At the International business of Federated Hermes, we have long believed that the investment management industry has not only the potential, but a duty, to be a driving force in addressing the climate crisis.
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Yet another year has passed where the scientific consensus demands urgent and profound action be taken if we are to limit the devastation that climate change will have on our planet. The events of 2020 highlighted just how vulnerable we are to social and economic disruption, but also how impactful we can be as a society when governments, businesses and individuals come together to tackle a critical issue.

The position that we sit in as the investment management industry is one of unique potence. By way of intelligent and considered stewardship of capital we have the potential to effect genuine and positive change, but conversely, collective inertia risks compounding the crisis we face to an irreversible extent. Climate change also presents risks to us as a business. It is for all of these reasons that we have a responsibility to make the right choices, to the benefit of our clients, their end beneficiaries and indeed society at large.

Transparency and accountability are both fundamental aspects of ensuring that we, as both a business and as an industry, are making progress that is genuine and committed, which is why we welcome the reporting recommendations presented by the Taskforce on Climate-related Financial Disclosures.

This report details our approach to identifying and managing climate risks, including how we seize related opportunities, how we engage at the policy level and how we ensure that the weight of the climate crisis is front and centre in everything we do.

We are proud of the progress we have made, both as a business and in encouraging our industry to ask itself the difficult questions which must be answered if we are to achieve our goals in earnest. We do, however, recognise that there is much more work to be done if we are to truly enact change before it is too late.

Saker Nusseibeh, CBE
Chief Executive
As the Covid-19 pandemic forced many businesses and manufacturing to close down, borders to shut and people all around the world to limit their travel and stay at home, there was a hope that at least one upside to the all but closed global economy would be a dramatic fall in greenhouse gas (GHG) emissions. What now looks more likely is a marginal reduction in GHG emissions in 2020 of around 7% compared to 2019, but a relentless upward trajectory for cumulative atmospheric GHGs levels, which have continued increase and now stand at 416 parts per million (ppm), up from 411ppm a year earlier1.

Fortunately, for many businesses and governments, despite the social and economic disruption of the pandemic has caused, climate change action has remained very high on their priority lists. The EU and UK are rapidly mobilising their sustainable finance agendas. The new administration in the US has also already sent positive signals about the future of the ESG and sustainable finance agenda, with President Biden signing an Executive Order to reinstate the US to the Paris Agreement and the US Securities and Exchange Commission (SEC) announcing the formation of a Climate and ESG Task Force.

We are beginning to see regulation on disclosure take shape, providing more transparency to sustainable finance markets. For example, the EU’s Sustainability-related Financial Disclosures Regulation (SFDR), which came into force in March 2021, will increase the rigour and consistency of ESG disclosures made by the financial services sector, helping guard against sustainability mis-selling. Similarly, the UK’s rolling implementation of mandatory TCFD reporting across non-financial and financial companies through to 2025, will set a new bar around the transparency with which firms are responding to the climate change challenge. We welcome such regulation, which brings consistency to and a deeper understanding of how climate change and wider environmental, social and governance issues are understood, responded to and reported on by the market – including in financial product development – as we have been doing for many years.

As the much awaited and welcome recovery from the pandemic unfolds, this focus needs to be consolidated and deepened. The scientific consensus remains that we must limit average temperature rises to 1.5°C in order to avoid the worst impacts of climate change. To reiterate this stark reminder, the Intergovernmental Panel on Climate Change has warned that in order to stabilise temperatures, we must reach net zero GHG emissions by mid-century at the latest – front-loading much of the progress into the next decade2.

As is often the case in the aftermath of major disasters, there is an opportunity to turn negative events into ultimately positive futures. Governments implementing recovery measures and issuing recovery packages to restart the economy have an opportunity to better integrate decarbonisation policies and to channel finance to sustainable projects. One example is the EU’s landmark Coronavirus Recovery Fund that is channelling 30% of the funding (£225bn) towards fighting climate change. Countries must also revisit and tighten their Nationally Defined Contributions (NDCs) ahead of COP26 in November 2021. According to Climate Action Tracker (CAT), 127 countries representing 63% of global emissions have adopted or are considering net zero targets, most recently and notably the US under the Biden administration. For the UK and EU, these targets are legally binding. Others need to follow suit. For many countries, current NDCs remain inadequate.

Corporations must bolster these efforts with their own initiatives. It is encouraging to see the list of companies around the world setting net zero and climate positive targets grow by the week, particularly those in the most

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1 As measured by NASA in February 2021
2 Chapter 2 – Global Warming of 1.5 °C (ipcc.ch)
carbon intensive industries. However, overarching net zero commitments need to be bolstered by short-, medium- and long-term science-based decarbonisation targets, with a credible level of detail provided on how the company is implementing a strategy to achieve their ambition.

In line with this, we believe we must use our influence with investee companies to make the case for accelerating the allocation of capital to activities and infrastructure that will help, not hinder, delivery of the Paris Agreement and, where necessary, withdraw access to capital for activities where we see a strong case that they hamper progress. This is our theory of change: that it will be critically important to engage with investees whose activities are mis-aligned with the goals of the Paris Agreement in order to encourage them to transition, and therefore aid global efforts to align the real economy with the Paris Agreement goals. Stewardship will play an essential role in achieving this – and is why we have a strong and long-established stewardship team: EOS at Federated Hermes.

Against this backdrop, we recognise that companies will need to manage the potential physical risks to their operations and supply chains that arise from a changing climate. Companies also need to undertake climate transition risk assessments. These are needed to understand what operational and business risks – and also opportunities – may arise from a progressively tightening climate policy environment capable of shifting global markets to stay within the 1.5°C temperature increase limit.

The physical and transition risks posed by climate change represent a systemic threat to financial stability, our economy and society and will have a significant impact on both the financial state and lives of our clients and their end beneficiaries. Asset managers have an important role to play in accelerating the transition to a net-zero carbon and resilient economy.

**Physical risks:** The US’s National Oceanic and Atmospheric Administration has confirmed that 2020 was on a par with the hottest year ever recorded (2016). The world has experienced its seven hottest years on record since 2014, and the physical impacts of climate change are a present reality, not a future worry. This impact is being felt across the world, particularly in the form of extreme weather events and natural disasters. Australia, California and Siberia battled their worst ever bushfire seasons, resulting in several human deaths, billions of animals killed and harmed, and millions of hectares of land scorched. Global ice melt is in line with the IPCC’s worst case scenario, with 28 trillion metric tons of ice lost between 1994-2017. Floods, cyclones, hurricanes and droughts are becoming more common and have wreaked havoc across regions in 2020, causing loss of life and significant economic and financial damage. 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. The UNEP estimates that adapting to climate change and coping with damages will cost developing countries US$70 billion per year, with the expectation that this will reach US$140–300 billion in 2030 and US$280–500 billion in 2050.

**Transition risks:** Urgent action to reduce further and, in time, eliminate new GHG emissions and will require significant structural transformation of the economy, both at a global level and locally within countries and individual business. The investment industry has a significant part to play in tackling both issues as stewards of the funding engine of economic development, ensuring that the transition doesn’t only deliver on climate objectives but is also ‘just’ for society and spurs, not limits, job creation and prosperity.

Floods, cyclones, hurricanes and droughts are becoming more common and have wreaked havoc across regions in 2020, causing loss of life and significant economic and financial damage.
The transition implies that significant changes be made to how we power and heat our homes and businesses, fuel our cars, planes and ships, grow our food and use natural resources of all types. Many of the opportunities for a managed, gradual transformation of the economy have gone. Many assets that have been financed and are being built or operated today could become “stranded” as a result of climate change and efforts to tackle it.

We are already seeing changes to industries such as power and automotive, with the roll-out of renewable energy and electric vehicles. There will be further upheavals in sectors ranging from agriculture to aviation. Inevitably there will be winners and losers at international, national, sectoral, company and individual levels. For investors, climate change creates risks such as investing in fossil fuel-focused assets that then become ‘stranded’ because of changes in technology, demand, policy and regulation.

Increasing investment in green projects and renewable energy sources, carbon capture technology, and enforcing the transition to greener modes of transport – such as the UK’s ban on the sale of new cars and vans powered wholly by petrol and diesel by 2030 – forms a large part of energy transition story. In reality, ‘greening’ existing infrastructure and working with investee companies to transition their assets must play an equally important role. Finally, focusing talent and investment towards green innovation will be crucial for job creation, creating further cost efficiencies and providing technological solutions to the world’s evolving problems.

The International business of Federated Hermes and the TCFD

The Taskforce on Climate-related Financial Disclosures (TCFD) was launched in 2015, and published recommendations for companies in 2017. The recommendations call for companies to outline the climate risks they face – physical (extreme weather events etc) and transition risks (the regulatory and policy responses to climate change) – in four areas – Governance, Strategy, Risk Management, and Metrics and Targets.

Since then, more than 1,500 organisations have expressed their support for the TCFD recommendations, an increase of over 85% since the 2019 TCFD status report. In addition, as part of broader green finance drive, the UK became the first country in the world to mandate disclosures in line with the TCFD for non-financial and financial companies by 2025, going further than the ‘comply or explain’ approach. However, there is still an urgent need for adoption globally to ensure consistent reporting on climate risk across sectors and beyond just support from large financial institutions. The International business of Federated Hermes is a founding member of the Climate Financial Risk Forum (CFRF), which was set up “to build capacity and share best practice across financial regulators and industry to advance financial sector responses to the financial risks from climate change”.

The Forum, which brings together senior members of the financial sector, has four working groups tasked with producing practical guidance on a key area. The groups focus on risk management, scenario analysis, innovation, and disclosure. Our CEO, Saker Nusseibeh, chairs the Disclosures Working Group. The CFRF is a great example of peer-to-peer learning and we expect it to shape the discussions both on TCFD implementation in the UK but also of global financial regulators looking at how best to strengthen climate change risk management and disclosures.

On 29 June, the CFRF published a guide written by industry for industry to help firms approach and address climate-related financial risks. The guide, the first of its kind, provides practical recommendations to firms of all sizes on disclosure of climate-related financial risks; effective risk management; scenario analysis, and opportunities for innovation in the interest of consumers. This guide will assist companies seeking to apply the TCFD recommended disclosures3.

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3 See https://www.fca.org.uk/transparency/climate-financial-risk-forum
**Status of TCFD implementation**

In terms of our own implementation of TCFD, we have identified many areas in the TCFD recommendations where we are doing well, some where we need to improve and a few where we are still in the process of developing publishable responses. The diagram below shows the TCFD recommendations and how we currently perform on integrating each one. Those coloured yellow have only limited disclosure and therefore our coverage needs to increase and be of better quality in these areas. For those coloured red, disclosure and methodologies are still being developed. The diagram identifies our efforts to describe the resilience of our strategy in different climate-related scenarios; to describe the targets we use to manage climate-related risks and opportunities, and how we perform against them as priority areas to focus on. In this 2020 report we provide a more comprehensive overview and commentary on our scope 1,2,3 emissions and their related risks. We also for the first time start to provide information about targets used to by the organisation to manage climate-related risks and opportunities.

To date, the majority of our efforts have focused on integrating climate change risk and opportunity considerations into our investment management and engagement activities, and report progress on this. Going into 2021 we are focusing on integrating climate change risk and opportunity considerations more fully at the corporate entity level. In this year’s report we make a distinction between the two, setting out what we have done to date – but also our next steps in 2021.

<table>
<thead>
<tr>
<th>Governance</th>
<th>Strategy</th>
<th>Risk Management</th>
<th>Metrics and Targets</th>
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<tbody>
<tr>
<td>Disclose the organisation’s governance around climate-related risks and opportunities.</td>
<td>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.</td>
<td>Disclose how the organisation identifies, assesses, and manages climate-related risks.</td>
<td>Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.</td>
</tr>
</tbody>
</table>

**Recommended Disclosures**

- **a)** Describe the board’s oversight of climate-related risks and opportunities.
- **b)** Describe management’s role in assessing and managing climate-related risks and opportunities.
- **c)** Describe the resilience of the organisation’s strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.

**Recommended Disclosures**

- **a)** Describe the climate-related risks and opportunities the organisation has identified over the short, medium, and long term.
- **b)** Describe the impact of climate-related risks and opportunities on the organisation’s businesses, strategy, and financial planning.
- **c)** Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organisation’s overall risk management.

**Recommended Disclosures**

- **a)** Describe the organisation’s processes for identifying and assessing climate-related risks.
- **b)** Describe the organisation’s processes for managing climate-related risks.
- **c)** Describe the targets used by the organisation to manage climate-related risks and opportunities and performance against targets.

**Recommended Disclosures**

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

**Good disclosure – good coverage to date**

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

**No disclosure – Limited disclosure, methodologies in experimental phase**
Governance

**Board level responsibility:** Hermes Fund Managers Limited (‘HFML’) Board and Executive Committee (‘ExCo’)

**Delivery:** Head of Policy & Advocacy

**Coordination:** Climate Change Working Group (‘CCWG’)

**Implementation:** Responsibility Office, investment teams, EOS at Federated Hermes (‘EOS’) stewardship team, compliance and risk management, business development.

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.

**Board Members:** The International business of Federated Hermes 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 executive committee 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 & Advocacy and Head of Responsibility.

**Chief Executive:** Our chief executive has passionately led the development and implementation of Hermes’ mission and responsibility goals. He has long been an advocate of change in the industry on this topic.

**Responsibility Office:** Our Head of Policy & Advocacy chairs the CCWG and is the climate change coordinator for the International business of Federated Hermes, leading on implementation and delivery of our climate change strategy and reporting progress to the HFML Board and the Responsibility Working Group. 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.

**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 International business of Federated Hermes’ mission to generate wealth sustainably. Their work is supported by both the Responsibility Office and EOS.

We 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.
Stewardship Team: Our stewardship team, EOS, boasts one of the largest stewardship resources of its kind in the world, representing £938.5 billion in assets and engaging with 1245 companies in 2020. EOS is one of the key contributors to the Climate Action 100+ initiative, which represents $52 trillion AUM and 545 investment houses. We are lead or co-lead for 31 companies out of the total of 160 companies engaged by the initiative. We collaborate on a further 25 companies. We 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 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 2020.

Climate Change Working Group
Our CCWG 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 departments.

During 2020 the group structured its work around four themes, all contributing to the development of an enhanced climate change strategy, and Net Zero Statement and policy, which will be forthcoming in 2021.

These subgroups were:
1. Climate change scenario selection
2. Developing top down risk assessment approaches to inform corporate and investment risk management
3. Enhancing in-house climate-related investment risk assessment and engagement
4. Tackling our own emissions

The group meets at least four times per year to continually review and strengthen our approach.
Our strategy for managing climate risks and opportunities

As mentioned earlier, to date, the majority of our efforts have focused on integrating climate change risk and opportunity considerations into our investment management business, and report progress on this. Going into 2021 we are increasingly focusing on integrating climate change risk and opportunity considerations at the corporate entity level and this will be a major area of work for our corporate risk management team. However, for this 2020 report much of the disclosure that follows relates to our investment practice. Where it also applies to our consideration of climate change as a corporate entity we have stated this.

Describing climate risk and opportunities

The international business of Federated Hermes 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 outsourcers and suppliers including information and communication technology (ICT) and data providers as well as the utility services that power our offices and, all importantly in the pandemic, our homes. These are all potentially exposed to acute physical climate risks.

As an investment manager, understanding and responding to the range of potential 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.

We analyse physical risks at asset level through use of open source data and detailed asset level exposure analysis. 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 outsourcers and 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 below. 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.
How we think about climate-related risks across different timeframes

<table>
<thead>
<tr>
<th>Timeframe</th>
<th>Climate risk definition</th>
<th>Description of material climate-related issues</th>
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<tbody>
<tr>
<td>Short term</td>
<td>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.</td>
<td>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.</td>
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<tr>
<td>Medium term</td>
<td>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.</td>
<td>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.</td>
</tr>
<tr>
<td>Long term</td>
<td>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).</td>
<td>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.</td>
</tr>
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</table>

Source: The International business of Federated Hermes

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 not be 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 ExCo members are fully 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 but also second order effects of climate change risk and 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.

Over 2021 we are focusing our efforts on documenting our entity level risks and preparing a climate-specific risk appetite statement and response. The use of scenario analysis will be a key component of this work.

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 CCWG.

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

Engagement

We act as engaged stewards of the investments we manage or represent on behalf of our clients. Where we hold assets with significant climate-related risk exposure, we will manage directly-owned assets, and engage with public and private companies, to mitigate the climate-related risk.

Awareness

Portfolio managers are aware of the climate-related risks in their portfolios, which investments are the largest contributors, what are the associated risks and mitigation strategies.

Integration

Portfolio managers integrate climate-related risk considerations alongside other value and risk considerations, exploiting green investment opportunities or divesting where climate-related risk impacts value.

Advocacy

We engage with public policymakers and sector organisations, nationally and internationally, to encourage policy or best practice that facilitates the transition to a low carbon economy.

Over 2021 we are focusing our efforts on documenting our entity level risks and preparing a climate-specific risk appetite statement and response.
Our approach to assessing impact and managing risk covers our public equities and credit; direct lending; real estate; and infrastructure assets. Work continues to fully integrate it into our private equity activities. At its core our strategy is based on our belief that we can create positive feedback loops between investment and stewardship to reduce the climate risks and maximise the opportunities for the companies and assets in which we invest.

More detail on the processes by which this is achieved are included in the Risk Management section.

The resilience of the organisation’s strategy, taking into account different climate-related scenarios including 2°C or lower

As mentioned earlier our primary risks to consider relate to investment performance alongside changing client expectations and business reputation and operational risk management. Scenario analysis, including using 1.5/2°C transition pathways, is a useful tool to understand whether assets within portfolios are Paris-aligned or not and is embedded both into the ESG integration tools we have developed ourselves and those we use from third-party providers such as Trucost and PACTA.

However, given the level of uncertainty and lack of clarity of underlying assumptions in some of the third-party tools in particular, we use such scenario analysis with care. Our key finding is that it is not enough to just look at outputs – deep engagement in the climate scenario analysis process is fundamental to understanding the low-carbon transition implications and applying them to both engagement and investment decision-making.

Thus while we do not discount the use of climate value-at-risk or implied temperature increase outputs from some tools we use, given the degree of uncertainty embedded, we see it as just one element of the story that is complemented by a deep fundamental analysis of trends and scenarios to achieve a full understanding of companies and their underlying progress.

In 2021 we will be further developing our entity level climate change resilience strategy, building on the work done to date at the investment management level.

One of our next tasks will be to use scenarios to model investment risk at the macro level and it is this we are now working to develop. We are pursuing a dual prong approach – an interim in-house solution and working with third parties on an open source solution. The international business of Federated Hermes has become a founding member of the OS-C technology platform, which seeks to accelerate development of scenario-based predictive analytic tools and investment products that manage climate-related risk and finance climate solutions across every geography, sector and asset class. The OS-C Open Source organization will enable alignment of the stakeholder community on priority data and modelling needs, focus shared resources on executing those priorities, and accelerating adoption. Scenario based predictive analytics are key aims, including top down and bottom up modelling to integrate climate related risks into key decisions using multiple climate scenarios and transition pathways5.

5 https://www.os-climate.org
The company is moving in an ordered manner to embedding climate change considerations across the entire firm. Given its importance to our business, the initial priority has been to focus on integrating the management of climate change risks into our investment activities and our first line of defence in managing these risks has been through management controls focused on awareness, integration, engagement and advocacy, the processes of which are set out in detail below.

We manage climate-related risks as part of the International business of Federated Hermes’ overall investment risk management processes, integrating them in ways that are appropriate to the different asset classes we invest in. Our materiality assessments take into account client mandates and the relevant regulatory environment.

Below, we describe the specific processes used to assess the size and scope of our climate related risks and opportunities and provide details on how we mitigate and control them as part of our investment management processes.

During 2021 we plan to build on this work to fully develop our corporate level risk management framework. In due course we expect to be able to report on how we are using scenario analysis in particular 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, set a formal risk appetite and associated risk management framework and further include climate change impacts into financial planning.

**Identifying, assessing and managing climate-related risk**

**Awareness**

We continue to keep monitoring the risks and opportunities of climate change – and understand the need to keep a laser-like focus on the issue. The Intergovernmental Panel on Climate Change’s (IPCC) 1.5°C Report, published in 2018, outlined the risks of allowing average temperatures to rise by more than that level and highlighted, as noted earlier, that limiting global warming to 1.5°C would require global net human-caused GHG emissions to fall by about 45% from 2010 levels by 2030.

That will mean “rapid and far-reaching” transitions in land, energy, industry, buildings, transport and cities, not least because the IPCC found that in 2018, the physical effects of climate change were record-breaking. GHG concentrations reached their highest levels ever, as demand for energy continued to outstrip growth in renewable energy capacity. The international community is beginning to realise that the real impacts of climate change are happening faster and more dramatically than many could have anticipated.

Against this backdrop, vast investment in renewable energy is needed within the power system, in transport and in heating and cooling. At the same time, all sectors of the economy need to decarbonise, a task that will be harder for some companies than others. Companies that fail to reduce their emissions and reliance on fossil fuels face significant dislocations and the possibility of assets becoming stranded because of tighter regulation and reduced consumer demand.

Keeping teams abreast of development 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 Responsibility Seminars, which are of particular interest to members of our investment teams and EOS engagement teams, but given the primacy of climate change, ESG and other sustainability topics as issues for a growing number of global asset owners, they are also relevant to members of the everyone across the wider business. In 2020 they included the following.


Responsibility Seminar #13: Food loss and waste in the supply chain – big issues and hidden opportunities in the sector that is in total responsible for one third of greenhouse gas emissions – July 2020.

Material such as our internal Climate Change Expectations Dialogue Tool, which supports engagement discussions on climate change across both our public and private markets activities and spanning both physical and transition risk issues, and our public Climate Change Expectations document, which we have found useful for opening new discussions with investee companies but also prospective tenants and private market investments⁶, were produced by direct request from the investment floor to aid a deepening awareness of the issues within the business.

The evidence is that awareness is high across the business, as shown by the following examples of insight notes published in 2020

- **Gemologist**: Can we adapt to a new climate normal?⁷
- **Balancing the carbon equation**: How are we investing for a better climate.⁸
- **New order**: Navigating the energy transition.⁹
- **Real estate**: Achieving net zero on behalf of our clients.¹⁰
- **The Goldilocks Crisis**: Why we must use Covid-19 to wake up to climate change.¹¹

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⁷ https://sustainability.hermes-investment.com/uploads/2020/12/624f195756824b0df4b204825071a0f0/gemologist-can-we-adapt-to-the-new-normal-global-ex-us.pdf
In November 2020, we set out our expectation of our investee companies, alongside ourselves, to commit to understanding their role in climate change and becoming a proactive part of the solution.

We urge those companies where we have identified misalignments relating to the climate transition to challenge themselves to understand what more they can do to help accelerate the transition to a sustainable and net zero economy, set science-based targets and to prepare for the changes to our climate that we know are already locked-in.

Companies, regardless of their sector, industry, or location, need to understand and plan to manage the potential physical risks the climate emergency poses to their operations and supply chains.

We cannot wait for action from governments across the world, the threats posed by the climate crisis are too grave. Together, we must commit to understanding our role in fighting the climate crisis and become a proactive part of the solution to accelerate the transition to a sustainable and net-zero economy.

Our six expectations of our investee companies:

1. **Companies should use the Taskforce on Climate-Related Financial Disclosures (TCFD) as the best in class framework approach to understanding and setting out how it is responding to climate change.**

   We believe the voluntary TCFD framework is the most universally appropriate framework for systematically working through climate change issues at an operational level and developing the appropriate governance, risk management and strategic responses to climate change. As such we expect companies to review this framework and either report against it or set out a compelling rationale for why they are not. Acceptable exceptions are likely to be where a company is very small in size. However even then, we could expect at least some minimal physical risk assessment to be undertaken.

2. **Companies should, in the first instance, prioritise putting the appropriate governance and internal capacity to act in place.**

   Understanding and responding to the complexities of climate change risk and opportunity will not be straightforward. It will require dedicated capacity sufficient to understand and develop the appropriate risk management/strategic response. Acting on what is found will require Board and Senior Management engagement and oversight. We encourage companies to allocate sufficient capacity and senior level oversight on understanding its position regarding climate change risk and opportunity and report on the rationale for choices made.

3. **Companies should embrace the complexities of climate change and the transition to a low-carbon economy, seeking to model how it might impact the business financially under different physical and transition risk scenarios.**

   The resilience of company sales and operations need to be considered under different climate change futures. To model these, scenarios could include an orderly transition, a fast and late disorderly transition and no transition at all. To be decision useful to investors, information should be shared on what assumptions and inputs are used and why – as well as the potential impact on forecast revenues over 5, 10 and 15 years and the mitigants that might be put in place to ensure the business remains viable without compromising the global shift to a resilient net zero carbon economy.

4. **To ensure resilience, companies should look beyond their own operations to consider supply chain risk.**

   Companies should assess how physical risks might impact supply chains, identifying key factors and how they are working with suppliers to mitigate them where possible and seeks alternatives where they may not. Equally important are physical risks to distribution networks – which should be identified and mitigated.

5. **Where relevant, companies should use their influence positively with peers to build consensus on the need for collective climate policy success.**

   Where the company is a part of industry trade associations, it should review such trade associations’ approach and positions on climate change to ensure they reflect a constructive approach to acting on climate change and the role policy makers can play in ensuring a timely and orderly transition to 1.5°C. Similar considerations should be in mind when considering political donations.

6. **The priority is to commit to carbon neutrality by 2050 at the latest, backed up with metrics and targets to demonstrate progress made.**

   We urge companies to commit to carbon neutrality by 2050 at the latest. Companies should provide information about short-, medium – and long-term science-based targets – and milestones to reaching those targets as appropriate both in relation to climate change mitigation and adaptation. These should be both qualitative to demonstrate direction and intent and quantitative to show progress.
Integration in public markets

Climate change is an increasingly important issue for listed companies. All our funds integrate engagement with investees on climate change and its explicit consideration in investment processes and decision-making.

In addition, in response to client demand we have in the past few years launched three thematic public markets strategies that explicitly link to the SDGs, encompassing tackling climate change as one of their goals.

- Federated Hermes Impact Opportunities
- Federated Hermes SDG Engagement Equity
- Federated Hermes SDG Engagement High Yield Credit

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. More detail on the tools we used is set out below.

Proprietary tools

The International business of Federated Hermes’ Carbon Tool

The primary means through which we monitor and measure the climate change exposure of our investment portfolios in public markets is through our proprietary carbon tool and has been in use since 2018.

The tool allows fund managers to identify concentrations of carbon risk within our portfolio, the value at risk from a rising carbon price and the level of and progress achieved in engagement. The tool also facilitates enhanced reporting to clients to demonstrate how climate change-related and wider ESG and engagement is being credibly integrated into the firm’s fund and stewardship offerings.

The carbon tool assesses and integrates the following five key elements to evaluate the impact that investment funds have on the environment and vice versa:

- Measuring the carbon risk of an investment fund relative to its benchmark and of listed companies relative to their peers, including Scope 1, Scope 2 and Scope 3 emissions.
- Calculating the profit at risk for an investment fund for different carbon pricing scenarios.
- Identifying companies with which carbon-focused engagement should be initiated or intensified.
- Highlights whether and to what extent progress is being made in carbon-focused engagement.
- Gauging the level of carbon risk being engaged on within portfolios – and the progress achieved. The tool helps our fund managers to more effectively take into account information about specific carbon risk and thereby enhance their investment decisions. This helps them identify investment opportunities and threats to value, and to begin or intensify engagements that can reduce the risk of holding exposed companies.

A further feature of our carbon tool is its attribution analysis. When integrating climate change considerations into the investment decision-making process, it is useful for portfolio managers to understand the role of sector-specific choices in driving a fund’s carbon footprint up (or down) relative to its benchmark. Attribution analysis enables the managers to identify specific sector exposures relative to the benchmark – helping them to pinpoint sources of high or low emissions caused by these sector allocations.

Climate Change Impact Score

Reflecting the complexity of climate risk and opportunity, our credit team has developed a Climate Change Impact (CCI) score to specifically assess a company’s willingness and ability to decarbonise on a pathway consistent with the goals of the Paris Agreement (COP21). The score considers two dimensions to determine a company’s impact on the decarbonisation of the economy:

- Its progress along a decarbonisation transition.
- The impact of that transition.

To determine where a company sits along these two dimensions, we analyse climate data as gleaned from our Climate Change Database (CCDB). The CCDB acts as a central repository for data related to climate change. This database currently covers the credit team’s investable universe and is an amalgamation of different metrics from providers such as TPI, CDP, Trucost and SBTi. As such it builds on our carbon tool, offering further opportunities to integrate and interrogate different data sources. The database also holds our proprietary data such as QESG scores and insights from our EOS team, helping us identify leaders and companies in the transition.

Source: Federated Hermes, as at February 2021. For illustrative purposes only.
Through this approach we will aim to target a material strategic reduction in climate change risk, rather than decarbonising our portfolio by rotating towards already-arrived leaders. We assign the CCI scores and monitor them to ensure real change is delivered. Progress through engagement, combined with data updates and credit analysis, drives changes to the CCI score.

**Third party tools and data sources**

**Temperature Alignment tool:** We have now started using a 2°C alignment assessment to help inform our product development and are working on incorporating this into our investment process across our public market strategies. The data is obtained from a third-party provider. This assessment measures the adequacy of emissions reductions from our investments over time in meeting a 2°C carbon budget. Adopting the transition pathway approach, company emissions and activity levels are tracked and forward-looking indicators are incorporated over a medium term time horizon. A key advantage of the approach is its ability to be applied across a wide variety of portfolio holdings and aggregated to portfolio-level results, not limited to the assessment of a small number of sectors or business activities. The transition pathway approach is adapted from two methodologies that are highlighted by the Science Based Targets Initiative (SBTi), the Sectoral Decarbonization Approach (SDA) and the Greenhouse gas Emissions per unit of Value Added (GEVA) approach. The SDA is applied to companies with high-emitting, homogeneous business activities while GEVA is applied to companies with lower emitting or heterogeneous business activities.

Up to six years of historical data disclosures on greenhouse gas emissions (Scope 1 & 2) and company activity levels are incorporated into the dataset. We also utilise forward-looking data sources to track likely future transition pathways up to six years into the future.

We use 2 Degree Investing Initiative’s PACTA tool, which looks at capital expenditure plans and transition risk, TPI and data from CDP, MSCI and Sustainalytics among others to identify climate risk.

The integration work also includes setting and monitoring targets to align our investments with the goals of the Paris Agreement and developing new metrics and targets to assess, manage and disclose our approach. This is discussed further in the metrics and targets section.

**Integration in private markets**

Across private markets, which for the International business of Federated Hermes includes real estate, infrastructure, private equity and private debt, our strategies cover sectors that lend themselves more naturally to innovative opportunities arising from the low-carbon transition. We use our rights and leverage as owners or shareholders of those assets and companies in which we are invested to influence practice and strategy.

In private equity, sustainability is one of the five ‘megatrends’ that the team focus on within our investment mandates. Within this ‘megatrend’ there are three themes which are all closely related to identifying opportunities in relation to the climate transition. These themes are: a net-zero economy, the future of food and responsible production/consumption.

In real estate, we have integrated climate factors into our active asset management and sustainable development and refurbishment activities since 2006. We have an increased focus on ‘place-making’ where we see an opportunity to bring together climate and environment risk with the other drivers of future performance. We take a disciplined approach to measuring factors such as energy and water consumption, and we have specific tools to reduce those inputs.
CASE STUDY

Real estate: building a better future

Our Real Estate team has integrated climate risk management throughout its investment decision-making and asset-management processes. A responsible property investment (RPI) acquisition checklist is used when acquiring new assets, which covers specific ESG issues like climate change, with a particular focus on flood risk and mitigation.

Our Real Estate team’s responsible property development and refurbishment guidance also 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.\(^\text{12}\) The approach also follows BREEAM principles\(^\text{13}\), which adopt sustainable methods of construction to deliver an operationally efficient and sustainable building or refurbishment. In order to further our net-zero alignment aspirations, we have signed up to pioneer a number of industry projects in 2020. These include the Better Buildings Partnership Design for Performance initiative, which focuses on carbon reduction in operations, and the London Energy Transformation Initiative, which supports the development of net-zero aligned assets.

In order to further our net-zero alignment aspirations, we have signed up to pioneer a number of industry projects in 2020.

Adaptation measures are embedded in the design and construction of the building. The team monitors the 10 UN Global Compact Principles and also the mandatory completion of both initial and final responsible-property-development action plans.

In 2019, we joined the Better Building Partnership Climate Change Commitment (along with 22 other signatories) with the aim to achieve net-zero emissions across our real estate portfolios by 2050. As part of this commitment, we have set out our proposed pathway to achieving net-zero emissions by 2035 across the managed assets included within our global commercial real-estate portfolio. This 2035 target aligns with our clients’ stated objectives and targets. A pathway and timescale will be devised and agreed – including a methodology for target setting – and pathways will be published in 2021. 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 will look to align our managed-asset portfolio’s pathway. We continue to develop and implement initiatives across our real-estate portfolio that are designed to reduce carbon emissions and improve efficiencies in our built environment portfolio, making use of new technology and best practice gleaned from our active engagement in peer-group benchmarking.

\(^{12}\) The Royal Institute of British Architects (RIBA) Stages or Plan of Works provide a framework for architects to use on projects with their clients, bringing greater clarity to the different stages of a project.

\(^{13}\) Building Research Establishment Environment Assessment Method (BREEAM) is the world’s leading sustainability assessment method for master planning projects, infrastructure and buildings. It recognises and reflects the value in higher performing assets across the built environment lifecycle, from new construction to in-use and refurbishment.
19% of our infrastructure portfolio consists of investments in renewable energy generation or energy from waste investments.

As main board member and chair of the Cadent Sustainability Committee, we are focussed on decarbonisation and ensuring optimal team structures and appropriate resources are allocated to equip the business to successfully navigate the rapidly shifting UK energy environment. We are advocating for a UK regulatory approach that encourages and facilitates energy transition focussed spending and innovation. Over the last 12 months, Cadent has significantly ramped up its activity around the future role of hydrogen. To support its efforts, it is currently building out a team of 22 FTEs focusing on: (i) pilot projects to demonstrate technical feasibility and safety, (ii) developing robust economic and consumer-led arguments for the benefits of the role of hydrogen, and (iii) policy advocacy and engagement.

**CASE STUDY**

**Future of gas at Cadent: role of hydrogen in future energy mix and transition bond**

- HyNet North West is a planned low-carbon industrial cluster located in the North West of the UK, aiming at setting a UK model for clean growth including decarbonisation of heat for homes, industrial processes and carbon capture and storage. The project has the potential to create 5,000 jobs in the North West.
- HyDeploy is a project aiming to blend up to 20% of hydrogen into the network. The Hydrogen Home project is the plan for the UK’s first homes to be built with appliances fuelled entirely by hydrogen. Both will positively impact on wider local supply chains by awarding work to local companies.

In March 2020, Cadent issued the UK’s first ever transition bond, a €500 million 12-year bond aligned to the EU Sustainable Finance Taxonomy and the UK’s National Adaption Plan. Innovative transition bonds are designed to encourage issuers to migrate to more sustainable business activities and decarbonise their operations. Cadent will primarily use the proceeds of the bond to replace pipelines within its network. This will both facilitate the carrying of zero emission hydrogen and other low-carbon gases in the future and reduce leakage (a major source of Cadent’s emissions).
Engagement

Across all asset classes, Federated Hermes acts as engaged stewards of the investments we manage and represent on behalf of our clients. The global coronavirus pandemic dramatically changed the business landscape, as well as our own approach to engagement. While we were not able to travel or meet with companies in person, building on the strong relationships we had fostered with companies, we were able to continue our engagement using face-to-face videocalls. This enabled us to achieve higher levels of activity and similar quality and seniority of engagement to previous years as we continued to pursue the long-term agenda of our Engagement Plan.

Climate change has remained – alongside management of the impacts of the pandemic – a high engagement priority: it is one of the six key engagement themes for 2020-202214. To be aware of climate change and other ESG risks can only be the first step in sustainable wealth creation. The next is to act.

To do this we use our integration tools to identify and then systematically engage on climate risk and opportunity both in our public and private market investments. Our focus prioritises companies where transition risk has been identified to be financially material, using our own carbon reporting tool, which identifies concentrations of carbon risk within our portfolio, the value at risk from a rising carbon price and the level of and progress achieved in engagement; Trucost’s portfolio alignment and carbon earnings-at-risk tools; and 2 Degree Investing Initiative’s PACTA tool, which looks at capital expenditure plans and transition risk. Where climate-related risk tools are not available, for example in private equity and lending and to an extent credit markets, we seek data directly from investees/clients.

In our view, with only a few notable exceptions at this stage, it remains preferable to engage rather than simply divest. Our goal is to aid companies in catalysing the conversations that need to happen to enable a transition strategy to be developed and implemented with the support of all stakeholders.

In our real estate and infrastructure investments we already engage with all investee companies and assets where significant transition risk has been identified to address that risk. In real estate our focus is on managing operational assets. In infrastructure this includes making the case for investee companies to set science-based targets, including net zero targets for 2050 at the latest, with interim milestones and strategy to achieve them.

On climate-related investment risk management in public markets, we made a formal commitment to assess our portfolios annually for climate-related risk and to engage in 100% of instances where material transition risk is identified. We have also been developing an innovative new approach to controversial activities with the policy due to be published in 2021.

As the world’s largest semiconductor foundry, TSMC’s operations consume vast amounts of electricity and water. The company must be commended for its water-management framework, yet tackling electricity consumption has historically been a challenge due to the shortage of sizeable green electricity suppliers in Taiwan. However, there is growing pressure from responsible investors who see the business case for climate-change mitigation and adaptation strategies.

TSMC achieved zero carbon emissions from power consumption in its overseas sites in 2019 after it purchased renewable energy certificates and carbon credits. TSMC has also set sustainability targets: it wants 25% of the power consumed by its fabrication operations to be supplied by renewables and to procure 100% of its energy for the rest of the business from renewable sources by the end of 2030.

Despite these goals, TSMC’s current use of renewable energy is low. We recently engaged the senior management team to encourage the company to make progress on this front, despite the constraints in the local power market. The team understood our views and highlighted the company’s efforts to work with the Taiwanese government to overcome some of the obstacles.

Following our engagement, TSMC signed a landmark 20-year deal to buy the entire power production of Ørsted’s third offshore windfarm in Taiwan. This comes to 920 megawatts, a significant increase on TSMC’s current renewable-energy power-purchasing agreements. The windfarm is expected to start commercial operations in 2025-26, subject to grid availability and the final investment decision and should enable the group to eliminate more than 2m metric tonnes of carbon CO₂ emissions a year. In 2020, the deal gave TSMC the confidence to become the first semiconductor company in the world to join RE100, the alliance of businesses committed to 100% renewable-energy use. TSMC has pledged that all power consumed in its manufacturing plants and offices worldwide will be sourced from renewables by 2050.

As noted earlier, EOS is one of the key contributors to the Climate Action 100+ initiative, which represents $52 trillion AUM and 545 investment houses and we were awarded an ‘A+’ grade in a recent report by InfluenceMap for our climate change engagements and noting in particular our voting support for shareholder resolutions on climate change was 86% in 2020.

Notable progress with companies in 2020 includes:

- **Strategy and action:** 2020 was a breakthrough in commitments to achieve net-zero emissions by 2050 or sooner. BP was the first oil major to announce a 2050 net-zero goal, accompanied by a new business purpose and detailed strategy in response to the shareholder resolution we co-filed as part of the Climate Action 100+ (CA100+) in 2019. Following intense engagement, Total SA published a joint statement with CA100+, setting a 2050 net-zero ambition, further reductions in scope 3 emissions and capex aligned to the goals of the Paris Agreement. PetroChina committed to near-zero emissions by 2050, a first for the industry in the region. We engaged intensively with Barclays which put forward its own resolution to achieve net-zero financed emissions by 2050 in response to an alternative proposal led by an NGO and a group of institutional investors. Morgan Stanley and HSBC also announced net-zero goals for financed emissions, and we supported climate change resolutions at JPMorgan Chase and Mizuho Financial, which each achieved significant support. Other companies with which we engaged on making net-zero commitments following our engagement included: Rio Tinto, POSCO, Honda Motor, Rolls-Royce, Hon Hai, National Grid and Dominion Energy (all by 2050); RWE (by 2040); Reliance Industries (by 2035) and Apple (by 2030). In addition, LafargeHolcim, Intercontinental Hotels, Coca-Cola, Burberry, Engie and Johnson & Johnson committed to science-based targets.

- **Governance and disclosure:** Following engagement, many companies reported for the first time using the recommendations of the TCFD, including Nomura Holdings, Mitsubishi UFJ, BNP, Danske Bank and Bank of America, with Danone and Pfizer committed to TCFD reporting and Renault and ING making material improvements.

- **Public policy and market best practice:** EOS led development of investor expectations documents for CA100+ on each engagement with the banking sector and utilities. EOS is a member of the Institutional Investor Group on Climate Change (IIGCC) corporate advisory committee and co-chairs the resolution sub-group. EOS was also invited to co-chair the Asia Investor Group on Climate Change’s engagement working group. We also gave significant input into the design of the net zero benchmark used by IIGCC.
Advocacy

Looking beyond investment and asset engagement, we also believe that policymakers have a key role to play in determining the investment risks and opportunities created by climate change. The international business of Federated Hermes has a long track record in engaging with public policy makers and sector organisations, nationally and internationally, to encourage policy or best practice which facilitates the transition to a net zero carbon economy.

We are active members of, among other initiatives, the Institutional Investors Group on Climate Change (IIGCC) – including the Net Zero Investment Framework Working Group; UNEP FI Portfolio Decarbonisation Coalition; CDP; and the Climate Action 100+ initiative, CDP’s Science Based Targets Campaign and the Japan Climate Initiative. We are also co-chairs of the investment Association Climate Change Working Group. We are members of the FCA-PRA Climate Financial Risk Forum – and chair the Disclosures Working Group, which published an industry-led guide to state-of-the-art climate-related financial risk management15. This Group is also influencing the UK regulatory agenda relating to how mandatory TCFD disclosures should be designed. We also sat on the UK Committee on Climate Change Net Zero Private Finance Advisory Group and founded and now chair the UK chapter of the Partnership for Carbon Accounting Financials (PCAF). PCAF UK was launched in September 2020 and our involvement demonstrates our continued commitment to driving innovation in sustainable investment at an international level. PCAF is an industry-led partnership to standardise carbon accounting in the financial sector, enabling firms to measure the level of financed emissions and to work collaboratively in enacting genuine change.

The social dimension for climate change remains important and we therefore joined the Financing the Just Transition Alliance, which was established with the goal of translating the growing commitment across the financial sector into real world impact. We co-chair the UN Positive Impact Initiative, which seeks to co-create commercially viable, impact-based solutions to the Sustainable Development Goals (SDGs) and finally, we signed the Finance for Biodiversity Pledge along with a number of other financial institutions, and joined the Investors Policy Dialogue on Deforestation in Brazil.

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 integrate a focus on stimulating investment to deliver a low carbon and resilient economy16.

We are also keen to promote the environmental responsibility of the financial system as a whole, and as a result have been very engaged over the past 24 months in the development of the Sustainable Financial Disclosure Regulation, meeting with the European Commission but also regulators in France, Luxembourg, Ireland, Croatia and the UK to set out our thoughts and concerns around ambitious but pragmatic implementation of the new rules. As a result of the influencing by ourselves and other the initial set of mandatory reporting indicators has been slimmed from an initial 34 to a more reasonable 18.

Building Back Better

In May 2020, we published Building back better: why climate action is key to a resilient recovery, containing research and recommendations on how governments across the world can maximise the longer-term benefits of the Covid-19 recovery by ensuring that stimulus measures are combined with efforts to tackle climate change, thereby creating a more sustainable and resilient future for all.

These recommended actions included:

- Scrap commitments to build infrastructure that will make it impossible to deliver net zero in 2050 and risk asset stranding. This includes airport expansion – including the controversial third Heathrow runway in the UK – and the expansion of oil and gas infrastructure – including the US-Canada Keystone XL Pipeline.

- Instead, focus on stimulating investment in infrastructure needed to reduce emissions and invest in training to deliver the skilled workforce needed to deliver these outcomes. This should include, as a priority, rolling out nationwide programmes to deliver low-carbon buildings by insulating them to a high standard and installing solar panels and other low carbon energy sources where suitable. This must be fully funded in an equitable fashion, taking account of income levels in the case of housing. It could be a prime target for stimulus that also creates high-quality jobs.

- Invest in nationwide electric and hydrogen vehicle infrastructure to accelerate the shift to clean private transportation networks. The hydrogen network could be linked to investment in the first Carbon Capture and Storage (CCS) clusters that start to decarbonise industrial emissions. This is technological know-how that could be exported. These efforts would also go a significant way to addressing the health inequality caused by air pollution, which has been identified as one of the factors affecting the poor more than the wealthy in general – and specifically in the case of Covid-19.

- Agriculture is already facing a period of considerable change. Future success will require diversification of incomes as well as taking opportunities that come with transformational land use change. Moreover, policy that encourages farming practices to reduce emissions must move beyond the existing voluntary approach. In the UK, financial payments in the Agriculture Bill could be linked perhaps to actions that reduce and sequester carbon, though with Brexit effects yet to be borne, this may be best exercised further down the line.

- Boost spending on public transport and cycle networks to accelerate the shift to sustainable modes of transport and invest in increasing green spaces. In turn, this will improve public health overall.

- Double down on the efforts to strengthen the global digital infrastructure, notably to more remote areas that are poorly serviced. This greater connectivity, which has proven to be a lifeline during the pandemic, can enable the permanent ‘banking’ of a portion of the travel-based, GHG emissions society, who have benefitted from during the lockdown through the normalisation of more virtual meetings.

- Ensure there is a resilience ‘overlay’ to the siting and building of all infrastructure so that it is fit to withstand currently locked in climate changes, along with increased investment in flood defences.
**Accounting and Climate Change:** We are part of a group of investors who have engaged with the Big Four audit firms asking them to explicitly incorporate climate considerations into the audit of companies that are materially exposed to transition risks through decarbonisation. In particular, we set out expectations that auditors test critical accounting judgements against credible economic scenarios that are consistent with the Paris Agreement and highlight where company assumptions may be too aggressive.

Following on from meeting each of the Big Four individually, we co-signed letters alongside other long-term investors to the audit committee chairs of some of the largest European companies to draw their attention to the IIGCC paper ‘Investor Expectations for Paris-aligned Accounts’ which clearly sets out that investors expect directors and auditors to deliver Paris-aligned accounts – accounts that properly reflect the impact of getting to net zero emissions by 2050 for assets, liabilities, profits and losses.

**Processes for identifying, assessing and managing climate-related risks are integrated into the companies’ overall risk management**

During 2020 we have started to embed climate change risk management at the corporate entity level in a more systematic way. As a priority for 2020 we have focused on reducing our reputation-based operational risks – and our approach is discussed below.

Looking ahead, the involvement of the investment risk and strategic risk and compliance teams in the CCWG has had a pivotal role to play in building awareness across the business, capturing all three lines of defence at the corporate entity level. More information on this will be disclosed in our 2021 TCFD report. Our 2021 work will include developing a new approach to assurance -incorporating independent external review in 2021 – and our plan to undertake second line review of key aspects of sustainability risk. This will underpin enhanced Board level reporting and oversight on climate change risk management in 2021.

**Identification, assessment and management of corporate GHG emissions**

Addressing our environmental responsibilities as a firm, our Environmental Management System (EMS) Working Group works with property consultant JLL to set and deliver our environmental goals and improve our sustainability. Comprised of 12 employee representatives, EMS actively promotes sustainability in the office by educating and encouraging staff to reduce our environmental impact. One of the key risks identified by EMS and the CCWG is reputational risk from operational emissions, notably travel emissions, which in the period 2018-2019 grew.

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 four key environmental management goals in 2020.

- Retain our ISO14001 EMS standard.
- Reduce our operational electricity consumption per full time employee (FTE) for our occupied space at 150 Cheapside by 2% in 2020 compared to 2019.
- Ensure as much waste as possible is reused or recycled, and reduce total waste produced by our activities.
- Continue to monitor business travel across all departments and modes of transport and develop a travel policy to reduce emissions.

We are proud to say we have retained our ISO14001 EMS standard. As the charts below show we have also exceeded the targets we set for ourselves on reducing electricity consumption, waste production and recycling. Travel emissions have also fallen. While pleased we are also not complacent. We understand much of this progress has been due to staff working from home and travel restrictions and that on travel in particular it is important to ‘bank’ the behaviour changes catalysed in 2020.
In 2020 we revisited the firm’s travel policy with a view to ‘banking’ at least some of the travel behaviour changes necessitated by lockdown, which can be seen as positive from a carbon emissions perspective. The new policy has a double focus on cost controls but also carbon controls, through introducing the idea of a new avoid-reduce-mitigate hierarchy.

To help implement this, we now request that our employee 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 over longer time period.
  - Consider what method of travel is most appropriate for the destination, distance and time of travel.

- **Mitigate**
  - Where travel cannot be avoided, we will mitigate through offsetting our carbon emissions, as we currently do.

Where travel is still deemed necessary, travellers are requested to select the most carbon efficient flight option, taking into consideration cost (including the cost of carbon offsets) and also route choice. We are now working with our travel provider Reed & MacKay to fully operationalise the policy and will look to set concrete emission reduction targets in 2021.
Figure 4. Proportion of total waste recycled at 150 Cheapside offices in 2020

<table>
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<th>Recycled</th>
<th>Not Recycled</th>
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<td>Volumes of Waste (Kg)</td>
<td>73,220</td>
</tr>
<tr>
<td>Proportion of Waste</td>
<td>71%</td>
</tr>
</tbody>
</table>

Source: The international business of Federated Hermes / Cushman and Wakefield.

Figure 5. Travel and building (150 Cheapside) emissions

<table>
<thead>
<tr>
<th>Year</th>
<th>2018 Emissions (tCO₂)</th>
<th>2019 Emissions (tCO₂)</th>
<th>2020 Emissions (tCO₂)</th>
<th>% Reduction from 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emissions from Transport</td>
<td>553</td>
<td>2,100</td>
<td>360</td>
<td>-83%</td>
</tr>
<tr>
<td>Emissions from Buildings</td>
<td>179</td>
<td>168</td>
<td>136</td>
<td>-19%</td>
</tr>
<tr>
<td>Total Emissions</td>
<td>732</td>
<td>2,268</td>
<td>496</td>
<td>-78%</td>
</tr>
</tbody>
</table>

Source: The international business of Federated Hermes / Reed & Mackay.

Figure 6. Total distance of corporate travel

<table>
<thead>
<tr>
<th>Distance (km)</th>
<th>Proportion of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distance travelled by rail</td>
<td>24,533</td>
</tr>
<tr>
<td>Distance travelled by airplane</td>
<td>1,150,548</td>
</tr>
<tr>
<td>Total distance</td>
<td>1,175,081</td>
</tr>
</tbody>
</table>

Source: The international business of Federated Hermes / Reed & Mackay.

In 2021 we want to build on this momentum and:
- Reduce our operational electricity consumption for our occupied space at 150 Cheapside by 5% per FTE in 2021 compared to 2020.
- Reduce waste to <400kg per FTE. In 2020, due to reduced office use during the Covid-19 pandemic, waste volume per FTE was 181kg. In 2019, under normal office occupation, waste volume was 526kg per FTE.
- Maintain recycling rate >70%.
- Implement the sustainable elements of our updated travel policy and set targets for reduction.

As well as measuring its GHG emissions, the international business of Federated Hermes offsets its operational carbon emissions by working with Trees for Cities. For every tonne of greenhouse gas 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 October 2020 to March 2021, Trees for Cities will plant >6100 trees to offset the 2,287 tonnes of CO₂e the firm emitted in 2019. We have signed a further 3-year contract with Trees for Cities and will plant further trees in 2021-22 to offset the estimated 938 tonnes of CO₂e generated in 2020.
Through 2020 we have been developing our corporate Net Zero Strategy, with new targets and metrics to help us manage climate-related risks and opportunities; this is in the process of being finalised and will be published in 2021.

At the corporate level, our operational emissions and targets and progress in meeting those targets are set out in the previous section.

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

**Carbon footprinting**

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 97% for listed equities and 68% for credit.

- 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 with 100% of our underlying assets collecting data on climate risk and opportunities and transition strategies as well as the carbon footprint. Data coverage is 87% of the infrastructure portfolio.

We are not yet able to measure the carbon footprint of our structured credit, real estate debt or direct lending activities or for our fund of fund structures. This is something we are continuing to look at.

Within public markets – listed equities and fixed income – we have seen aggregate carbon footprint\(^\d\) decline by circa 35% since a peak at the end of 2018\(^\d\). 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 method for calculating the carbon footprint of equity and credit assets.

**Figure 7.** Carbon footprint (tCO\(_2\)/£m invested) of corporate credit and equity in the international business of Federated Hermes shareholder and participating funds (Scopes 1, 2 and 3)

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 with more details on targets we use to be disclosed in 2021.

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\(^{18}\) As at end December 2020.

\(^{19}\) (tCO\(_2\)/£m invested).

\(^{20}\) Between end December 2018 and end December 2020.
Public markets

In addition to tracking our carbon footprint we track the weighted average carbon intensity (WACI)\(^{21}\) of our public equity and credit portfolios as shown in Figure 8. The analysis includes scope 1, 2 and 3 emissions. Despite being backward looking, this provides a good proxy for assessing the exposure of our assets to transition risk.

Figure 8. Weighted average carbon intensity (tCO₂e/$m sales, weighted by the proportion of each holding in the portfolio) of corporate credit and equity in the international business of Federated Hermes shareholder and participating funds as at 31/12/2020.

Figure 9. Weighted average carbon intensity (tCO₂e/$m sales, weighted by the proportion of each holding in the portfolio) of corporate credit and equity in the international business of Federated Hermes shareholder and participating funds as at 31/12/2020.

In Figure 10 below we show the WACI by investment team at 31 December 2020.

Figure 10. Weighted average carbon intensity by investment team

In Figure 11 below we look at our exposure to carbon intensive sectors in shareholder and participating funds (both equity and credit).

Figure 11. Public markets exposure (% of AUM) to carbon intensive sectors in shareholder and participating funds (credit and equity) as at 31/12/2020.

In addition, we are tracking the level of engagement we have with assets for which material transition risk has been identified (as identified using our carbon tool, PACTA and TPI): this is now at 100%. We are also tracking the percentage of our investments that have and/or are committed to developing science-based targets (SBTs). For credit, 17% of our AUM has already set an SBT and a further 16% is committed to setting one. For equity this is 6% and 4% respectively.

\(^{21}\) WACI is the weighted average of individual company intensities (tCO₂e/$m sales), weighted by the proportion of each holding in the portfolio.
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 portfolio. When calculating the emissions of our portfolio, we do not include any ‘avoided’ emissions from renewable energy generation. As shown in Figure 12 following a reduction in the period 2017-2019, in the period 2019-2020 the infrastructure portfolio WACI increased by 13% from 2018-2019 to 2019-2020. This was driven exclusively by the acquisition of an increased stake in Cadent Gas and reflection of this in the portfolio weighting. On a like for like portfolio weighted basis, the portfolio’s WACI would have reduced by 8% over the same period as the carbon intensity of each of the portfolio’s assets has reduced. By way of example, Cadent Gas exceeded its long-term emission reduction target in 2020 ahead of schedule, cutting emissions by 70% against a 45% target when compared to 1990 levels. Similarly, Thames Water, another asset in the portfolio, exceeded its original target to reduce emissions by 34% by 2020 compared to 1990 levels with a 70% reduction in emissions (including a move to purchasing 100% renewable electricity). Reductions were driven by a switch to green tariff electricity supply, an increase in renewable electricity self-generation from sludge, a reduction in emissions from sludge incineration, and improved methane recovery from secondary digestion. 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\textsuperscript{22}.

Figure 12. The weighted average carbon intensity of our infrastructure portfolio (tCO\textsubscript{2}e/£m revenue, weighted by the proportion of each investment in the portfolio)

\[
\begin{array}{ccc}
269 & 265 & 299
\end{array}
\]

Source: Portfolio company information/Federated Hermes, as at March 2021.

Real Estate

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. As a part of this commitment the Real Estate business set their pathway to net zero in their managed assets in the UK real estate portfolio by 2035. The strategy for our residential, international and debt portfolios will follow.

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\textsubscript{2}e. 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 58% against the 2006 baseline as at the end of 2020, 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.

Figure 13 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\textsubscript{2}e were emitted by 162 properties and in 2020 only 22,210 tCO\textsubscript{2}e were emitted by the same number of properties.

Over the course of 2020, 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 largely by the Covid-19 pandemic, which saw numerous UK lockdowns, with the most severe one lasting between March and June. The lockdown effort by site teams typified the Responsible Property Management (RPM) programme’s leading approach to energy reduction and on average a 17% reduction in energy usage was seen during the first two weeks of the first Covid-19 lockdown.

\textsuperscript{22} Weighted average carbon intensity for assets managed by the Infrastructure Team of Hermes GPE. All outputs based on annual emissions (up to the financial year end date of the relevant portfolio company) and March valuations of the relevant year. Figures exclude Scope 3 and avoided emissions. [2019-2020 figures exclude Iridium Hermes Roads (asset was acquired in January and April 2020) and Energy Assets Group (realised in April 2020).]
As of 31 December 2020, offices account for 69% of overall portfolio emissions, compared with 8% for shopping centres. Other retail and industrial buildings account for 23%.

Figures 14 shows the annual change in CO₂ 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.
Carbon intensity by lettable floor area (see figure 15) is an important metric to monitor as it signifies the progress made in sustainable lettings across the portfolio. 2020 has continued to show the same downward trend in intensity for offices and shopping centres, with 91% and 72% reductions respectively when compared to the 2006 baseline. For example our shopping centre at Central Milton Keynes in 2006 had 6,618,876 kWh of energy consumption and this reduced to 2,510,577 KWh in 2020 which shows a 62% reduction in carbon against our 2006 baseline. This has been successfully achieved due to responsible property management and active optimisation initiatives.

While proactive management has continued and interventions such as the Collaborative Asset Performance Programme (CAPP) have driven down emissions at sites in the office portfolio, the predominant reason for this decrease is the COVID-19 pandemic. Many offices were unoccupied across the portfolio from March to June 2020 and then again in November and parts of December, with UK government guidance enforcing home working where possible.

The story is similar for the shopping centre portfolio where non-essential retail tenants were forced to close during the national lockdown periods. Footfall greatly reduced over the year, with Centre:MK only running essential equipment for much of the period between March and June.

Active management of emissions remained at the core of the Responsible Property Management programme despite the COVID-19 disruption and the programme’s annual forum focused on the actions property managers could take to ensure their buildings were reducing consumption throughout the national lockdowns. The programme also identified assets where energy usage was not reducing during lockdown and interventions were made to assist the site teams and ensure non-essential equipment was turned off where possible.
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 now form the international business of Federated Hermes. Our brand has evolved, but we still offer the same distinct investment propositions and pioneering responsible investment and stewardship services for which we are renowned – in addition to important new 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

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