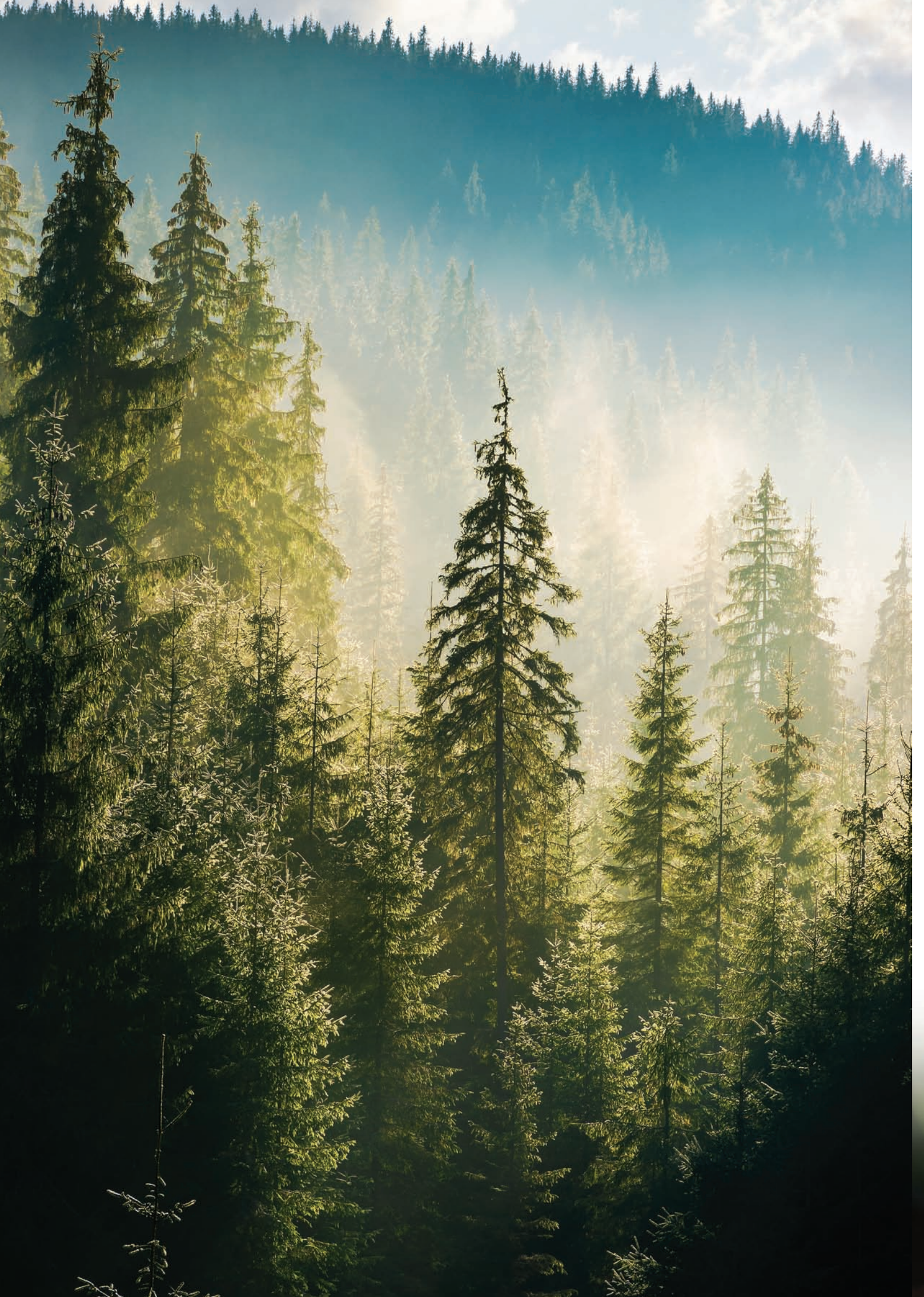
THE ODDFELLOWS SINCE 1810
making friends, helping people

Oddfellows' climate change journey

Climate change disclosures

year end 31 December 2021



Foreword

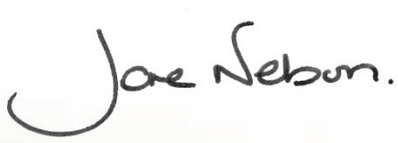
The Oddfellows exists to serve our members. We have been around for 200 years, and we aim to still be around and serving our members 200 years in the future. Climate change fits in with our inter-generational time horizon. All the science tells us that it's happening now, but, as we all know, the effects will continue to be felt for decades to come. Larger firms have been actively discussing climate change for several years now, and the Regulators are formulating expectations of how it should be managed and what disclosures should be made by the firms they regulate. Climate change is an issue that is of real importance to us all. So even though the rules requiring disclosures (based on Taskforce on Climate-related Financial Disclosures recommendations) only come into effect from 6 April 2022, now seems like a good time for us, as a Society, to start.

In the Society's Reports and Financial Statements, under the Strategic Report, you will see a high level summary of where we are as a Society, in terms of our journey on Climate Change. This document is to provide you with more information about what we have done, and what is on the horizon.

The disclosure expectations cover emissions arising out of our own activities i.e. running the Society, as well as our financed emissions i.e. those emissions caused by companies whose stocks or bonds we own as part of our investment portfolios. As you would expect, it takes time and effort to collate that information, and, once the information is to hand, further thought needs to be given as to what we can do to reduce or mitigate those emissions.

Our investments, for example, are intended to underpin our service to members and our commitments to policyholders. Therefore, we aim to invest for the long-term to generate value for current and future generations. In the medium to long term, climate change is likely to impact the global economy and, therefore, needs to be factored into our strategy, governance and risk management.

So, here is our first climate change report aligned to the Taskforce for Climate-related Financial Disclosures' (TCFD) recommendations. We've identified baseline emissions and laid out goals for emissions that we would like to reduce. As the science evolves over the coming months and years, I am sure we will build on those aspirations. We believe our members are best served by a steady pragmatic approach to reduction and mitigation. By the time next year rolls around, we'll have more to report.



Chief Executive Officer

Introduction

The Society is primarily devoted to the wellbeing of our members and to securing good financial outcomes for our policyholders. As part of that commitment, the Society acknowledges climate change as a matter of scientific fact.

Carbon emissions have increased massively since pre-industrial times and have already contributed to a rise in average global temperatures of about 1°C since 1850-1900. The UN's assessment of future scenarios of climate change is that temperatures will continue to increase until at least the mid-century and will increase by more than 1.5°C - 2°C unless deep cuts in emissions occur in the coming decades.[1]

While 2°C doesn't sound like much, it is an average composed of regional extreme heat spikes. These heat spikes contribute to an increase in windstorm activity, floods, wildfires and droughts. These concerns led governments to reach the Paris Agreement on Climate Change (The Paris Agreement) in 2015. The Agreement is a legally binding international treaty which requires signatory nations (including the UK) to substantially reduce greenhouse gas emissions to limit the global temperature increase in this century to 2°C whilst pursuing efforts to limit the increase even further to 1.5°C.

The UK Government is acting upon that commitment by introducing new statutory disclosure requirements which are designed to ensure that all stakeholders are aware of the role played by UK businesses in the global effort to ensure a sustainable climate transition. These requirements are in line with the recommendations of the Taskforce on Climate-related Financial Disclosures (TCFD).[2]

Our TCFD disclosures are required to cover three main categories of emissions:

- Scope 1: emissions arising directly from fuel combustion, including the use of natural gas (for heating) or fuel in company cars.

- Scope 2: indirect energy emissions arising from the consumption of purchased electricity, heat or steam and are thus mostly related to the running of our offices and of course, our Branches

- Scope 3: indirect emissions related to the Society's use of purchased materials (e.g. paper) and to car and rail travel by staff and Directors. The Society is also required to review and disclose "*financed emissions*", being those caused by, for example, companies whose shares or debt we invest in.

[1] IPCC, Summary for Policymakers, 2021 (Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change).
[2] TFCD, Recommendations of the Task Force on Climate-related Financial Disclosures, June 2017.

The expectation over the coming years is for firms, such as Oddfellows, to define metrics and targets to measure and reduce its direct and indirect carbon emissions (Scope 1, 2 and 3), in line with the UK Government target of reaching **Net Zero** by 2050 or sooner.[3]

Net Zero is common shorthand for the balance between the amount of carbon produced and the amount removed from the atmosphere. We reach net zero when the amount we add is no more than the amount removed. This is not the same as zero emissions, which means that no carbon or other greenhouse gases are released at all. Net zero means that carbon gases are still being emitted, but the emissions are offset through some action taken.

The Net Zero shorthand creates the impression that carbon emissions can be negated by some sleight of hand. However, the truth is more onerous. Firms like the Society - not engaged in extraction, manufacturing, or transportation – are still expected to critically review their carbon emissions. Once the sources of carbon emissions in our activities have been identified and quantified, we then need to take all reasonable steps to reduce our emissions. Those steps might include reducing our paper usage, or turning down the office thermostat to reduce our use of heat. Even simple things, such as promoting the use of teleconferencing or video conferencing for some meetings, can help reduce the amount of carbon emissions emitted by our activities.

Only when we have done our best to minimise our "carbon footprint" can we turn to other means of achieving Net Zero, such as **carbon offsetting.**

There are various types of carbon offset schemes which are recognised around the world. They fall into three broad categories:

- Projects that avoid emissions. For example, renewable energy projects that avoid burning fossil fuel and therefore contribute to a generally "cleaner" profile.

- Projects that stop emissions being released. For example, avoiding deforestation and carbon capture and storage on industrial processes.

- Forestry and other direct carbon capture and storage. For example, reforestation and conservation are popular for offsetting schemes. Estimates vary but the typical mature broadleaf tree can absorb around 21 kilograms of carbon dioxide (CO_2) per year. Over a lifetime of 100 years, one tree could absorb around a tonne of CO_2.

Firms in developed economies may deliver these projects through targeted investments or by sponsoring community projects such as planting trees – either at home or elsewhere on the planet. The Society is aware of the expectation that carbon offsetting projects are effective, credible and transparent and will work to ensure that this is the case.[4]

As a responsible mutual organisation, we are wholeheartedly committed to caring for our members and the environment in which we all live. The Society will do so in a manner that is consistent with the size and complexity of our business.

[3] In 2019, the UK became the world's first major economy to adopt a legally binding target to reduce its greenhouse gas emissions to net zero by 2050.

[4] University of Oxford, The Oxford Principles for Net Zero Aligned Carbon Offsetting, September 2020.

The Society made its first climate change disclosure in the Reports and Financial Statements for the year ended 31 December 2020. We reported then on the four key pillars of our response to climate change:

- Strategy
- Governance
- Risk Management
- Metrics and Targets

Strategy

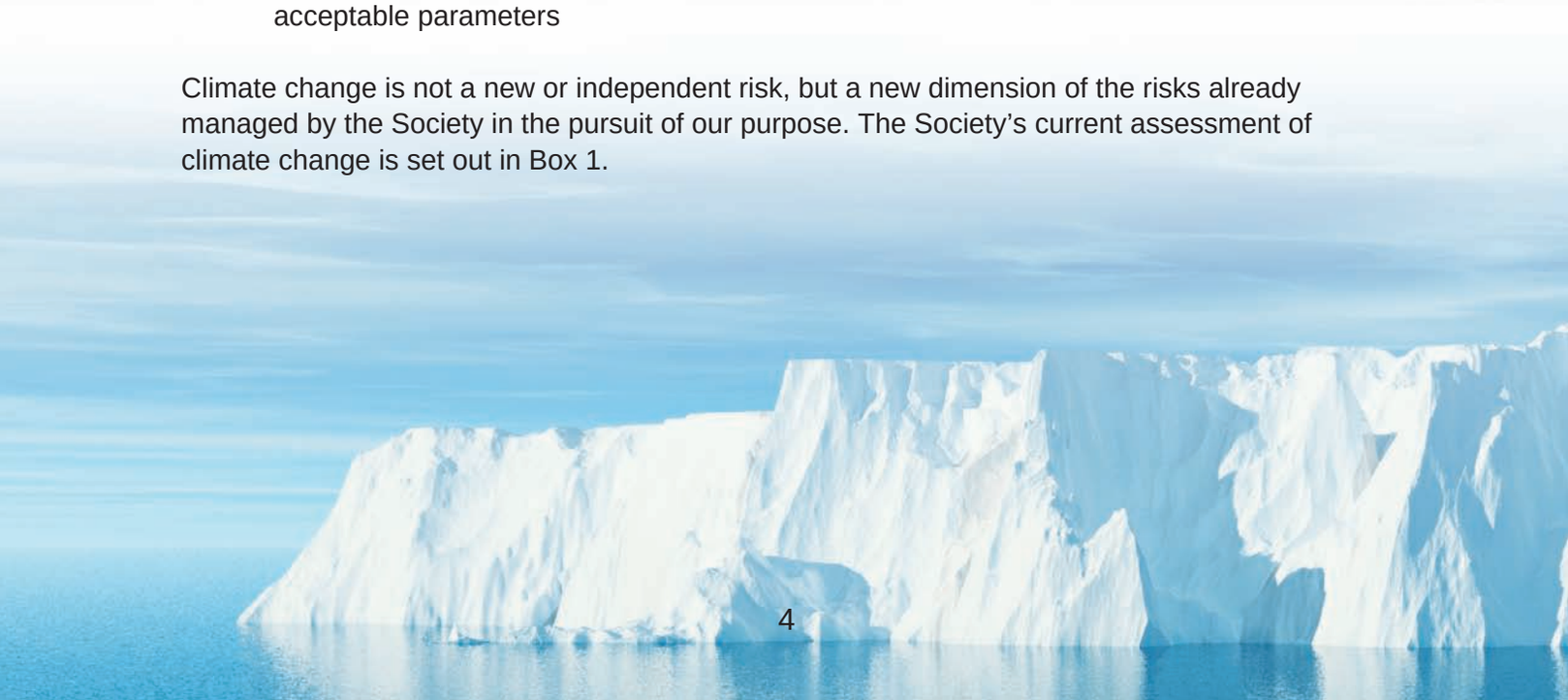
This section describes how climate change is taken into account as part of the Society's strategy.

The Society's purpose is to serve and support its members. Our strategy is developed to ensure that the Society has the financial strength to be there for members and policyholders – in this generation and the next.

How is the Society's business strategy changing as a result of climate change?
Risk is inherent in every aspect of our modern world: it can't be avoided but it can be actively managed. Ultimate responsibility for the design and implementation of the Society's strategy for managing climate change risks and opportunities, and its delivery lies with the Board. With that broad objective in mind, the Board will articulate clear messages to steer the Society's direction covering:

- what we want to achieve;
- how we expect to achieve that goal;
- the parameters of risk the Society is willing to accept in order to achieve our goal;
- the persons to whom responsibility for specific steps is delegated;
- the metrics and targets we will use to measure both risk and success; and
- the checks and balances that need to be in place to ensure our risk remains within acceptable parameters

Climate change is not a new or independent risk, but a new dimension of the risks already managed by the Society in the pursuit of our purpose. The Society's current assessment of climate change is set out in Box 1.



Box 1: Current assessment of climate change financial risks

When considering climate change financial risk, we think of several key aspects:

- Climate change is a ***systemic risk*** that will affect all parts of society and the economy – from farming to manufacturing and on to services. So it isn't possible to escape the risk simply by reallocating resources or capital from one area of the economy to another. As investors withdraw funds from carbon-intensive companies, that selling pressure may cause unexpected valuation swings.
- ***Transition risk*** is common shorthand to describe the changing asset valuations which arise as society and industry work to reduce reliance on carbon. Companies that stick with processes and products that are seen as environmentally "dirty" may find that investors no longer purchase their shares or lend them money so that their cost of capital increases dramatically. Our review of possible climate change impacts on our investment portfolios is discussed in detail under Metrics and Targets. The Society is also exposed to transition risk if there is material change in customer's preferences for "green" investment products that we are unable to meet.
- ***Physical risk*** addresses the possibility of buildings or equipment being damaged or destroyed as a result of flooding or other extreme weather events. For some of our members, this may mean that they no longer leave valuable equipment parked in open-sided shelters. For the Society, it means we are carefully reviewing our portfolio of real estate to ensure that all buildings are suitable as discussed in detail under Metrics and Targets. The Society's current activities include limited life underwriting which may, over time, result in minor exposure to climate change.
- When we speak of ***liability risk***, we mean the possibility that our financial obligations will be increased or speeded up by climate change. In the case of the Society, this could come about when older members struggle to go about their daily business during an extremely hot summer, meaning they may need and expect more support from the Society and our Branches. We are aware that the Regulators use the term "liability risk" to address direct liability to third parties for causing climate change, e.g. unbridled carbon emissions or by misrepresenting a company's financial position when it has been impacted by climate change. As of now, we believe the Society has no exposure to such liability.
- Materiality is an important consideration for a financial firm such as the Society. There is a perceived need for urgent responses to everything related to climate change, but it is important to keep perspective by asking a few pre-action questions:
    - What is the risk?
    - Is it likely to cause a swing in the total value of our portfolio?
    - Is there any action we can take to reduce the impact to the Society?
    - Will action be more harmful than no action (spending £1 to save 50p)?

The Board's role is to ensure that risks – especially climate change risks – are appropriately understood and managed and that opportunities consistent with the Society's purpose are also identified and pursued.

The Society started this process last year and it will continue through 2022 and beyond, as set out in the rest of this document.

In recent years our strategy has been to acquire blocks of business – generally books of life insurance policies or similar savings products – to pursue cost containment and manage the orderly run-off of legacy books.

Correctly handled, this means that – owing to our larger size – we can achieve economies of scale in running these books and that the underlying policyholders receive their expected returns.

Up to now the risks associated with the Society's strategy have been quite clear:

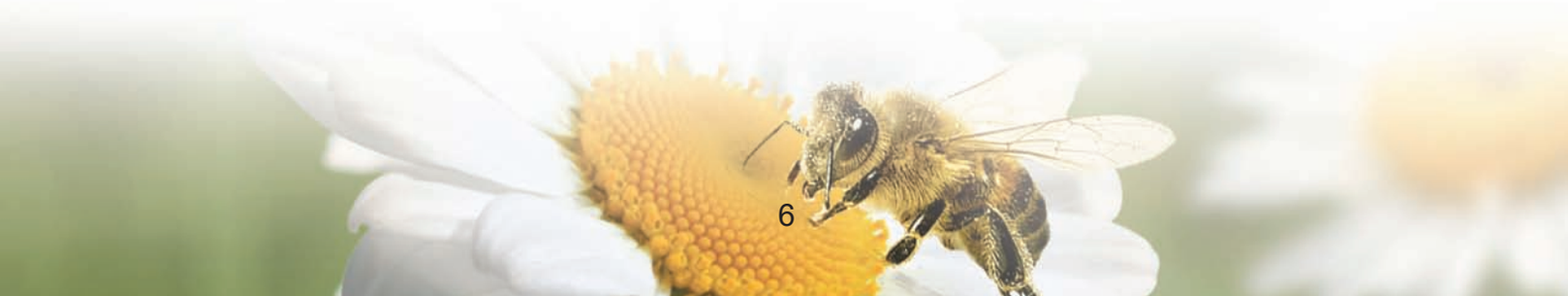
- we acquire a book of business that is no longer economically viable as a standalone business in the medium term, which then stresses the capital position of the Society;
- we are unable to realise economies of scale and, therefore, the cost of running the book exceeds the anticipated benefits; and
- we do not accurately identify, during due diligence, where there are more illiquid assets associated with a book of business, which could then affect the cash position.

Starting in 2022, we will consider which of our investment portfolios are likely to be impacted by climate change, and, where material, how the risk can be managed. We report our initial steps in the Metrics and Targets section of this Report. We will also be exploring with our Investment Managers how they view climate change and how they are preparing to steer portfolios to reduce our carbon footprint, whilst continuing to produce the anticipated yield.

This effort will also include our real estate portfolio, which is affected by the Government plans to gradually increase the minimum energy efficiency of residential and non-residential properties in the next few years. Our initial assessment is reported in the Metrics and Targets section of this Report.

Our future strategy also includes developing new products and we will consider whether there is demand for sustainable features to be included. We will also formalise the process for considering climate change risks and opportunities as part of the Society's business strategy and in Board engagement.

Finally, many of our members are also exposed to climate change – both in their daily lives and in their businesses. During 2022, and beyond, the Society will be looking at ways of supporting our Branches. This support could take many forms and may even be as simple as offering tools that support climate change measurement, understanding and behavioural changes.



What is the Society's approach to climate change?

While many firms are hastening to fix public targets for Net Zero emissions within the next decade, we believe that, for the moment, our members and policyholders are better served by a steady approach of pragmatic reduction of carbon emissions. The science around climate change mitigation is evolving rapidly: when we have greater clarity on what can be realistically achieved and the costs associated with it, we may set more ambitious goals.

In the meantime, we are also aware that any period of major change also throws up opportunities for market participants such as Oddfellows. Those opportunities may involve greener products to support our members' transition, or we may simply reposition investment portfolios to take advantage of rising valuations in emerging "green" sectors.

Governance

This section describes the Senior Management and Board approach to manage and oversee climate change financial risks and opportunities.

The Society's governance approach to climate change financial risks and opportunities begins with the Board's strategy and flows down to all levels of the firm. Put simply, it deals with:

- the formal delegation of responsibility for the execution of the Board's strategy;
- the oversight of the metrics and targets used to measure risk and success; and
- the formal implementation of checks and balances to ensure that the Society remains firmly on track and within its risk parameters.

Ultimate responsibility for climate change financial risk sits with the Board. Over the past year, this has been formalised by making appropriate adjustments to the Board's Terms of Reference. The Board in turn has assigned Senior Management responsibility to the CEO.

In the run up to year-end 2021 (this report), a new Internal Auditor was appointed. The intention is to ensure that there is consideration of the 'big picture' risks faced by the Society. Climate change has been included in the assurance plan for 2022. The Board will be reviewing the audit reports with a view to obtaining new insights for inclusion in the Risk Register (see Risk Management below).

The Board has also been briefed on Climate Change Financial Risk and is now considering how best to operationalise climate change considerations and activities so that the Society's future TCFD disclosures can chart a course of steady improvement in our carbon footprint.

Senior Management regularly update the Board on climate change developments which affect the Society. In addition to follow-ups after each quarterly meeting with our Investment Managers, we can also report on first steps on the climate change journey:

- back in mid 2021, we commissioned a risk management consultancy proof-of-concept assessment of transition risk on equity investments supporting mainly the Child Trust Fund and Junior ISA; and
- an independent consultancy carried out a measurement of Scope 1, 2 and 3 emissions associated with our offices in Manchester and Liverpool (see below – Metrics and Targets).

During 2022, we will also need to revisit and redraft the Terms of Reference and accountabilities of the Main Board, Sub-Boards and Committees in respect of climate change. This may sound very mundane, but it is important to get these right, as they function as a sort of '*job description*' for the participants. In particular we need to ensure that the remit is clearly extended to include the strategic, financial and operational risks and opportunities inherent in Climate Change. We will also consider the possibility of appointing a Board champion for climate change.

Once those parameters have been suitably set, we can ensure that they flow through to the responsibilities assigned at all levels of the Society.

During 2022, the Board will be revisiting its Risk Appetite Statement (see Risk Management below) to ensure that the Society's appetite for climate change risk is suitably formalised. Our other major task during 2022 will be to revisit our Own Risk and Solvency Assessment (ORSA) with a view to enhancing the consideration of climate change and ensuring that its impact on our financial stability has been properly considered and documented (see Risk Management below).

Risk management

This section summarises how the Society's risk management approach is evolving to consider climate change risks and opportunities.

Reduced to the most basic level, the Society's business success is based upon assessing the risk of putting money to work as against the possibility of losing all or part of the capital deployed. The gains realised are the reward for taking risk thoughtfully. As a financial firm therefore, risk management is central to everything we, as a Society have ever done, and continue to do.

Over time the Society has evolved a large number of processes, checks and balances to ensure solid risk management in line with the expectations of our stakeholders and the requirements of our Regulators. These activities are then documented in the following documents to which we refer to when considering any major step:

- the Society's Risk Management Framework;
- the Society's Risk Appetite Statement; and
- the Society's Risk Register.

Together, these three documents provide the guidance framework against which any proposed venture or action is measured. They are designed to ensure that we understand any risks we take; take only those risks we intend to take; and are properly rewarded for taking those risks. Climate change is a new and evolving aspect of risk to be included in our evaluation.

Our Risk Management Framework summarises the risk management activities undertaken to ensure that the Society is aligned with its Risk Appetite.

The Risk Register serves as additional management information for assessing risk: it is a compilation of emerging risks, threat scenarios and specific concerns, calibrated to reflect both the likelihood of occurrence and the possible harm to the Society if the threat should indeed emerge. It is regularly updated to reflect the latest views of risk, and it serves as a permanent reminder that not all risks are immediately visible, and that some need to be teased out among large swathes of information.

While both the Risk Management Framework and the Risk Register have been updated to include climate change risk and climate transition risk, we will be undertaking further work on them during 2022 and beyond. We need to ensure that climate change is adequately represented in all three documents, with sufficient granularity to reflect the different sources of climate change risks (transition, physical and liability risks) and their materiality for Oddfellows.

In addition, our Own Risk and Solvency Assessment (ORSA) considers the risks to which the Society and our stakeholders are exposed and explores mitigating factors and actions. The goal is to ensure that the Society is able to continue serving its members from a position of financial strength. Our most recent ORSA (prepared in June 2021) contains our first scenario analysis of climate change risks.

During 2022 we will be enhancing the scenario analysis to clearly articulate the link between the Government's climate policy and time horizons, and the Balance Sheet impacts for the Society. To that end the Society has participated in the pilot of the scenario analysis tool being developed for smaller entities by the Climate Financial Risk Forum (CFRF), a financial industry body chaired by the PRA and the FCA.

Metrics and Targets

This section summarises the metrics and targets used by the Society to assess climate-related risks and opportunities in line with its strategy and risk management process.

Developing targets and metrics for climate change begins with understanding what is already present. This is articulated in respect of the Society's operations (scope 1, 2 and 3), property portfolio (scope 3) and our investments (scope 3). Climate change is a marathon not a sprint, so we also identify steps that represent just the beginning of a multi-year journey.

Our overall approach will be informed by materiality considerations. Where appropriate, we will develop targets for emissions that are deemed material. The Society will need to consider whether remediation is possible and, if so, over what time period. Where remediation is not possible, we will need to structure appropriate disclosures and explore offsetting options.

Own operations

As identified in our 2020 Reports and Financial Statements, Oddfellows House in Manchester achieved the Building Research Establishment Environmental Assessment Method (BREEAM) Certification but that high standard of sustainability does not alone discharge the Society's obligation to reduce carbon emissions.

We also reported then that the Society had seen a reduction in its carbon footprint as a result of the Covid-19 pandemic, with staff working from home and most meetings being conducted remotely. Hopefully, the end of the pandemic is now with us, but we will continue to explore options around remote meetings and working where appropriate.

During 2021 the Society began the process of developing metrics and targets appropriate to its exposure to climate change risks and to the complexity of its business model and strategy. As a first step the Society engaged with an energy management consultancy to undertake an assessment of emissions between 31 March 2020 and 31 March 2021. This assessment serves as a baseline for disclosure at year-end 2021 (this report).

The pilot project began by assessing the carbon footprint of our two offices in Liverpool and Manchester. That assessment covered areas within our immediate control and addressed in particular:[5]

- Scope 1: fuel consumption, being natural gas used to heat the offices, and petrol burned by company cars. For the 12 months to 31 March 2021 it was assessed that company cars emitted 0.29 tonnes of CO_2e, and office heating produced 10.03 tonnes of CO_2e;[6]
- Scope 2: office electricity consumption represented by far the largest chunk of our carbon footprint, being responsible for 52.15 tonnes of CO_2e; and
- Scope 3: homeworking (during the pandemic), paper consumption, car and rail travel accounted for 19.96 tonnes of CO_2e.

The assessment did not include either the Branch network or the emissions associated with the companies in which we invest, nor did it cover the emissions associated with our portfolios of rental properties (both commercial and residential).

While the assessed total of 82.93 tonnes of CO_2e is not a full picture of the Society's carbon emissions, some mitigating actions are already in place or being considered:

- the Manchester office features motion sensors throughout, thus ensuring that no energy is wasted on unnecessary lighting;
- since electricity consumption is the largest part of our carbon footprint, we have commissioned a further report in respect of the Manchester office to ascertain where exactly that electricity is used, and how best we can reduce it; see Box 2 for a summary of the key findings;

[5] The emissions have been categorised in line with the World Resources Institute's Greenhouse Gas Protocol.
[z]The report refers to CO_2 equivalent emissions ("CO_2e") to account for the emissions of other greenhouse gases in addition to CO_2, which amount for less than 1% total of scope 1 emissions.

- we conducted a survey of staff travel preferences during 2020. That survey revealed that while many staff members value the office as a good place to exchange ideas and push projects forward, they also value the flexibility and time efficiency of working from home. Staff already have the option to work up to two days per week from home; during 2022 and beyond we will be conducting further surveys into staff preferences in the hope of identifying further opportunities to reduce our commuting footprint;

- wherever appropriate, meetings can still be held remotely – again, reducing the travel footprint; and

- the Society has sponsored the planting of 83 trees in Brazil's rainforest, and a further 83 in the UK, which should contribute to the offsetting of the annual carbon footprint of our offices as measured to date.

Box 2: Key findings about electricity consumption

A report was commissioned from an energy management consultancy to identify the main sources of electricity consumption in the Manchester office and what steps the Society might take to reduce our electricity consumption.

The main consumers of electricity are heating, domestic hot water, server room and lighting.

The report identified and costed a number of measures we could take in the short and medium term. Some measures, such as replacing lights and deploying LED, and enhancing various controls, have relatively short payback periods. These are estimated to reduce our energy consumption by 16%. The report also endorses our intention to switch to a green energy contract when our current contract falls due for renewal before the end of 2022.

The medium term options are based on proactive maintenance and require a more significant investment with a longer payback period.

During 2022 and beyond, we will

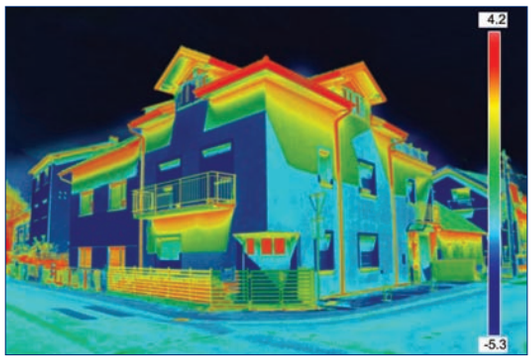
- engage with the energy consultancy company to explore how feasible it is to align the assessment of the carbon footprint of the emissions from our operations with our financial reporting;

- explore opportunities to move to a renewable energy tariff when our current electricity contract expires towards the end of 2022;

- implement recommendations from the energy audit report summarised in Box 2;

- consider ways to reduce our paper usage; and

- develop a voluntary approach for the assessment of carbon emissions of our 113 Branches.



The Society's property portfolio

The Society owns three portfolios of rental properties – both residential and commercial. While it might be tempting to simply farm out the assessment of these properties to our energy management consultancy as part of the scope 3 emissions, we have concluded that the resultant carbon emissions would not be the correct metric from a management perspective.

We arrived at this view because, as a landlord, we cannot force business or behavioural changes upon our tenants. If, for example, an office tenant chooses to crank up the heating but keep the windows open for Covid prevention reasons, we, as the landlord, cannot stop those extra carbon emissions.

What is in our gift is the provision of energy efficient premises and dwellings. Accordingly, we have started a comprehensive review of the Energy Performance certifications (EPCs) of all the units in our portfolio to ensure we meet UK government expectations.

Our targets here are:

- All units in the commercial portfolio to have an EPC of B or better by Spring 2030, unless an exemption applies;[7] and
- All units in the residential portfolio to have an EPC of C or better by Spring 2028, unless an exemption applies.

Where work is necessary, we hope that natural tenant fluctuation will enable us to carry it out with minimum disruption.

Our work so far has identified some data issues (e.g. missing and expired certificates) and that, unless exempted, about 53% of our units would be affected by the enhanced EPC requirements between now and 2030.

During 2022 and beyond, we will work with our property managers to address the data issues identified. We will also start planning upgrades to the affected units to meet the new EPC requirements. This will involve working with property managers to understand the scope of the changes needed to each unit, explore the possibility of exemptions and then prioritise delivery and assess financing. This work is likely to continue throughout 2023.

[7] A regime of exemptions is in place for commercial and residential units covering a wide range of circumstances. This includes the provision of commercial shell units where all the fittings are provided by the tenants and circumstances where the age and type of the residential or commercial unit make it disproportionately expensive to upgrade it to meet modern EPC standards.

The Society's portfolios of investments

The Society holds extensive portfolios of investments which underpin both Branch investments and our insurance contracts. These portfolios are managed by professional Investment Managers in accordance with criteria that reflect the nature of the underlying commitments.

Some portfolios are clearly designated as index tracker funds, meaning their composition is driven by the current composition of whichever stock market index they are intended to mirror. Others are a combination of bonds, gilts and stocks, all of which are actively managed.

During 2021, we started the process of identifying and quantifying the carbon emissions associated with our investments. These are scope 3 emissions and are usually referred to as "financed emissions".

We have not identified an industry-wide consensus approach to measuring these financed emissions. One measurement tool which seems to have wide acceptance among financial firms and regulators is called the **Paris Agreement Capital Transition Assessment** (PACTA) developed by 2˚ Investing Initiative (2DII).

Box 3 provides an overview of the PACTA model and the analysis undetaken. The analysis has covered the investments managed by two of the Society's Investment Managers. These are a UK index tracker fund representing 50% of the Society's investments and two actively managed funds covering fraternal assets. The conclusions from these assessments are that:

- a relatively small proportion of the assets are invested in the main polluting sectors - oil & gas extraction, coal mining, steel making, power generation, aviation, cement and automotive; they generate between 70% and 80% of the carbon emissions of the funds;
- a significant proportion of the investments in polluting sectors do not have green alternatives, e.g., oil & gas extraction but there are green investment opportunities within some of the polluting sectors that could be exploited; and
- overall, the companies in the polluting sectors in which we are invested are making some progress towards aligning with the Paris Agreement over the next 5 years, but the progress is not consistent across funds.

Starting in 2022, we will be considering whether the carbon footprint of the remaining investment portfolios is material. In some cases the portfolios are naturally running down as benefits are paid out upon maturity of the underlying contract. In others it may be appropriate for the Board to consider whether there are appropriate and proportionate mitigation actions to reduce the portfolios' carbon footprint.

As a consensus on investment practices emerges, we and our Investment Managers intend to refine and develop if necessary new metrics to assess material financial risks and opportunities arising from our securities portfolio and the green transition.

Box 3: Overview of PACTA and results

PACTA is an open-source methodology and tool which measures financial portfolios' alignment with various climate scenarios consistent with the Paris Agreement[8]. The model is extremely data-intensive, so it focuses on the eight most polluting sectors - oil & gas extraction, coal mining, steel making, power generation, aviation, cement and automotive. According to the model developers, these sectors account for 75% of global emissions. The analysis produced by the tool reflects the relative share in the invested company.

Over the course of 2021 we worked with a risk management consultancy which uses PACTA to identify financed emissions in our investment portfolios. Together, we carried out an initial assessment of a UK index tracker equity portfolio using year-end 2020 data. This is our largest fund and represents about 50% of the Society's investments. These investments underpin Child Trust Fund and other similar insurance activities. Given that this is an index tracker, significant changes to investment allocation are unlikely from one year to the next so we believe that the high-level conclusions of the analysis remain appropriate.

Work continued with the analysis of two actively managed equity portfolios using data at year-end 2021. These are classed as "fraternal assets" and are invested in by our Branches and by the Unity Office in Manchester. They are included in the analysis because the capital can be accessed under the Rules of the Society in a number of circumstances and, as such, is included with the Society's Solvency II calculations.

At year-end 2021, the Society had 16 investment portfolios managed by four Investment Managers valued at c.£467m. Seven of the portfolios are run by one Investment Manager on a passive basis with all the rest being managed actively. The analysis carried out so far covers about 60% of our total securities investments and includes the majority of our equity exposures.[9]

The portfolios analysed have limited exposures to the eight main polluting sectors, 13.5% and 20% of assets respectively. As expected, the carbon emissions from the portfolios are much greater than the Society's own emissions. A simple analysis of carbon intensity (defined as pounds of investments per kilogram of CO_2) shows that the UK index tracker fund is more carbon intensive than the fraternal assets.

[8]More specifically, the carbon emissions of listed equities and bonds. It includes a look-through where there are investments in a collective investment scheme.

[9]There are some equity exposures in two other funds investing in a mixture of equity and bonds.

Charts 1 and 2 below show a sectoral breakdown of the emissions in the two portfolios. Overall, between 70% and 80% of the portfolio emissions are generated by the eight main polluting sectors. The main polluting sectors for both are oil & gas extraction and power generation.

Chart 1: UK index tracker sectoral breakdown of emissions

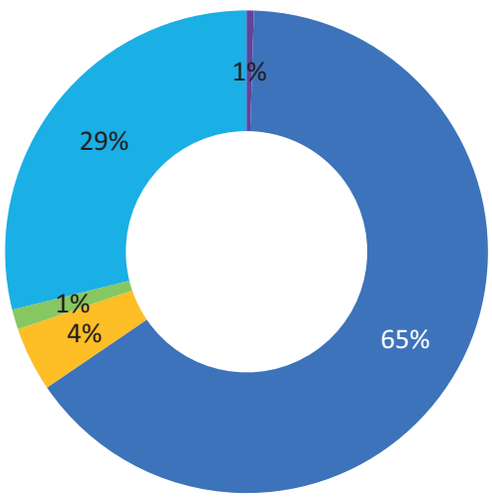
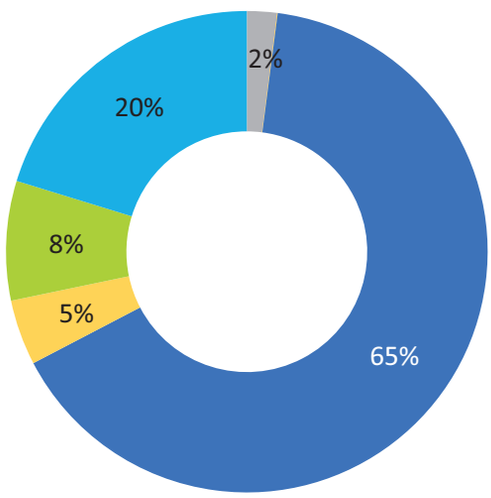


Chart 2: Fraternal assets sectoral breakdown of emissions



PACTA also provides technology-based insights to reflect that not all the activities in a sector have the same carbon footprint. For example, the power sector includes electricity generation from renewables and hydropower and the automotive sector includes electric and hybrid vehicles. This shows that:

- a significant component of the investments in polluting sectors are in activities that do not have green alternatives, e.g., oil & gas extraction; and
- at the same time, there may be more green investment opportunities within the polluting sectors that could be exploited.

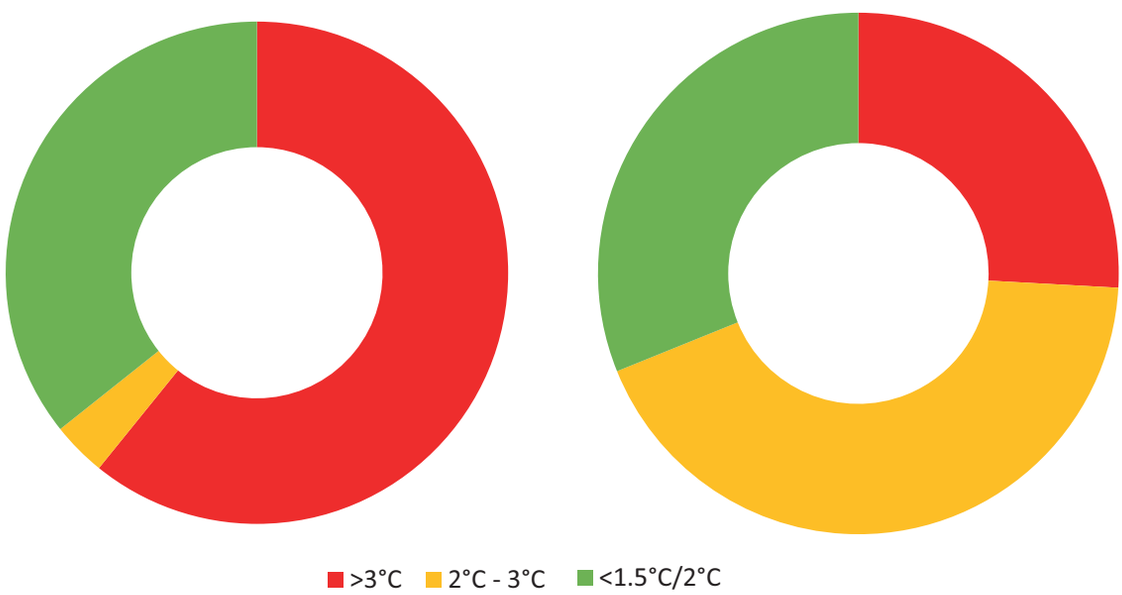
The model assesses financial portfolios' future alignment with the Paris Agreement, using publicly available information about invested companies' plans to adapt future production over a 5-year period.[10] Examples might include automotive manufacturers producing more electric vehicles or power generators switching from oil to wind power. In theory, alignment could be achieved without requiring changes to investments. This is combined with the three main climate change scenarios for alignment by the end of this century contemplated by the Paris Agreement – pessimistic, neutral and optimistic pessimistic. These are aimed at more than 3°C less, between 2°C and 3°C and less than 2°C / 1.5°C increases in global temperature. These scenarios are labelled as red, amber and green respectively.

[10] A five-year horizon is far from ideal from the perspective of climate change alignment. The modeller's choice reflects the availability of public information from companies in the polluting sectors.

Charts 3 and 4 show the planned alignment of the emissions from the main polluting sectors in 5-years time.

Chart 3: Alignment pathway of main polluting sectors UK index tracker

Chart 4: Alignment pathway of main polluting sectors of fraternal funds



Note: the "main polluting sectors" are oil & gas extraction, coal mining, power generation and automotive

The charts above show that several of the polluting holdings appear unlikely to evolve in a manner consistent with the Paris Agreement. This in turn provides an indication of portfolio adjustments that might be required. The differences between the two charts represents investments in different polluting sectors (see Charts 1 and 2) and, for a given polluting sector, investment in companies with different transition plans. For example, it has been suggested that US energy companies are not progressing as fast as their European counterparts when it comes to Net Zero targets and investments in renewable assets.[11]

Cimate change and the underlying issues we face will continue to be monitored. The issue that the Society will continue to try and balance in 2022 and beyond, is the need to remain cognisant to balance climate change against the need to achieve favourable returns for our Branches and policyholders.

[11] Quinson, T. US Oil companies lag far behind greener Europe rivals, Bloomberg Green, 24 March 2021.