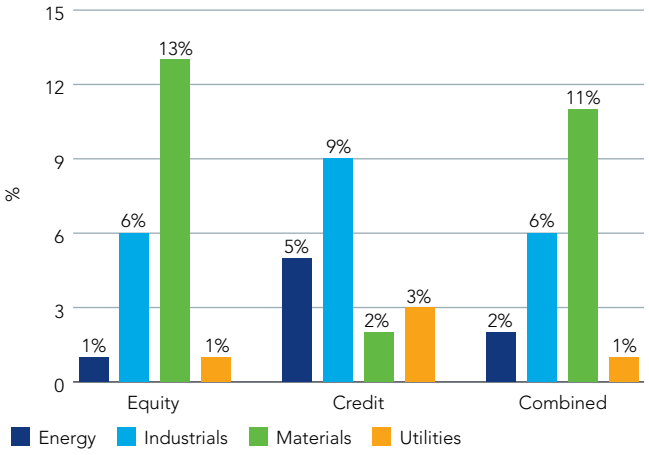
Figure 23: Weighted average carbon intensity (tCO_2e/$m revenue, weighted by the proportion of each holding in the portfolio) of Corporate Credit and Equity in FHL shareholder and participating funds.



Source: Federated Hermes Limited, Trucost as at 31 December 2021.

In Figure 24 below we look at our exposure to carbon intensive sectors (energy, industrials, materials and utilities) in shareholder and participating funds (both Equity and Credit). Out of the four carbon intensity sectors, our Equity funds have most exposure to materials whereas our Credit funds have most exposure to industrials.

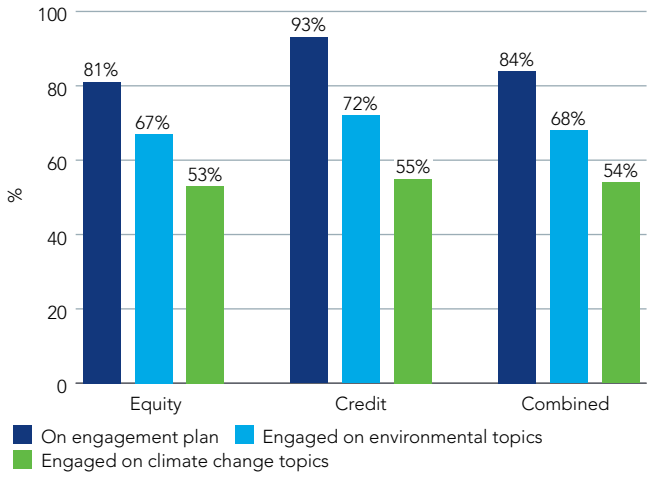
Figure 24: Public markets exposure (% of AUM) to carbon intensive sectors in FHL shareholder and participating funds (Credit and Equity).



Source: Federated Hermes Limited, Trucost as at 31 December 2021.

We believe that climate is a material risk across a variety of sectors, and therefore climate change is an important topic for our engagement. We will aim to engage with our top emitters, with a first focus on the top 100 emitters across our Public Equity and Credit funds which makes up c. 80% of our Public Equity and Credit carbon footprint. Issuers that are not added to our formal engagement plan will be engaged by our investment teams who will continue their dialogue with companies to better understand their transition plans. In our private market asset classes, our dialogues with companies are directly via our investment teams given the nature of the relationships in these asset classes. Climate change will continue to be a main point of conversation to ensure we have a good understanding of the climate risks of the asset and appropriate actions are being undertaken to minimise the transition risk and ensure we remain on track to meet our net zero target. Figure 25 shows the proportion of the carbon footprint of our Corporate Credit and Equity investments that was covered in 2021 by our engagement on environmental and specifically climate topics.

Figure 25: Public markets carbon footprint (scope 1, 2 and 3) on the engagement plan and engaged on environmental and climate change topics by EOS in FHL shareholder and participating funds (Credit and Equity) as at 31 December 2021.



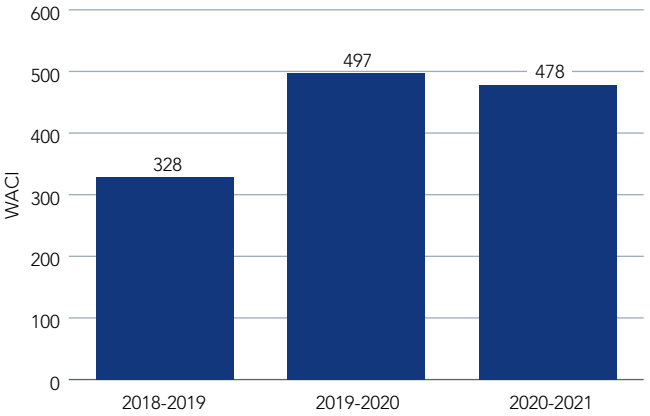
Source: Federated Hermes Limited, Trucost as at 31 December 2021.

Private markets

Infrastructure

Our Infrastructure team has been measuring the Scopes 1 and 2 carbon emissions from its portfolio companies since 2017. All companies now report on their emissions and we use this data to monitor the emissions of our Infrastructure portfolio. When calculating the emissions of our portfolio, we do not include any 'avoided' emissions from renewable energy generation. As shown in Figure 26, the WACI has reduced 4% between 2020 and 2021. The largest emitters, Cadent (the UK's largest gas distribution network) and Viridor (a leading UK recycling, resource and waste management company) together make up 81% of gross emissions in the Infrastructure portfolio (38% and 43% respectively). Both have seen reductions in emissions year on year. Cadent's gas leakages, comprising c.95% of its overall greenhouse gas emissions, continue to decrease as a result of an ongoing mains replacement programme, and its business carbon footprint was down in 2021 as a result of Covid-19 restrictions and greater instances of working from home. Viridor's emissions decreased in 2021 due to a reduction in landfill gas emissions, including capping work completed over the year reducing fugitive emissions. Emissions across the transport portfolio have reduced by 4% year on year, despite generally improved operational performance in 2021 as Covid-19 restrictions eased. The introduction of lower carbon transportation technologies, such as a rotor sail on Scandlines ferries has reduced fuel demand. Emissions per trip were reduced from 3.72 tCO_2e in 2020 to 3.45 tCO_2e in 2021, and the expectation is this will be driven down further in future years due to new and credible net zero targets. Similarly, Associated British Ports (ABP) has implemented more fuel-efficient pilot boats and now has renewable energy generation projects at 17 of 21 ports. Over 20% of electricity consumed at ABP is from on-site renewable generation – 29 megawatts (MW) installed generating over 22 GWh in 2021. We continue to engage with all portfolio companies to establish targets and further reduce their emissions in line with the needs of the Paris Agreement and UK carbon budgets.[26]

Figure 26: The weighted average carbon intensity of our Infrastructure portfolio (tCO_2e/£m revenue, weighted by the proportion of each investment in the portfolio)



Source: Federated Hermes Limited as at 31 December 2021.

Real Estate and Real Estate Debt

In 2006, we set a target to reduce the absolute carbon emissions from our managed Real Estate portfolio by 40% by 2020 against a 2006 baseline of 52,949 tCO_2e. This target of 40% was initially achieved in 2012 through asset disposal.

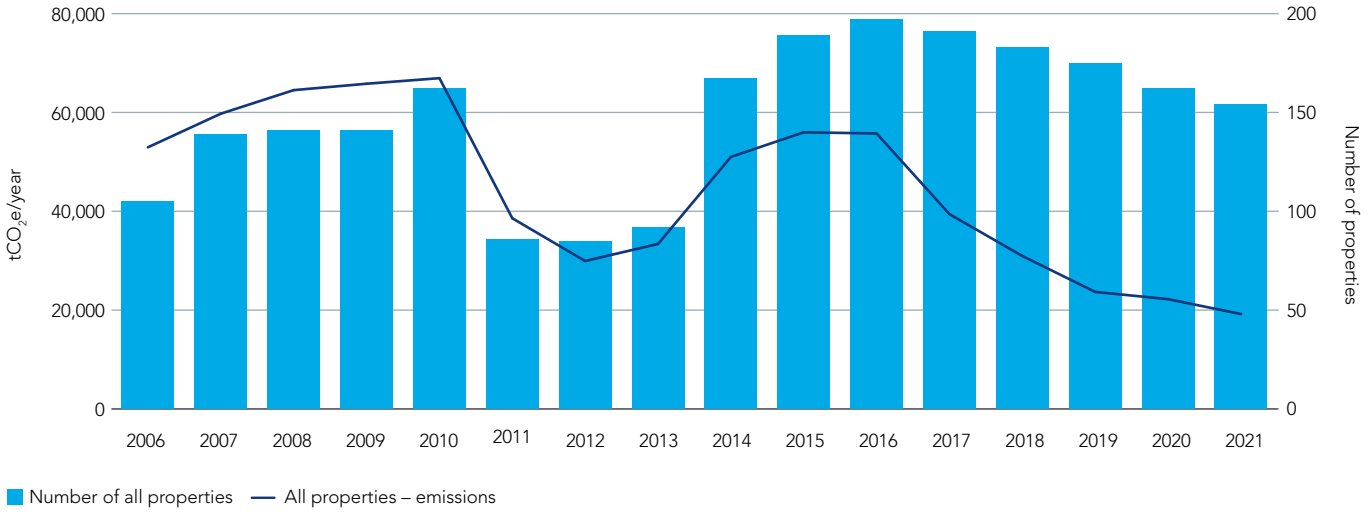
However, we later successfully managed to decouple our portfolio growth and emission reduction and achieved the target in 2018, two years ahead of the target date. Further progress has been made since so that the absolute emissions of the Federated Hermes Real Estate portfolio have now fallen by 34% against the 2006 baseline as at the end of 2021, significantly exceeding our initial target. This was achieved working closely with investment teams, property managers, occupiers and consultants to implement innovative initiatives to reduce operational emissions of each asset. The ongoing decarbonisation of electricity coupled with the fall in utilities emissions and the deployment of smart building technology contributed to it. Through this we successfully managed to decouple our Real Estate portfolio growth and emission levels.

[26] Weighted average carbon intensity for assets managed by the Infrastructure Team of Federated Hermes. A change in reporting methodology, which has been applied to all three years, means that outputs for each portfolio company are based on the December valuation and the annual emissions for the financial year ending in the same calendar year. Figures exclude Scope 3 and avoided emissions. 2019 figures exclude: Iridium Hermes Roads (asset was acquired in January and April 2020), Energy Assets Group (realised in April 2020 which lead to a lack of available data), Ventus (lack of available data), and Viridor (acquired in July 2020). 2020 figures exclude Braes of Doune (realised in February 2021 which lead to a lack of available data). Indirect investment holdings are excluded.

Figure 27a shows the long-term performance of our portfolio. It depicts the annual emissions from energy usage for areas we manage in our Real Estate portfolio. The chart includes only the properties within our Real Estate portfolio for which we supply energy. There may be areas within these properties for which we do not supply energy as they are managed by our tenants and which are therefore not captured in the chart below. Due to variation in the size and energy needs of individual assets, it is not feasible to normalise the carbon footprint for the whole portfolio by floor area. However, the chart below shows that in 2010 66,939 tCO_2e were emitted by 162 properties and in 2021 only 19,200 tCO_2e were emitted by 154 properties.

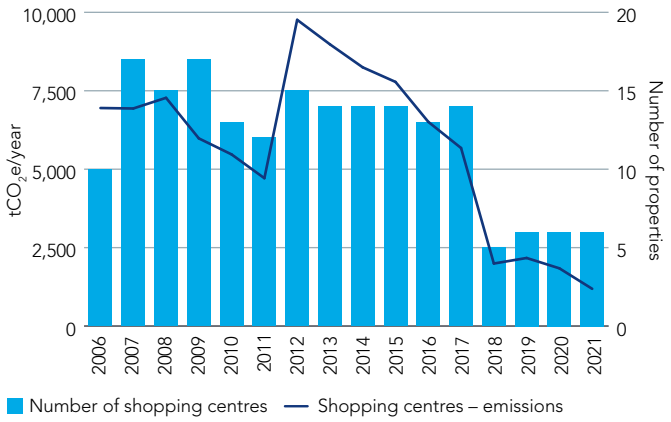
Over the course of 2021, proactive property management helped to ensure that absolute carbon emissions continued to fall. This was also supplemented by the continued decarbonisation of the UK grid and a move to 100% green electricity for all assets where we have freedom to negotiate supply contracts.

Figure 27a: Changes in absolute carbon emissions (Scope 1 and 2) for all properties in landlord-controlled standing portfolio between 2006 and 2021



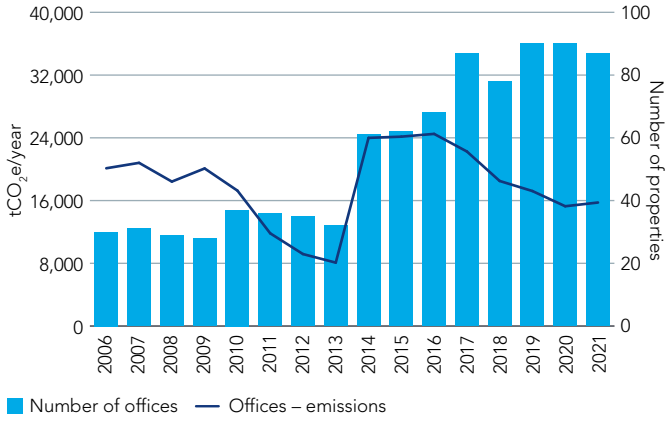
Source: Federated Hermes Limited, Carbon Intelligence as at 31 December 2021.

Figure 27b: Changes in absolute carbon emissions (Scope 1 and 2) for shopping centres in landlord-controlled standing portfolio between 2006 and 2021



Source: Federated Hermes Limited, Carbon Intelligence as at 31 December 2021.

Figure 27c: Changes in absolute carbon emissions (Scope 1 and 2) for offices in landlord-controlled standing portfolio between 2006 and 2021

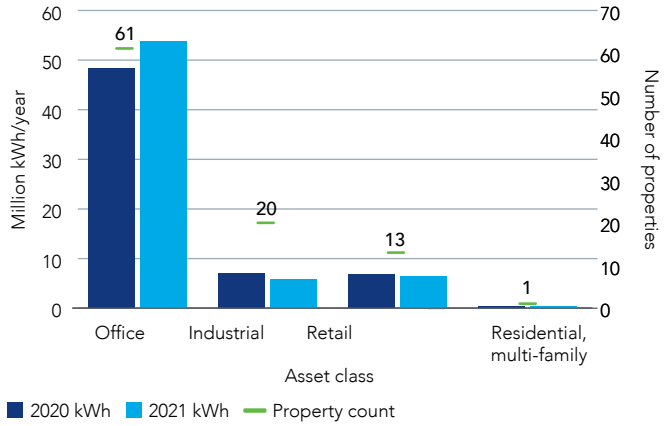


Source: Federated Hermes Limited, Carbon Intelligence as at 31 December 2021.

As of 31 December 2021, offices account for 82% of overall portfolio emissions, compared with 6% for shopping centres. Other retail and industrial buildings account for 12%.

Figure 28 shows the annual change in CO_2 emissions on a like-for-like basis for each real-estate asset class over a period of 24 months, adjusted for heating degree days. We have included assets where there was consistency over the 24 month period in terms of void rates, occupancy rates and major refurbishment. In all asset classes we have seen a consistent reduction in energy consumption over this 24 month period. Some of the reduction can be attributed to the lockdowns in the UK due to the Covid-19 pandemic.

Figure 28: Annual change in kWh on a like-for-like basis between 2020 and 2021, adjusted for heating degree days



Source: Federated Hermes Limited, Carbon Intelligence as at 31 December 2021.

The Real Estate Debt portfolio's total Loan-to-Value (LTV) adjusted emissions are 6,991 tCO_2e.

The path ahead

We recognise there is much more work needed to limit temperature warming to less than 1.5°C above preindustrial levels. We will continue to leverage our engagement and proxy voting capabilities to elevate the ambition and action of our portfolio companies, and we will continue to support a focused range of advocacy initiatives in an effort to encourage a transformation of the whole industry. FHL has sought to report on a wide range of environmental metrics, in an effort to understand the climate-related risks our portfolios are exposed to. We are also exploring metrics to better reflect positive opportunities offered by the transition. The TCFD and CFRF recommendations on metrics formed the basis for ongoing dialogue across our firm on how to provide robust, best-in-class disclosure. At the same time, we are conscious that the methods and data required to evaluate climate exposure are still evolving, and as such we will continue to look to incorporate the most robust and forward looking approaches over time.

Federated Hermes Limited

Federated Hermes

Federated Hermes is a global leader in active, responsible investing.

Guided by our conviction that responsible investing is the best way to create long-term wealth, we provide specialised capabilities across equity, fixed income and private markets, multi-asset and liquidity management strategies, and world-leading stewardship.

Our goals are to help people invest and retire better, to help clients achieve better risk-adjusted returns, and to contribute to positive outcomes that benefit the wider world.

All activities previously carried out by Hermes Investment Management are now undertaken by Federated Hermes Limited (or one of its subsidiaries). We still offer the same distinct investment propositions and pioneering responsible investment and stewardship services for which we are renowned – in addition to important strategies from the entire group.

Our investment and stewardship capabilities:

- **Active equities:** global and regional
- **Fixed income:** across regions, sectors and the yield curve
- **Liquidity:** solutions driven by four decades of experience
- **Private markets:** real estate, infrastructure, private equity and debt
- **Stewardship:** corporate engagement, proxy voting, policy advocacy

For more information, visit **www.hermes-investment.com** or connect with us on social media:

For professional investors only.

PR001147 0013740 09/22