Rothesay

Environmental, Social and Governance Report 2021

Our purpose

We are dedicated to securing the future for every one of our policyholders.

Rothesay refers to Rothesay Limited (formerly Rothesay Holdco UK Limited) and its subsidiaries, together the Group.

About Rothesay

Purpose-built to protect pension schemes and their members' pensions.

Rothesay is the UK's largest specialist pensions insurer, purpose-built to protect pension schemes and their members' pensions. Our singular focus is to secure pension annuities for the future, providing certainty as well as genuine service excellence for all our policyholders.

Our conservative investment strategy and prudent underwriting mean we are trusted to provide pension solutions by the pension schemes of some of the UK's best known companies, including Asda, British Airways, Cadbury's, the Civil Aviation Authority, National Grid, the Post Office and telent.

Underpinned by sophisticated risk management, our expert in-house investment team is continually developing new ways to drive predictable, dependable returns that minimise risk and create real security.

At year-end 2021, we managed over £62 billion in assets. We secure the pensions of over 837,000 people, and pay out, on average, over £200 million in pension payments each month. We are securing the future for every one of our clients and policyholders, and improving how pensions are delivered as we do it.

Message from the CEO

At Rothesay, we see embedding Environmental, Social and Governance (ESG) principles across our business as a fundamental part of our commitment to providing our policyholders with security for the future.

Our first ESG report, published last year, set out our Pathway to Net Zero strategy. We have a comprehensive plan to achieving net zero emissions across our business by 2050 and have clearly defined the first milestones we will need to reach on the way.

This year's report updates on our progress over the past year, including receiving Carbon Neutral certification, and reflects some of the lessons we have learnt along the way. It includes progress reports against our key environmental commitments for our investment portfolio, our business and our people along with details of the partners with whom we have worked. It also provides an expanded overview of our approach to the social and governance aspects of portfolio management.

While the last twelve months have seen progress made internationally on achieving net zero there have been a number of events that highlight the scale of the challenge ahead. COP26 was remarkable for bringing together the world's nations to agree to strengthen their commitments to decarbonisation. The pledges made, though, are still only projected to be sufficient to restrict warming to 2.4°C and even then this will only be achieved with a dramatic increase in action to match the rhetoric. Less commented upon, yet a notable success of the conference, was the tightening of the rules around the carbon markets which contributed to a rise in the carbon price, a sharpening of the

Embedding ESG principles across our business is a fundamental part of our commitment to providing our policyholders with security for the future.

associated regulatory teeth and the injection of greater realism to much of the scenario analysis used to understand the likely fortunes of corporate emitters.

The geopolitical events of the last year, however, have also brought about some unanticipated obstacles that serve to remind us just how difficult it will be to stay on our collective path to net zero. The IPCC's AR6 round of reports made it clear that, at the current rate of emissions, the carbon budget that gives us just a 50:50 chance of staying below 1.5°C will be used up within a decade. Furthermore, the only socio-economic pathways that meet the 1.5°C target envisage cooperative management of global resources rather than the competitive drive for national energy independence and food security that we see developing in the wake of the pandemic and Russia's war in Ukraine. These events have contributed to rising levels of inflation, particularly concentrated in energy and food prices, that have understandably caused some to question the urgency of net zero ambitions and their requisite upfront costs.

We believe, however, that the need for collective action, particularly on energy resources, remains more acute than ever and that the insurance industry, and wider financial services sector, must not delay in delivering against its net zero commitments. Rothesay's approach to tackling these problems is not to simply build a portfolio of investments limited to those in low emitting sectors and leave to others the problem of funding essential industries with hard to abate emissions. Rather, we seek out areas where the company's lending power can be used for socially and environmentally worthy ends while maintaining adherence to our strict risk management criteria. In this report you will see examples of such investments as well as both an update and expansion of the metrics by which we measure the effectiveness of our efforts to assist in the decarbonisation of the economy.

We are still at the early stages of our Pathway to Net Zero, with reporting standards developing all the time, but we are proud of the positive progress we're making across our strategic pillars. We remain committed to being as transparent as possible in our reporting, and to working across our industry to achieve our collective net zero ambitions.

Tom Pearce
Chief Executive Officer
5th October 2022

Highlights

7%
reduction in portfolio CI to 197 t CO_2 / mm USD revenue

£3.9m
pledged to charity in 2021

Launched
Lambeth Winter Cheer campaign

Achieved
CarbonNeutral® company certification and signed Direct Air Capture contract

92%
of employees proud to work at Rothesay

Published
Responsible Investment Policy

Gold standard
from Pensions Administration Standards Association

£30.6bn
invested in the UK economy

Pension stability provided to over

830,000
policyholders

Our ESG pillars

At Rothesay, we seek to protect the future of every one of our policyholders and to provide them with long-term financial security.

An essential part of our promise is the responsibility to carefully manage a wide range of uncertain risks and opportunities relating to ESG factors. In this report, we discuss how we build our ESG strategy around three key pillars: investing our capital responsibly, committing to secure positive outcomes for our stakeholders and running a responsible and sustainable business.

1. Investing responsibly

Rothesay is responsible for managing over £60bn of assets, held to secure the pensions of more than 830,000 policyholders. It is therefore crucial that we invest in assets that match our liability cash flows and which provide an appropriate risk-adjusted return as well as supporting our pathway to a more sustainable future.

Rothesay's in-house team considers financially material ESG factors as part of the investment process and our market-leading risk management systems give us an advantage in the monitoring and management of ESG risks. Paired together, this allows us to proactively switch to assets that are not only in line with our ESG goals, but also provide us with improved risk-adjusted returns.

Read more from page 16

2. Securing positive outcomes for our stakeholders

We are dedicated to protecting the future for our policyholders and delivering positive outcomes for all our stakeholders, including our policyholders, our suppliers, our people, our community and our investors. Given the long-term nature of our business, this means that we need to consider the impact that our decisions will have not only in the short term, but well into the future.

Rothesay's backbone is our employees, based in the UK, US and Australia and we are committed to maintaining a culture that allows us to attract and retain top talent from across the industry.

Read more from page 52

3. Running a responsible business

At Rothesay we want to run our business in a sustainable manner. This means that we need to reduce our own operational emissions to the extent possible, and have controls and risk management frameworks in place that ensure that we can continue to navigate risk while creating new ways to deliver security to our policyholders.

All of this is made easier by our governance structure, which is robust yet agile, allowing us to seek to ensure the stability and solvency of the business.

Read more from page 64

Our pathway to...

Net Zero

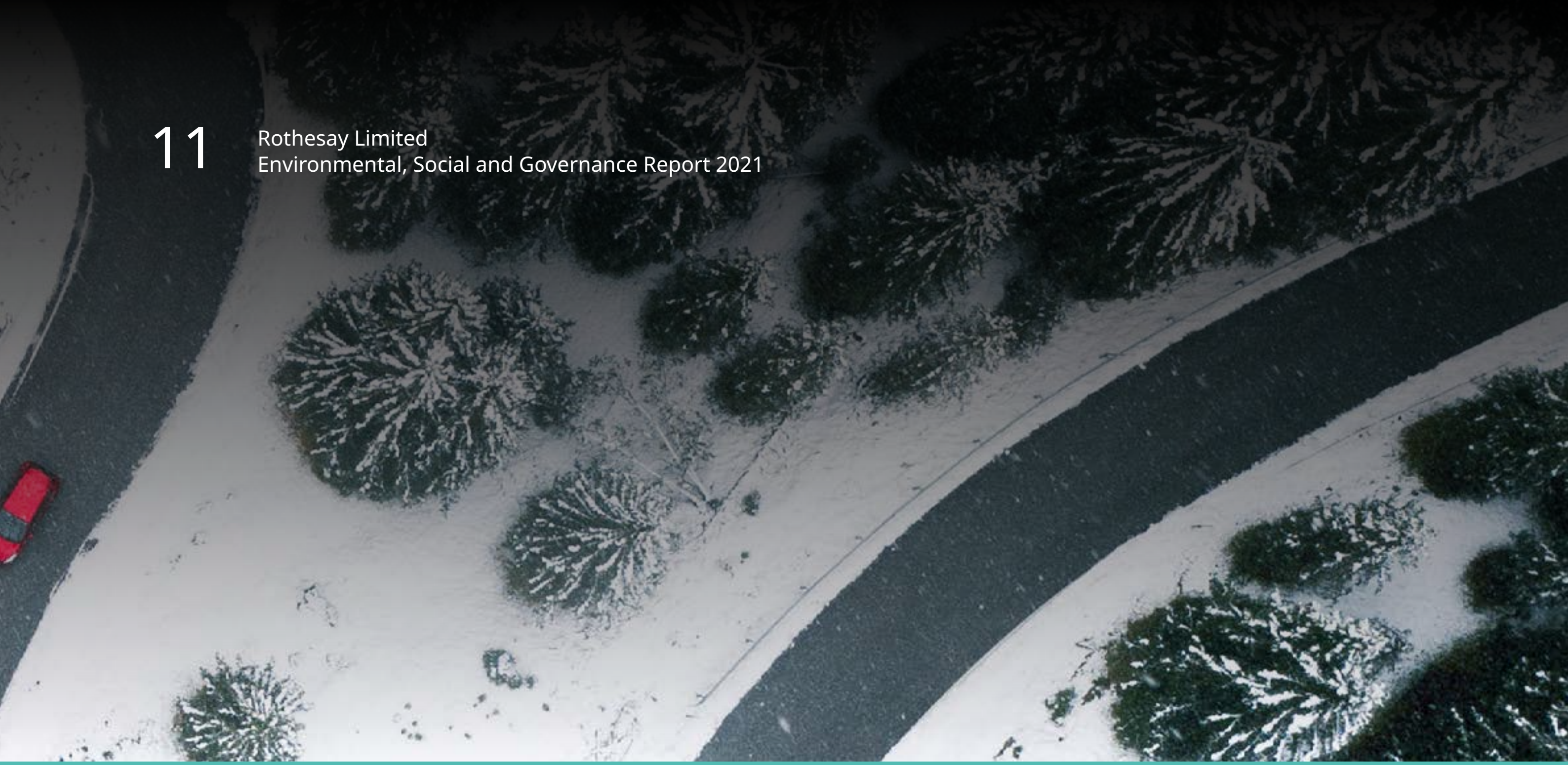
In last year's ESG report we set out, for the first time, the pathway by which Rothesay would transition our investment portfolio to net zero. In this report we are pleased to provide an update on this journey and discuss the progress that we as a company have made over the past 12 months.

Our pathway to Net Zero
continued

One of our key commitments last year was to become carbon neutral, or negative, with respect to our own business' Scope 1 and 2 emissions by 2023. Earlier this year we announced that we have received CarbonNeutral® company certification for 2020 in accordance with The CarbonNeutral Protocol, a leading global framework for carbon neutrality. We are pleased that Rothesay has met its commitment and this goal has been achieved significantly ahead of target.

In addition, we have also been working to secure an even higher quality supply of carbon offsets for future emissions, using Direct Air Capture technology. We have recently entered into a ten-year agreement with Climeworks, a direct carbon capture technology specialist, to help us remove our anticipated 2021-2030 Scope 1 and Scope 2 CO_2 emissions which we will be unable to abate. Further information on the work the firm has done to purchase high quality voluntary carbon offsets is provided from page 71 to 74.

Although we believe that currently portfolio Carbon Intensity is the most useful metric to assess the carbon footprint of our investment portfolio, we have worked hard to develop capabilities to begin calculating financed emissions and temperature alignment assessments, noting their current limitations as metrics. A detailed examination of these results is provided in the Metrics section of this report (of which the Strategy, Risk Management, Metrics and Governance sections serve as the firm's TCFD report) from page 38 to 50.



Our key numbers:

Portfolio Carbon Intensity =

197

t CO_2e / mm USD borrower revenue

which reflects a decrease of

7%

based on rebased 2020 number and

an increase in portfolio CI Coverage to

90%

New for this report we publish:

- **financed emissions of 92t CO_2e / mm GBP invested and 4 Mt CO_2e in total for the portion of the portfolio for which data is available**
- **temperature alignment of 2.7°C for the portion of the corporate bond portfolio for which data is available**

Our pathway to Net Zero
continued

The commitments made in our 2020 ESG report for our investment portfolio, our own operations and our people include the following:

Our investment portfolio

- **Net zero by 2050** – Rothesay is committed to transitioning our investment portfolio to net zero greenhouse gas emissions by 2050, aligned with a maximum temperature rise of 1.5 degrees above pre-industrial levels as outlined in the Paris Agreement.

- **20% reduction by 2025** – we aim to reduce the Scope 1 & 2 Carbon Intensity of our portfolio of publicly traded corporate debt by 20% over the five years beginning with the baseline set in 2020.

- **Regular and transparent reporting** – we will regularly report on our progress and publish, on an annual basis, the Carbon Intensity of our portfolio and other useful metrics. We will always be clear on where our data is sourced and what parts of the portfolio it covers.

- **Investing in the low carbon economy** – we will look to partner with governments and industry to identify ways in which we can increase our lending to sectors which support a low carbon economy.

Our business

- **Climate risk** – Rothesay has fully embedded climate risk management into our business and processes.

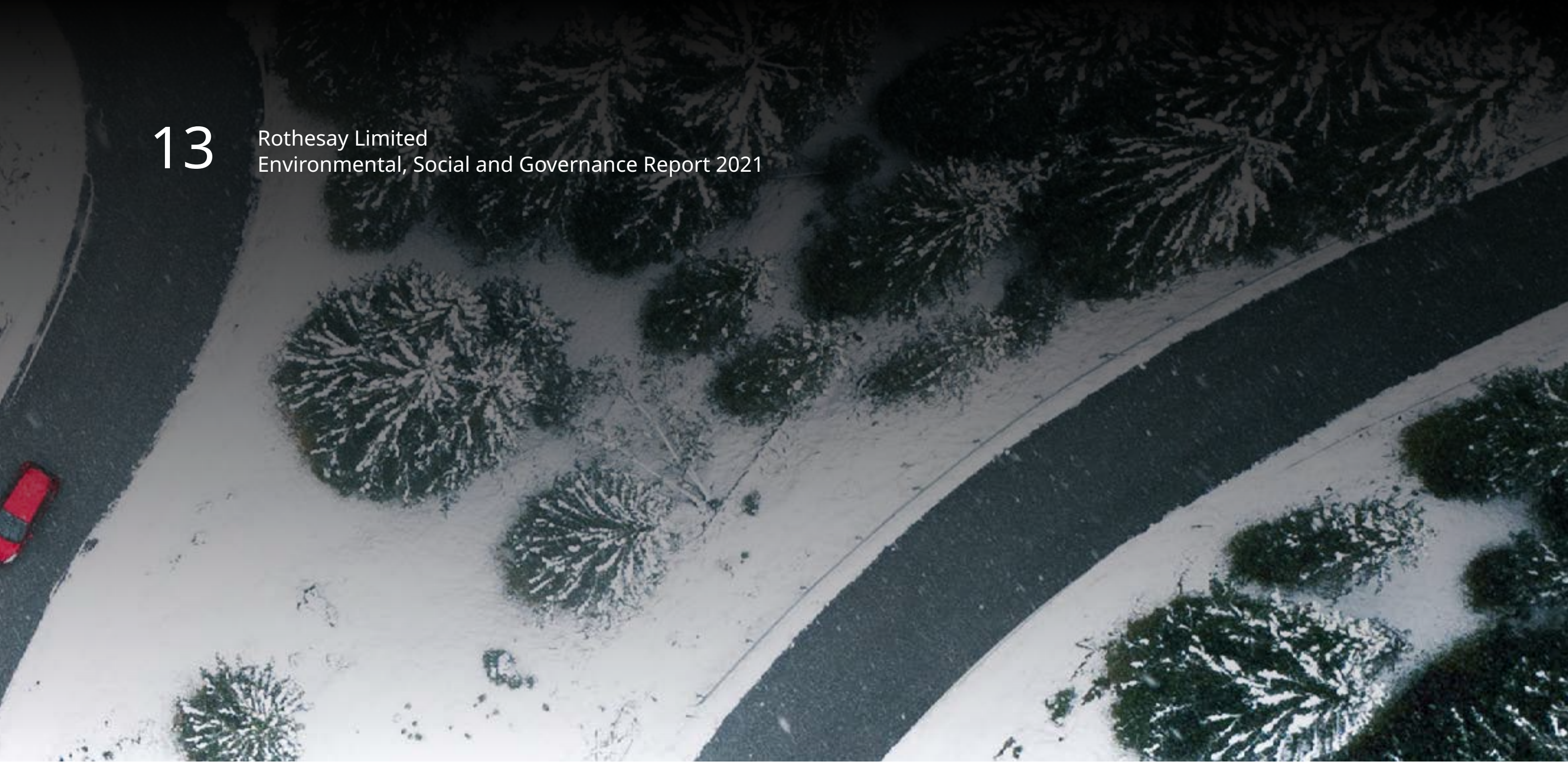
- **100% renewable electricity** – all electricity provided to our UK office comes from a supplier of 100% renewable electricity as certified by the Carbon Trust.

Our people

- **Leadership from across our business** – our ESG Working Group has representation from all of our business units, including Trading, Investing, Credit, Risk and Finance. It is chaired by our Head of Investment Strategy who sits on the Senior Executive Committee of our business.

- **Helping our people reduce their carbon footprint** – Rothesay offers low cost, tax efficient leasing of electric vehicles to all employees, along with our cycle to work scheme.

- **Embedding climate responsibility in all our operations** – we believe all our employees can contribute to our pathway to net zero and ESG strategy so our annual performance review provides space to describe such contributions.



As we strive to meet our commitments we are working with the following partners:

- We are a supporter of the TCFD.
- We are a signatory to the UN's Principles for Responsible Investing.
- We are a member of the UN-convened Net-Zero Asset Owner Alliance (NZAOA)
  - And in 2022 have made our first disclosure to the organisation of progress towards our targeted portfolio emissions reduction.
- We are an early adopter and supporter of The ESG Social Housing Working Group.
- New for 2021:
  - We have accepted a place as one of twenty international financial institutions in the PRA/FCA chaired Climate Financial Risk Forum.

TCFD TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES

PRI Principles for Responsible Investment

UN environment programme finance initiative

The ESG Social Housing Working Group

Our pathway to Net Zero – Timeline

2020

- Became signatory of the UN Principles for Responsible Investment.
- Registered support for Task Force of Climate-Related Financial Disclosures.
- Launch of electric-car leasing employee benefit.

2021

- Published first ESG report, including our pathway to net zero.
- Published Responsible Investment Policy.
- Published first Streamlined Energy & Carbon Reporting (SECR) disclosures.
- Joined as a member of the UN-convened Net-Zero Asset Owner Alliance.
- UK office is supplied by 100% renewable electricity.
- Received CarbonNeutral® company certification for 2020 in accordance with The CarbonNeutral Protocol.
- CEO joins as member of the climate change committee for the ABI.

2022

- Received CarbonNeutral® company certification for 2021 in accordance with The CarbonNeutral Protocol.
- Entered into a ten-year agreement with Climeworks to remove our 2021-2030 expected unavoidable CO_2 emissions.
- Joined as a member of the Climate Financial Risk Forum.

2025 2050

- 20% reduction in the Carbon Intensity of our publicly traded corporate debt.

- Net zero investment portfolio with respect to greenhouse gas emissions.

Investing responsibly

Our strategy

We do not believe that it is possible to achieve our core investment objectives without careful consideration of ESG risks. Our investment objectives are defined as:

- Policyholder security: To ensure that liabilities to policyholders can be met in full and in a timely manner via conservative balance sheet and liquidity management.
- Balance sheet stability: To maintain financial strength and solvency capitalisation in order to produce stable cashflows from in-force business.
- Value-driven investment: To take a quantitative view of risk where possible and invest in a manner that enhances shareholder value on a risk-adjusted basis.
- Focus on asset-liability management: To invest assets in a manner appropriate to the nature of the policyholder liabilities in order to reduce risk exposure and to take advantage of illiquidity premium.
- Knowing our borrowers: To ensure that the investment process reflects Rothesay's governance principles and appropriately takes into account factors that are harder to quantify, such as ESG and reputational risks.

The embedding of ESG within our investment decision-making supports these objectives by taking into account material risks and opportunities across our asset classes to drive policyholder security, balance sheet stability and value-driven investment, as well as helping us meet our ESG commitments.

We recognise the benefit of matching long dated cash outflows in our pension liabilities with stable long dated investments that fund the provision of critical infrastructure especially in the UK which aims to contribute to reduced emissions. Securing the future for our policyholders therefore takes a wider meaning than purely financially.

For example, as at year end 2021, Rothesay invested £30.6bn in UK companies, including investments in critical infrastructure, higher education and social housing. We have actively managed climate risk through portfolio actions, engaging with the 20 issuers with the highest emissions, to ensure we can evaluate and understand their climate strategy and ascribe confidence levels to their reduction targets.

Managing climate risk does not necessarily mean divesting from high emitters. In fact, we will add issuers in whom we have confidence that their emissions will decline in line with appropriate targets in their short and medium term. We are, however, reducing exposure to issuers where we have less confidence in the responsible stewardship of climate risks. We also acknowledge, in the way in which we manage ESG risks, the importance of giving consideration to the social consequences of withdrawing funding from one sector in favour of another.

Our management of these risks has contributed to a reduction in the Carbon Intensity of our portfolio of corporate issuers by 17%, of which 7% was driven by the issuers themselves, demonstrating the effectiveness of our approach to selecting issuers as described above, and 10% from active management of the portfolio. We acknowledge, however, that due to unusual factors resulting from COVID-19 restrictions, this year's large decline may not be regularly repeated without substantive action being undertaken even though this annual decline is of the order of what would be required to limit warming to 1.5ºC.

ESG and asset strategy

In considering ESG risks and opportunities, Rothesay's investment portfolio can be divided into three main groups:

- **Supranational, Sovereign and Public Finance bonds**
- **Corporate Bonds and Infrastructure Lending**
- **Bonds and Loans Secured by Property**

This partitioning is quite similar but not identical to that described in the Annual Report, which distinguishes: Cash & Government Bonds; Infrastructure and other corporate bonds; and Secure, illiquid assets. For example, the relatively small quantity of non-property linked, secure, illiquid assets appear in the Corporate Bonds and Infrastructure Lending group for the purposes of this report. The benefit of doing this is that the three broad sections each lend themselves to a consistent approach to the management and measurement of ESG variables.

Cash and derivatives are not included in our ESG analysis.

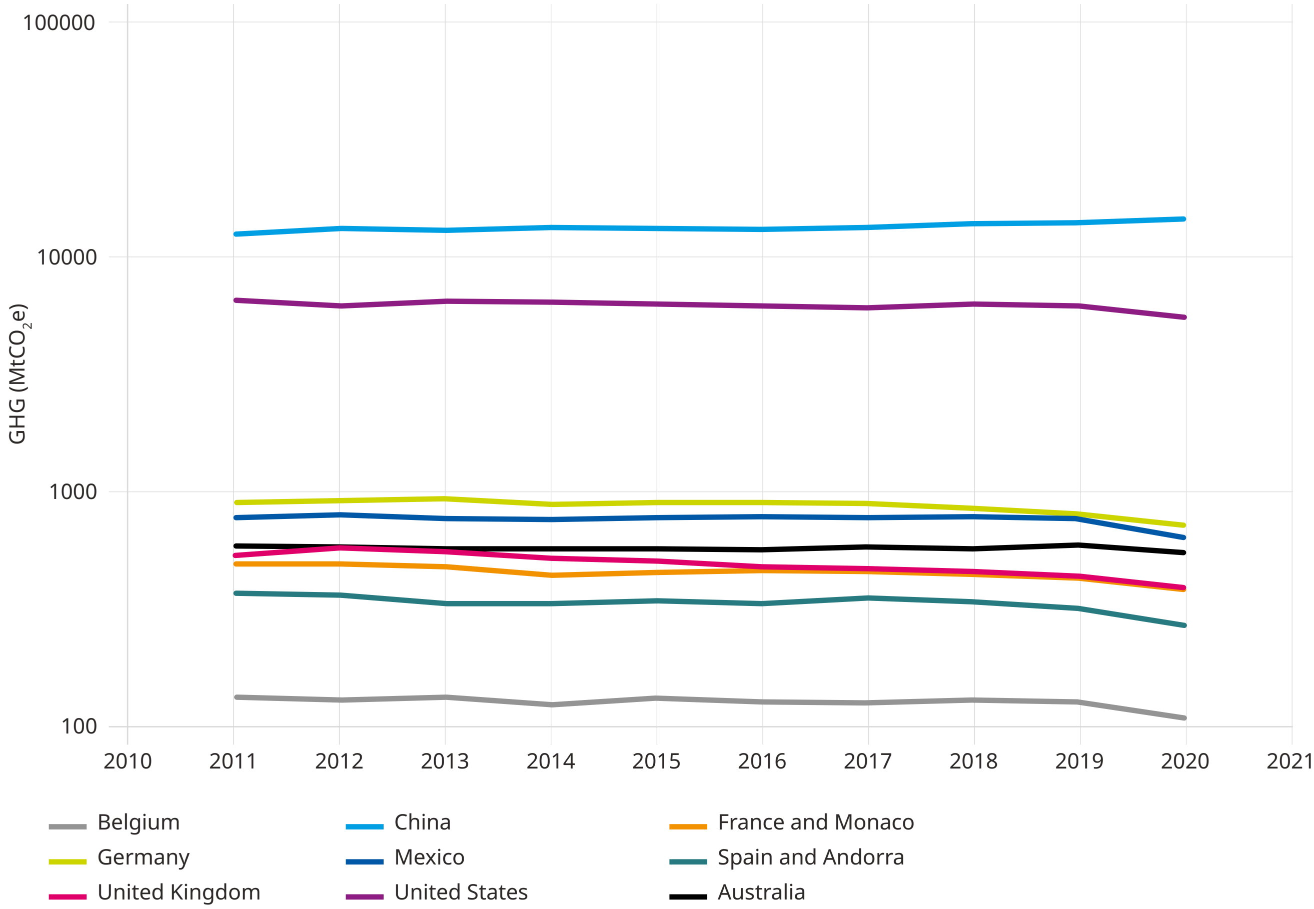
Our strategy
continued

Supranational, Sovereign and Public Finance Bonds

i) Sovereigns

To a large extent, Rothesay's pathway to net zero is reliant on the policy decisions made and implemented by the governments of the countries in which we make investments. 2021 was an important year in the development of national responses to the threat of climate change. First, looking backward, the scale of the COVID-19 pandemic's curtailment of economic activity was revealed to have caused worldwide reductions in greenhouse gas emissions but they came at the expense of a sharp decline in GDP.

GHG (Mt CO_2e)

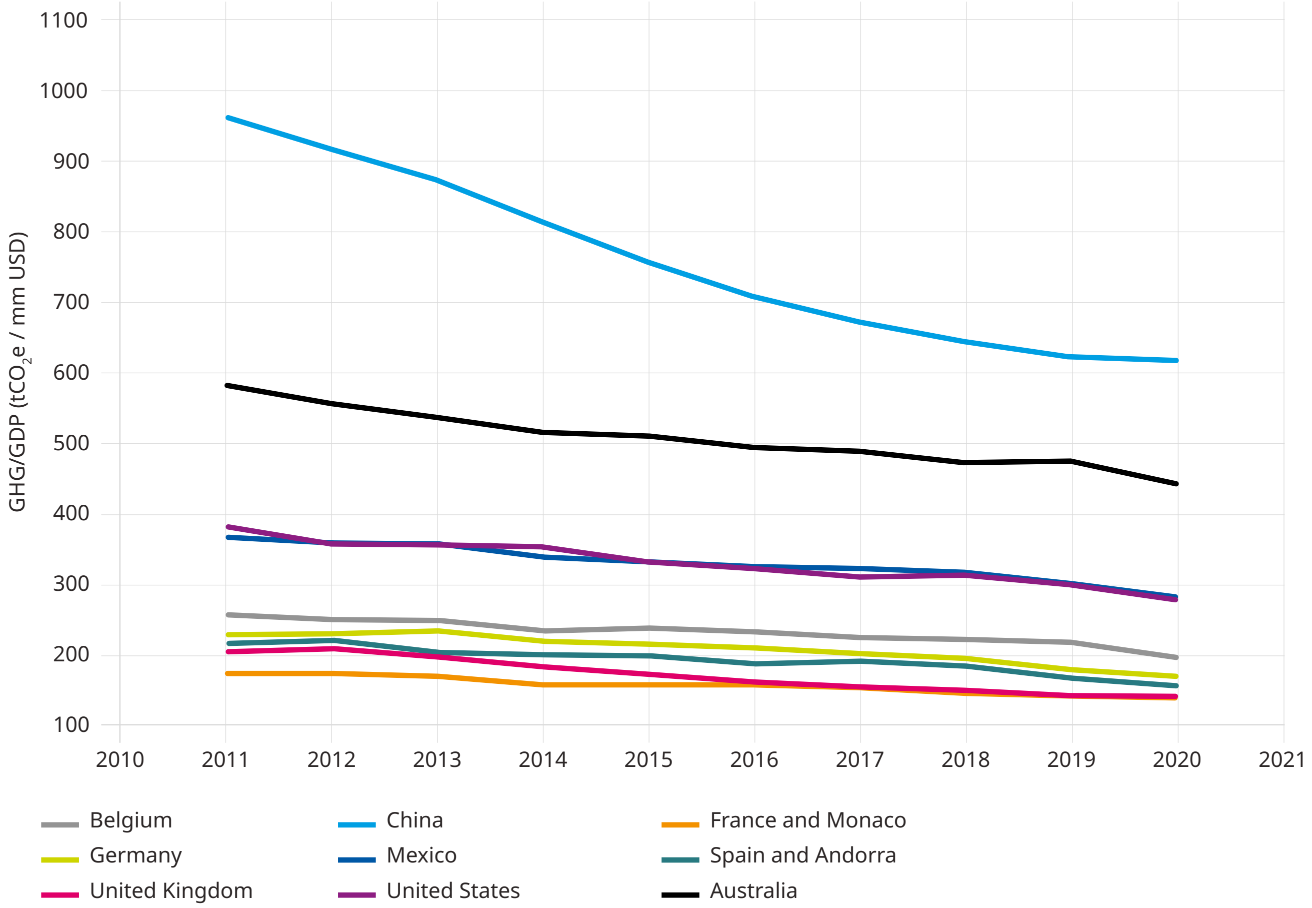


Second, looking forward, in November 2021 the Conference of the Parties held its 26th meeting in Glasgow at which a variety of national pledges were made more ambitious in areas such as coal power, methane, deforestation and electric vehicles. Below we summarise those which are important for the countries most relevant to Rothesay. We include China in our data to provide a scale for the upper end of emissions against which other countries may be compared. Rothesay has no investments in entities domiciled in China but several multinational corporations whose bonds we own do have operations there.

Most countries experienced an above trend reduction in GHG emissions although China, where the pandemic, in its first year, was controlled in a way that avoided the damage to industrial production experienced elsewhere, managed to continue to increase emissions.

Unsurprisingly, given the travel restrictions in place for much of 2020, transport rather than buildings or power generation was responsible for the greatest declines. As economic activity picks up again, we expect emissions to reverse at least some of their declines and so we consider that a more useful trend to follow is that of Carbon Intensity:

GHG/GDP (tCO_2e / mm USD)



Noting that, because dividing by GDP corrects for the relative sizes of countries, we have switched from a log to a linear scale, it is clear that Carbon Intensity has seen only minor variations from the long term trends.

Our strategy
continued

Moving to the pledges made at COP26[1]

- Updated Nationally Determined Contributions were submitted by over 150 nations including all those featured above. Almost 90% of global emissions and over 90% of global GDP are now covered by "mid-century" net zero or carbon neutrality commitments, rising from just 30% of global GDP at the end of 2019.
- Glasgow Leaders' Declaration on Forests and Land Use
  - The key pledge, "We therefore commit to working collectively to halt and reverse forest loss and land degradation by 2030 while delivering sustainable development and promoting an inclusive rural transformation", was signed by all nine sovereigns studied here.
- Declaration on Accelerating the Transition to 100% Zero Emission Cars and Vans
  - The key pledge, "As governments, we will work towards all sales of new cars and vans being zero emission by 2040 or earlier, or by no later than 2035 in leading markets," was signed by two of the nine sovereigns: Belgium and the UK (though neither is a major auto manufacturer).
  - In addition, Mexico pledged, "As governments in emerging markets and developing economies, we will work intensely towards accelerated proliferation and adoption of zero emission vehicles. We call on all developed countries to strengthen the collaboration and international support offer to facilitate a global, equitable and just transition".
- International Aviation Climate Ambition Coalition
  - A commitment to support the development of sustainable aviation fuel and the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) was signed by four of the nine sovereigns: France, Spain, UK and the US.
- Global Methane Pledge
  - A pledge to reduce global methane emissions by at least 30% between 2020 and 2030 was signed by over 100 nations including all of those tracked above with the exception of China.
- Global Coal to Clean Power Transition Statement
  - A commitment to scale up clean power generation, to transition away from unabated coal-fired power generation in the 2030s for major economies and in the 2040s globally, to cease issuance of permits for new unabated coal-fired power generation and to do all this while providing support for affected workers and communities was signed by the European sovereigns on our list but not by Australia, China, Mexico or the US.

We find from the evidence cited above that the UK continues to be a leader at least in committing to address the risk of climate change.

Our liquidity strategy calls for large holdings of Gilts and has the advantage of being further supported by the UK's strong climate credentials and low Carbon Intensity, which offers a useful benchmark for the entire investment portfolio. This, in turn, means that so long as the government pursues the policies necessary to live up to its commitments, our UK asset selection strategy across all sectors can be closely indexed to UK PLC as a whole. In the US and Australia, for example, we are more selective about the sectors and companies we choose as we seek to achieve our climate goals.

1 https://ukcop26.org/wp-content/uploads/2021/11/COP26-Presidency-Outcomes-The-Climate-Pact.pdf

ii) Public finance bonds

US Higher Education

Rothesay's strategy is to lend to financially secure and selective universities whose longevity is assured. These entities are in a position to provide strong social support to the US and worldwide community in many different ways. The social value of universities is self-evident as their purpose is to help to develop an educated population of graduates who can play intellectually demanding roles that help then drive civic and economic advancement. Such colleges and universities also work directly towards reducing social inequalities, enhancing social housing, and in many cases expanding access to healthcare through their medical schools or affiliations to academic medical centres. Typically, such universities pride themselves on their ethical behaviour and have often been leaders in setting strict ESG standards for their endowment portfolios.

All of Rothesay's US Higher Education investments provide some form of needs-blind admissions, admitting students regardless of their financial aid needs. All seven higher education institutions in the U.S. that offer needs-blind admission to all applicants appear in Rothesay's portfolio in recognition that this generosity is only feasible for the most financially secure institutions.

Not-For-Profit Health Systems

Rothesay lends to borrowers in the U.S. Not-For-Profit Healthcare sector which is an essential provider of services as it helps to fill the gaps in healthcare and social welfare services not provided by the US government. By their very nature, the core purpose of these borrowers directly addresses the social component of ESG.

The social benefits provided by health systems can include expanded, affordable and high quality access to care, uncompensated care, community grants/donations, investments in diverse and small business programmes, affordable housing and support of communities' aging population and mental health needs. According to the American Hospital Association, US tax-exempt hospitals provided $105bn in total direct benefits to their communities (excluding economic impact) which was ~13.9% of total hospital expenses in 2018. US Not-For-Profit Health Systems were at the epicentre of the COVID-19 pandemic, providing elevated levels of social support as well as treating indirect social risks of the pandemic.

Many of the organisations funded by Rothesay are addressing disparities in healthcare outcomes between socioeconomic groups and do this by undertaking annual health needs assessments for the different communities within their catchment areas. For example, BayCare Health System in Florida now provides expanded access to medications, behavioural health and substance abuse services having identified these needs in their 2016-2019 assessment[2]. Additionally, many health systems are the largest employers in their communities providing strong employment opportunities while promoting diversity and inclusion. For example, in 2019, Cleveland Clinic directly and indirectly supported $34.55bn of economic activity in the US through its ongoing operations and construction activities[3]. In an effort to better serve a broad demographic range of patients and their families, it is common for hospital networks to encourage a diverse workforce. Again Cleveland Clinic is an example, with its Office of Diversity and Inclusion working to improve the quality of employee-patient interaction thus helping to achieve health equity.

2 https://baycare.org/about-us/community-benefit-and-community-health-needs
3 https://my.clevelandclinic.org/about/community/reports/economic-impact-report

Our strategy
continued

Corporate bonds and infrastructure lending

Our climate strategy with respect to corporate bonds is broadly unchanged from last year. We continue to invest in a diversified portfolio of corporate bonds, including regulated infrastructure such as water, energy and transportation. We have recently published a Responsible Investment Policy which can be found online[4]. The policy makes clear that we prefer to analyse the individual ESG characteristics of each investment rather than relying on blanket sectoral exclusions, as we do not believe that rapid total divestment is an optimal strategy for either limiting climate change, or indeed in achieving other desirable ESG impacts. In addition, we want to retain the flexibility to be able to support plausible transition projects at entities we may currently avoid. In line with our NZAOA membership, however, we have decided to adopt an exclusion in relation to certain coal financing. We have also recently introduced an exclusion related to Controversial Weapons. Both policies are described under the Exclusions heading in the Risk Management section below.

Rothesay, in line with its Responsible Investment Policy, monitors its investments in carbon intensive sectors in order that the emissions of our portfolio as a whole can be aligned with our climate goals. Furthermore, within each carbon intensive sector, through detailed consideration of individual corporate strategies, we try to identify those firms most likely to adapt to a low carbon world. We are also alert to risks associated with companies that, while not highly emitting themselves, have significant emissions in their supply chain.

This involves detailed credit work studied through a climate lens. Where we identify climate risk, we may limit our investments both in size and maturity while lending in the most liquid corporate bond format so that adjustment can be made when outlooks or circumstances change long before default or downgrade. Within the timespan covered by much of Rothesay's corporate bond portfolio, the risk is less to the vulnerability of a company's buildings and plant to physical climate risk (such as flood or storm damage) than to transition risk, or the impact of governments regulating the transition to a low carbon economy and change in consumer preferences. However, where it is important, we also consider the location and vulnerability of key assets, particularly infrastructure.

Rothesay supports the UK government's new Energy Security Strategy and its goals of long term energy independence and decarbonisation of the power supply. Many of the potential projects outlined in the strategy will issue investment grade bonds that will be a good match for our liabilities and align well with our carbon reduction, and broader ESG, objectives.

Bonds and loans secured by property

Among our secured illiquid assets most are backed by property, principally UK and Dutch residential real estate as well as commercial real estate in the UK, US and Australia.

Our climate strategy with respect to property backed investments is unchanged since last year. Their location is such that the risk of wildfire is low but an assessment of flood risk is undertaken prior to lending and we have worked with a consultancy firm, Ambiental, to conduct climate scenario analysis in which possible flood maps of the future are used to understand which buildings currently thought to be safe from inundation may become susceptible with differing degrees of global warming.

4 www.rothesay.com/media/k54ab22w/responsible-investment-policy-2021.pdf

Our strategy
continued

Property is also not immune from transition risk and Rothesay is alert to the possibility of government regulation requiring energy efficiency improvements or resulting in a change in demand for property use. Indeed, the UK already requires a residence to have an EPC rating of E or better if it is to be rented out, and the government is consulting on strengthening this standard to a rating of C or better. Rothesay has continued to gather more data and has been able to improve the granularity with which we estimate emissions based upon a property's location, type and value. We have reassessed our possible losses in a scenario in which minimum EPC standards must be met prior to the sale of a house and have added two other stress tests drawn from the PRA's recent CBES exercise.

The results of both physical and transition stress testing are presented under the Scenario Analysis heading in the Risk Management section of this report but the high level conclusion, just as with the PRA mandated climate scenario test conducted in 2019, is that we find no cases in the current suite of tests in which Rothesay experiences losses that exceed existing capital requirements for any area of the business.

Social housing

With almost nine million people in England estimated to have some form of housing need, there is an urgent requirement to provide homes for people who cannot otherwise access one. Regulated housing associations play a crucial role in developing and maintaining the nation's social housing stock. Rothesay has invested in social housing since 2012, and has worked with the sector over the best part of a decade to lend close to £6 billion to over 60 housing associations. Our continued investment in social housing aligns with our ambition to invest in projects that both support the pensions of our policyholders and provide wider social and environmental benefits. Funding to social housing providers can help build more affordable homes, rehabilitate local communities and improve the energy efficiency of existing homes to meet the government's net zero carbon target.

In the current landscape, housing providers have a number of competing priorities including the requirement to carry out fire safety remedial works, greening their existing stock, building new homes and continuing to contribute positively to the lives of their tenants. Given the nature of these priorities, housing associations are increasingly issuing social and sustainable bonds to support their strategy.

By year end 2021, Rothesay had invested in £399 million in bonds issued by housing associations for which proceeds are explicitly earmarked for sustainable or social purposes. We will continue to pursue investment opportunities in the sector that generates real social value.

As a leading lender in social housing, Rothesay is committed to supporting increased levels of sustainability performance across the sector. Clear and consistent reporting is vital in achieving this which is why, as we announced in last year's report, we're pleased to be an early adopter of the Sustainability Reporting Standard (SRS) for Social Housing. The SRS was co-created by both the housing and financial sectors and as at 1 May 2022, 36 lenders and 68 housing providers have adopted the SRS.

In its first year, the SRS has allowed for increased visibility of the sector's commitment to sustainability. We are utilising the output from the SRS to understand how ESG is integrated into business operations as well as future planning to improve ESG performance and manage sustainability risks. The SRS has affirmed our view that investing in the sector is a force for good which also has a clear social purpose and helps shape communities across the UK.

Climate change and longevity risk

As the UK's largest specialist pensions insurer, our liabilities are the pension annuities we secure which originated from pension schemes and other insurers. As such, the considerations required to assess ESG risk and opportunities are different from those we make for our asset side investments.

The most significant risk that Rothesay runs on the liability side of the business is to the longevity of its policyholders. All the other risks, such as to inflation and interest rates, are very closely hedged and while longevity risk is, to a large extent, also reinsured, residual exposure is retained by the Group.

For climate scenarios in which global warming continues but is kept to within non-catastrophic levels, we would intuitively expect the number of deaths associated with low winter temperatures to decline. This may translate into a marginal increase in longevity, though it could result merely in a flattening of the existing seasonality effect. The lower CO_2 emissions in this scenario are likely to be associated with reduced particulate pollution, improved respiratory health and further extended longevity.

In climate scenarios where emissions, and hence warming, are not brought under control, the prospects for mortality could become severe. The effects on respiratory and circulatory medical conditions of prolonged summer heatwaves may outweigh those of milder winters. In the most extreme scenarios one could imagine the elderly losing out in a competition for resources intensified by mass migration from the world's most badly affected areas.

Rothesay's longevity risk is overwhelmingly UK based and a combination of two factors leads us to believe that climate risk does not need to be considered when selecting which pension schemes we insure. First, no matter what the ultimate effect of climate change on longevity, we expect a fairly uniform outcome across Britain, and second, even if there are some very local effects such as flooding, the geographical spread of annuitants in any one scheme is wide enough for us to avoid a concentrated risk.

Our approach to the identification and management of ESG risks is guided by our Risk Management Framework and Responsible Investment policy. Rothesay directly manages all its investments, allowing for an approach to managing ESG and climate risk that can be customised in detail. In most cases, we prioritise engagement with issuers and investment selection, rather than pursuing a simple divestment strategy and undertake case-by-case analysis to understand our own and our issuers' exposure to ESG risks.

Our approach to risk management

Our approach requires the application of clear risk management processes at point of purchase and through the duration of our investments. The treatment of ESG risk has been specifically embedded within existing frameworks, with heightened scrutiny triggered as ESG risk increases. Strategies such as investing for shorter durations and in more liquid instruments may be considered for higher risk issuers to ensure we retain more flexibility to manage risk in these circumstances, where issuers fail to make or meet appropriate commitments.

ESG screening

Initial trade screening identifies issuers which are exposed to material ESG or climate risks.

Rothesay's approach to the integration of climate factors, where they are material within our investment decision-making, is to focus on financing the shift to net zero by preferentially investing in entities with clear transition plans and which are instrumental in effecting real world emission reductions.

All companies are exposed to some form of climate risk. However, inherently some issuers will have greater potential exposure to climate risk based on their activities, locations and regulation/policy focus. Acknowledging this, Rothesay has developed a climate screening approach to identify entities with elevated climate risk for which more detailed analysis is undertaken. The assignment of scores for comparison across our portfolio allows an additional lens to support our identification of priority issuers with which to engage on climate issues.

This climate score supports our assessment of an issuer's exposure to transitional and physical climate impacts. It supplements the current (spot) Carbon Intensity measure and builds our understanding of the scale and effectiveness of an issuer's transition strategy. A score is allocated to all issuers within the portfolio based on the materiality of climate impacts. It provides a quick and easy way to understand climate exposure within the existing framework and is updated as performance of an issuer evolves.

An issuer is deemed to be exposed to elevated climate risk for a number of factors: operating in a sector associated with elevated emissions; high Carbon Intensity and high physical risk exposure. The scores reflect factors such as current emissions and sector challenges, and overlays 'transition factors' such as issuer responses in terms of targets, track record and progress towards green technology.

As outlined above, due to their activities, some sectors are more likely to face elevated climate impacts. In order to identify and monitor these sectors, we undertake an annual review of Rothesay's portfolio in which we consider the concentration of emissions alongside analyst opinions of the industry concerned. The sectors of the Corporate Bond and Infrastructure Lending sub-portfolio that we currently deem most material are:

- Automotive
- Aviation
- Construction
- Land Transport (Road)
- Mining & Metals
- Oil & Gas
- Shipping
- Steel
- Utilities

Rothesay's exposure here is relatively low with c.8% portfolio allocated an elevated climate score based on activity in one of these sectors of which utilities form the bulk.

The property sub-portfolio has potential exposure to both physical and transition risks. As mentioned in the strategy section, specific property screening for flood risk is undertaken initially as part of standard direct lending activities and revisited in regular scenario analysis. Our potential financial exposure to transition risk is estimated by conducting scenario analysis that allows for changes to energy efficiency rules.

Wider ESG factors, such as involvement in controversies, are embedded in our credit analysis process because impacts from these factors are often current, event driven, result in public commentary and can lead to financial impact. Often an issue will be specific to a particular issuer and not necessarily a consideration for an industry or sector as whole.

This means that risk management is done on a case by case basis and that constant monitoring of the news flow is required. This has the potential to be labour intensive and so we have sought to formalise our activity in this area by introducing a controversial activities screen which utilises the Vigeo-Eiris ESG tool. While it is more common for this analysis to lead to rejection of lending to an entity that is new to Rothesay, there have been occasions where companies that passed initial screening have subsequently been found to exhibit behaviour that has led to re-evaluation and, in some cases, swift divestment. As an example of the former, we declined to extend a loan to a banking entity, which satisfied our return and creditworthiness criteria, because we were unable to have confidence in a senior management team that badly mishandled a case of executive sexual harassment. An example of the latter concerns our holdings in a utility company which were sold as soon as we became aware of fraudulent links between executives and government officials for the area in which the company operates.

We have in most cases not sought blanket policy bans on lending to entities with some aspect of their business regarded as controversial as the identification of controversial activities remains highly subjective. Indeed, involvement with civilian firearms or reproductive health, for example, which one investor may view as negative may be seen positively by another. The presence or absence in the Rothesay portfolio of an issuer engaged in such activities reflects the firm's assessment of the corresponding financial risk rather than reliance on the moral judgement of any subset of our employees.

Due diligence

Alongside the analysis undertaken by Credit and Trading, our Compliance team conducts "know your customer" style due diligence on borrowers new to the firm using a risk-based approach dependent on sector, jurisdiction and nature of the parties.

All due diligence includes the consideration of ESG factors, where this may either have a reputational impact or regulatory compliance implications. The factors considered depend on the sector concerned. We acknowledge that specific disclosure requirements relating to ESG are currently still in their infancy, with those surrounding climate change being the most developed while those on wider ESG themes are generally yet to be fully implemented in the UK. However, there are several areas of existing legislative and regulatory requirements that drive how we consider proposed investment opportunities from an ESG perspective, including the Modern Slavery Act 2015, various legal and regulatory requirements relating to Financial Crime (see page 75), UN Guiding Principles on business and human rights and OECD guidelines.

Our approach to risk management

continued

Case Study

Due diligence for a blended finance project

Rothesay has reviewed a number of blended finance arrangements which, due to their scope and structure, can lead to the need to consider ESG implications in more detail.

The purpose of blended finance instruments is to incentivise greater private sector funding for infrastructure projects in emerging economies. Blended finance arrangements typically look to achieve this by placing the majority of the financial risk on the public sector funders, for example by structuring the public sector lenders in the first loss tranche, alongside the inclusion of guarantees to protect private sector financing in the event of default.

Typical questions raised in relation to infrastructure projects where blended finance is proposed include:

- Weight of socio-economic benefits provided by the project against its impacts, including relocation of local communities and agriculture.
- Political stability and human rights record of the country whose public body is seeking funding.
- Financial Action Task Force (FATF) assessment of the adequacy of the country's anti-money laundering and terrorist financing controls.
- Consideration of any mitigation in place to address specific risks, such as ESG due diligence reports and impact assessments.

A case in which Rothesay conducted a specific assessment was a proposed trade between private sector investors and a continental European government, relating to a loan to fund the re-development of a mine in an emerging economy.

The mine was used to produce nickel and cobalt needed for green battery technology products and its re-development was required to prolong its operating life beyond 2024. Whilst the project product outcome is aligned with supporting green transition, the mining industry is considered high risk for bribery and corruption, particularly in the context of obtaining contracts and permits for mining projects in emerging economies. Therefore, as part of enhanced due diligence, an investigation into bribery and corruption was undertaken which examined:

- Local state investment in the mine (separate to the blended finance arrangement proposed) with a lack of transparency over the local government officials' involvement and allocation of Board seats.
- High risk indicators for bribery and corruption that had been identified through compliance screening of the firm with significant control over the project.

In addition to this, compliance also raised concerns of greenwashing, namely the inclusion of both ESG assessments and details of a solar farm in the prospectus with no evidence provided either that the ESG assessments had been completed or that procurement processes for the solar farm had been started or would be covered by the loan being sought for the project.

The decision was made to not finance this project because we were unable to satisfactorily resolve our ESG-related compliance concerns.

> **Read more from page 27**

Exclusions

Following the principles set out in Rothesay's Responsible Investment Policy leads us to having no holdings in many issuers and industry sectors that appear on typical exclusion lists without the need for explicit individually tailored exclusions. While we believe we can use our influence as a lender to engage with the companies in which we invest to drive positive developments, there are currently two areas in which we have blanket exclusions in place with respect to certain investments: coal and controversial weapons.

Coal

- Rothesay does not support the financing of any new thermal coal activity, including funding of new thermal coal plants or continuation with plans in preconstruction.
- Where issuers have coal exposure, we actively target those with clear plans to have minimal coal exposure by the commonly accepted coal exit timeframes of 2030 in OECD countries.
- We support a 'Just Transition'[5] in our approach, and acknowledge the interconnectivity of ESG issues relating to activities such as reduction in coal production. We therefore seek to understand an issuer's coal exit plans through analysis and issuer engagement, with greater credibility given to those with clear closure dates and consideration of employee redeployment.
- This exclusion is in line with our membership of UN PRI and the NZAOA and we note that climate risk management is evolving rapidly, so our strategy will continue to develop to ensure we protect our policyholders and manage to our long term ESG and climate commitments.

Controversial weapons

Although there is no nationally or internationally agreed definition of "controversial weapons", controversial weapons are generally understood to be those weapons that have an indiscriminate and disproportionate humanitarian impact on civilian populations. A number of international conventions and treaties have been largely adopted by countries to prohibit the use and availability of controversial weapons. Rothesay screens the portfolio and any new investments using a third party service provider to support exclusions in line with the following definition of "controversial weapons".

- Rothesay considers, in line with the UN convention on certain Conventional weapons[6], the following sub-set of weapons to be "controversial weapons":

  a) Cluster weapons

  b) Mines and Booby Traps

  c) Biological weapons

  d) Chemical weapons

- Rothesay will not knowingly finance any company[7] where:

  – such company is involved in the production, selling and/or distribution of (parts for) controversial weapons; AND
  – where such involvement concerns the core weapon system, or components/services of the core weapon system that are tailor-made and essential for the lethal use of the weapon.

Incendiary, lethal autonomous or nuclear weapons

If a company, or any company in its group, in which we invest or are considering investing, is identified by outside bodies as being involved, or we otherwise discover is involved, in incendiary, lethal autonomous or nuclear weapons, our investment decision (or decision to continue investing, as applicable) will include an investigation into the exact nature of that involvement.

5 As outlined in Paris Agreement, a Just Transition is defined as 'the movement towards an environmentally sustainable economy which is well managed and contributes to the goals of decent work for all, social inclusion and the eradication of poverty.
6 www.un.org/disarmament/the-cnvention-on-certain-conventional-weapons
7 In case of indirect involvement through ownership; the company is captured by the statement if the ownership exceeds 35%.

Our approach to risk management
continued

Portfolio surveillance

We manage our overall portfolio exposure to climate risk with reference to quantitative indices (e.g. the Carbon Intensity of the portfolio) and monitor this at portfolio, sector and individual issuer level. We also manage our climate risk exposure at the issuer level by assessing ongoing developments in their climate risk management strategy and performance against target metrics, including Carbon Intensity and emissions reductions. This aligns the risk management of our investments for the benefit of our policyholders, with real-world decarbonisation. Susceptibility to non-climate related ESG risks is tracked by monitoring news flow and in particular screening and the alerts issued by our vendor Vigeo-Eiris.

- The climate score for issuers will be regularly updated to reflect current climate commitments, as well as performance against these targets. This classification will also support our understanding of the level of climate risk within our portfolio, by analysing and reporting the distribution of issuers allocated each climate score to the Executive and Board Risk Committees.
- As part of our business as usual credit assessment processes, we continue to ensure that ESG driven events, which may result in a credit rating change, are assessed by analysts to understand any potential impacts.
- We use our ESG vendors to monitor ongoing compliance with our exclusion policies, responding to relevant news flow and conducting a formal annual review of the portfolio. In the event an entity is flagged as non-compliant, we endeavour to exit our position within 90 days, subject to market conditions. We note that sale may not be possible in certain circumstances.

Where Rothesay funds the origination of mortgages in the UK, our lending criteria include a specification of the type of properties that are acceptable including factors such as construction, location and environmental perils such as flood risk. For internally rated assets, any ESG risk that is material to the credit risk arising during the life of the transaction is also expected to be captured during the review of the internal credit rating assessment.

Engagement

Rothesay believes engagement with issuers (including borrowers in loan agreements) is a critical part of ESG risk management. Fruitful engagement can encourage more sustainable issuer practices to help secure long-term financial returns.

As our approach is to promote a real-world impact by supporting the transition to a low carbon economy, Rothesay seeks to engage with issuers to encourage this outcome. We also recognise that policy responses are evolving rapidly as companies adapt to challenges of managing ESG risks. As a lender rather than an equity investor, Rothesay has a limited ability to influence a company's activity by proposing or voting on shareholder resolutions. Nevertheless, we have, on a number of occasions, successfully obtained additional disclosure from companies about emissions or strategy that has been useful in making the decision whether to continue as a bond-holder.

As a signatory of both the UN PRI and NZAOA, we have committed to responsible engagement with firms in our portfolio. Our current approach is focused on individual engagement with the most material issuers in our portfolio to support greatest alignment with our climate commitments. We have hit a target to engage with a minimum of 20 of our most material climate issuers annually, representing more than 65% of emissions associated with the NZAOA sub-portfolio (defined on p42).

Issuers targeted for engagement are identified based on contribution to overall portfolio CI, degree to which their climate strategy lags their sector average, elevated climate score and lack of Paris aligned transition plans. This list is reviewed annually. Engagement targets may be identified for engagement throughout the year.

Engagement focuses on gaining additional information on gaps identified through our issuer screening to support our internal assessment. Whilst we aim for our engagement to encourage issuer change, due to Rothesay not holding equity positions, our engagement takes place via conversation with identified issuers. Areas of recent focus have included:

- Additional emission data disclosure (e.g. Scope 3 emissions).
- Ambitiousness of targets including science-based target alignment.
- Transition plans including green technology investments.
- Involvement & response to controversies, or controversial activities, e.g. coal exit strategy.

We then continue to engage with those identified issuers on an on-going basis as we track their performance against the actions raised, along with the impact on their credit fundamentals. Where actions are not being taken, where there are no clear improvement plans, or we see increasing financial risk, we may consider whether to take one of the following actions:

- Adjust or sell position.
- Contact the issuer and request more disclosure.
- If we are negotiating a bilateral loan, consider the inclusion of ESG covenants, which can include committing the borrower to disclose or meet certain standards, such as green loan standards.

Our approach to engagement will continue to develop as industry guidance and regulatory requirements regarding disclosures evolve, data quality improves and our approach matures.

Scenario analysis

Rothesay continues to develop its approach to climate change stress testing, which forms a key component of our risk management framework. We use climate scenarios to further explore, understand and model how physical climate change and the transition to a low carbon economy could affect the future value of our asset portfolio.

At the time of writing this report, climate scenario analysis techniques and supporting data remain relatively immature, and practices are likely to evolve considerably in the coming years. Furthermore, a significant range of assumptions are required regarding the behaviour of companies, consumers and governments, which increases uncertainty regarding outputs and also limits the scope of stress testing in some cases. Nonetheless, we are still able to utilise scenario analysis in its present form to help substantiate our views of the relative climate riskiness of sectors and also companies within a particular sector.

Stress testing our corporate bond and infrastructure lending portfolio

The Intergovernmental Panel on Climate Change (IPCC) has identified a number of potential future climate scenarios that cover a broad array of energy systems and decarbonisation pathways. A closely related set of scenarios, adapted to be directly relevant to the financial sector, have been developed by the Network for Greening the Financial System (NGFS). In these, climate outcomes have been translated into impacts on macroeconomic variables, government policy and certain asset prices. This, in turn, allows potential impacts on company revenue and expense streams to be modelled.

Rothesay has selected the three scenarios published by the Bank of England for its Climate Biennial Exploratory Scenario (CBES) exercise as the foundation for our current round of scenario analysis. We chose these in order that our work be directly comparable with that done by firms participating in the CBES despite the fact that the below 2°C scenarios are not necessarily consistent with a 1.5°C outcome. Each of the three scenarios represents a different possible climate future over a 30-year horizon, encompassing the global energy system and economy and implying differing levels of physical and transition risks. Further information on the three scenarios is provided below:

Early Action	Late Action	No Additional Action
Transition Risk = Medium	Transition Risk = High	Transition Risk = Low
Physical Risk = Low	Physical Risk = Low	Physical Risk = High[8]
The transition to a net zero emissions economy starts in 2021, with policies gradually brought in over the scenario horizon. As a result, global warming is limited to below 2°C by the end of the scenario.	Implementation of the policies required to drive transition are delayed until 2031. Consequently, policy introduction is more sudden and disorderly. Global warming is limited to below 2°C by the end of the scenario.	No new climate policies are introduced beyond those already implemented. Without action, greenhouse gas emissions continue to rise, leading to global warming of over 3°C by the end of the scenario.

8 In the CBES scenarios, physical risk variable changes are accelerated by 30 years in the No Additional Action pathway. Physical risk changes in the Early Action and Late Action pathways are assumed to be equal.
9 This report has been created by Rothesay drawing on selected data provided by Planetrics, a McKinsey & Company solution (which does not include investment advice). This report represents Rothesay's own selection of applicable scenarios selection and/or and its own portfolio data. Rothesay is solely responsible for, and this report represents, such scenario selection, all assumptions underlying such selection, and all resulting findings, and conclusions and decisions. McKinsey & Company is not an investment adviser and has not provided any investment advice.

Modelling the impact of climate scenarios

We assessed our portfolio against the CBES scenarios by translating changes in the energy system, economy and physical impact into impacts on asset values drawing selected data provided by Planetrics, a granular bottom-up climate scenario model[9]. Planetrics consider a range of climate impact channels to estimate valuation forecasts, including potential demand impacts for products and also carbon mitigation costs. The impacts on revenue, earnings and costs that result from the economic shocks are summarised by eight impact channels, providing a way to interpret the results of scenario analysis:

Transition impacts

1. **Demand destruction** – Contractions in demand for the services/products of a company due to the effect on consumer behaviour of changes in climate policy, as part of the movement to a low-carbon economy.
2. **Demand creation** – Growth in demand for companies who are likely to benefit from increased carbon costs. This covers renewable equipment, Ultra Low Emission Vehicles and battery cell manufacturing, biofuels and green minerals.
3. **Direct carbon costs** – The direct cost burden companies face due to increases in the cost of carbon. These impacts are quantified for individual issuers by using data on Scope 1 and 2 emissions.
4. **Abatement** – The ability of a company to adapt in order to relieve the cost burden of increases in carbon pricing, reducing its cost exposure to transition risk.

Physical impacts

1. **Chronic physical impacts** – Physical impacts caused by long-term shifts in climate patterns, such as rising average temperatures. These impacts are modelled as direct shocks to the productive capacity of various sectors in a country's economy.
2. **Acute physical impacts** – Event-driven hazards, such as extreme flooding, and the changes in the frequency and severity of these events.
3. **Adaption** – The ability of a company to reduce its exposure to physical risk, such as installing coastal dikes to protect against flooding.

Combined impacts

1. **Market impacts** – The ability of a company to reduce the financial costs of climate risks such as passing through costs to consumers. These impacts are heavily influenced by the competitive dynamics of the market in which a given company is active.

Finally, the projected change to a given issuer's income and balance sheet is then used to estimate any changes in credit rating and probability of default. From this, the model is able to adjust the expected payments for each issuer and provide us with updated bond valuations for our portfolio under each climate scenario.

Scenario analysis

continued

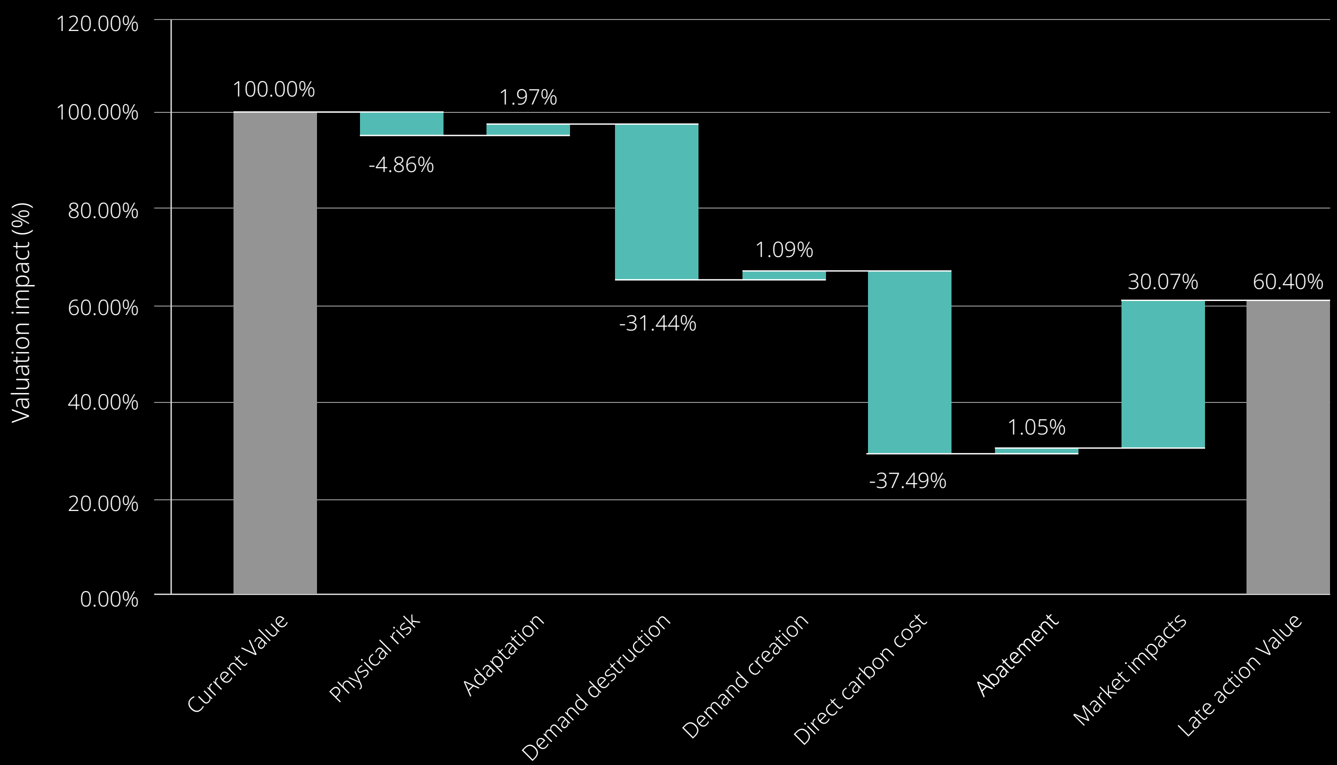
Comparing our issuers using scenario analysis

As mentioned above, climate scenario analysis is still developing and carries a number of limitations, including a lack of reliable data and challenges in fully capturing the financial impacts that climate change could have on a particular portfolio. Most scenario analyses that our business conducts specify a direct and immediate adjustment to credit spreads or interest rates or other financial variables that directly affect the valuation of our assets and liabilities. The ambition for financial climate scenario analysis is to build on the already complex modelling that leads from increased concentrations of emissions to predictions for the behaviour of the planet to include the likely response of regulation and policy and to further estimate the corresponding reactions of businesses and the price of the securities they may have issued. All this is to be carried out over a period of 30 years or more. Inevitably there are quantitative, albeit highly subjective, decisions to be made at every step in this modelling. In other words, over a 30-year horizon, there ends up being a certain amount of "fine-tuning" among the positive and negative impacts listed above that means the margin of uncertainty in the resulting state of the Rothesay balance sheet is too large for us to report with the confidence we would like.

Instead we believe that it is more helpful and instructive to publish the qualitative finding that the losses attributable to climate change in both the PRA 2019 climate scenarios and our internal 2021 scenarios are far less material than the losses attributable to all causes (e.g. credit losses and longevity improvements) assessed by our existing internal model for capital. We understand from the recently published results of the PRA's CBES exercise that this outcome is common across the industry.

We have chosen to present an example of how we are using the outputs of scenario analysis to compare the different impacts that a climate scenario could have on two issuers that operate in the same sector[10].

Company A

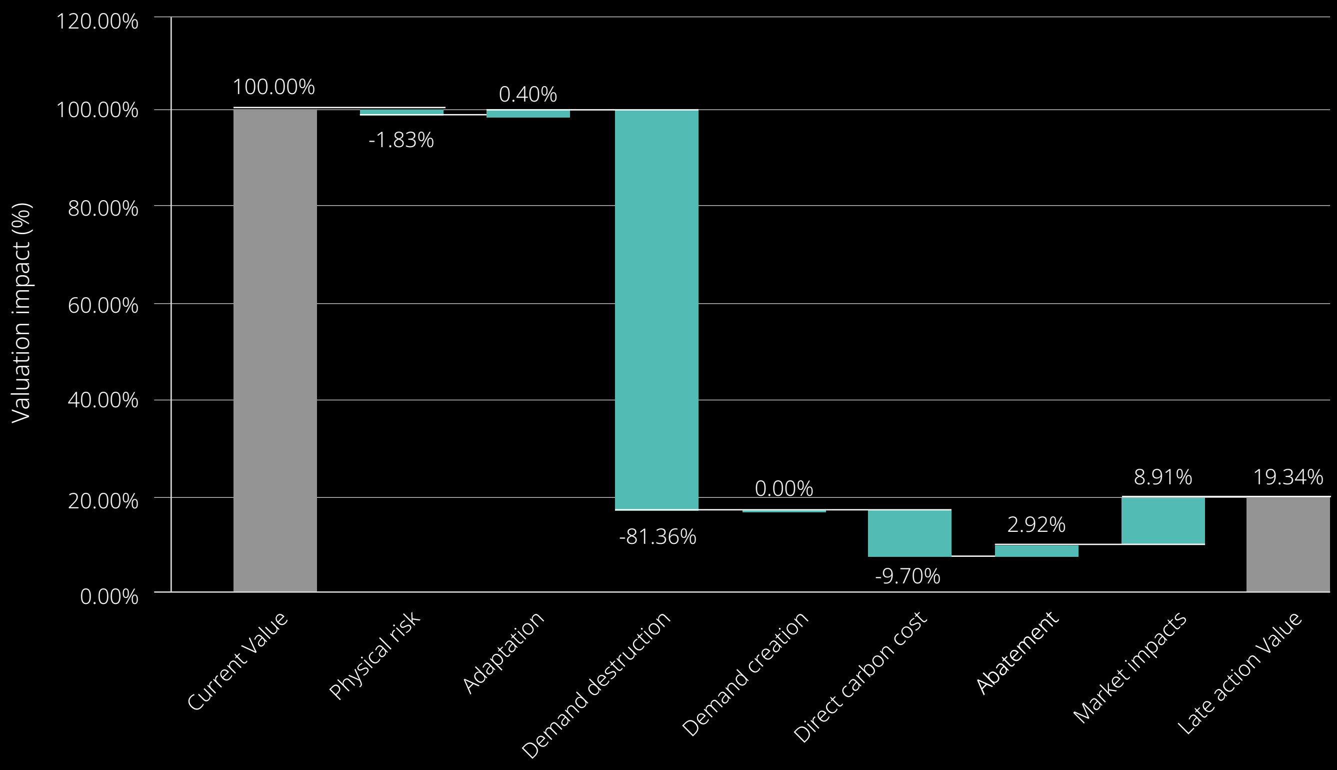


The below graphs highlight the climate scenario impacts experienced by two anonymised companies in the oil and gas sector. We have elected to use the late action scenario for this report, as issuers in the oil and gas sector are most likely to be financially impacted by a rapid movement to a low-carbon economy.

Some information on both companies is also provided below:

- Company A is an integrated oil major with a wide range of operations (including refining, chemicals and trading).
- Company B is more limited in its operations, focusing solely on exploration and the extraction of oil and gas.
- Company A has lower production costs than Company B.

Company B



10 These graphs have been created by Rothesay drawing on selected data provided by Planetrics, a McKinsey & Company solution (which does not include investment advice). These graphs represent Rothesay's own selection of applicable scenarios selection and/or and its own portfolio data. Rothesay is solely responsible for, and these graphs represent, such scenario selection, all assumptions underlying such selection, and all resulting findings, and conclusions and decisions. McKinsey & Company is not an investment adviser and has not provided any investment advice.

Scenario analysis

continued

Our climate modelling allows us to rationalise and explain the differing results for Company A and B by isolating each individual impact channel.

Physical risks and adaptation – Differences in physical risk pertain to the locations in which each company operates, driven by acute damage due to changing weather patterns. Our scenario analysis assumes that both companies have access to insurance providers to mitigate the costs of physical risk, but that premium levels will rise to reflect the increased physical risk associated with climate change.

Demand destruction – In the late action scenario both companies lose revenue as customers must look for alternative energy sources, such as wind and solar. As consumer demand for oil and gas reduces, so too does their end price. This will more negatively affect companies who have higher costs of production, in this case Company B, resulting in a higher number of stranded assets and increased margin destruction.

Demand creation – Company A receives a slight increase in customer demand from its investments in low carbon businesses, which grow as the economy decarbonises. Company B sees no increase in demand, reflecting its lack of investments in renewables.

Direct carbon costs – Carbon costs for Company A are more material on the remaining business after accounting for demand destruction impacts. This reflects that company B faces higher profit impacts from demand destruction and therefore has fewer assets remaining. Relative to Company A, Company B sees less profit impact on its lower base of remaining assets.

Abatement – Although the oil and gas industry is highly exposed to direct carbon costs, there are a number of abatement opportunities that Company A and B could use to mitigate their exposure to transition risk, such as carbon capture.

Market impact – Company A receives a greater positive contribution from the market impacts channel, implying that it is better equipped than Company B to pass through the costs of the late action scenario through to the end consumer.

The valuations to which the charts refer are of the companies' equity. We found that a further weakness of our modelling was in the translation of equity impact to credit rating and consequently debt valuation.

Conclusions and next steps

Climate stress testing is an important and evolving component of Rothesay's risk management framework. Although our modelling process continues to develop, early outputs are being used to support our sector deep dives and help inform our investment strategy.

At Rothesay, we understand the benefits that robust climate scenario analysis can bring to our business so we will now look to build on the good progress we have made this year and learn from the industry experience gained from participation in the CBES in order to refine our approach.

Stress testing our property portfolio

Physical risk modelling

Physical climate change risk is of particular importance for our property related investments, especially given the recent IPCC report which acknowledges that the acceleration of climate change is increasing the growing intensity and impact of climate events. The location of the properties underlying Rothesay's loans mean that flood risk is much more material than other physical risks such as wildfire and wind storm. We have undertaken flood assessments on our property portfolio as outlined below:

As described in our 2020 ESG report, we have undertaken various flood assessments on both our Dutch and UK mortgage portfolios, and more recently we have reinforced this work using data provided by Ambiental to give us a detailed mapping of the current and future flood risk under various scenarios. This investigation included both residential mortgages and commercial real estate loans.

We found that across our UK portfolio the number of properties which move into the highest flood risk categories by 2055 in an RCP6.0 scenario is very small. For example, the portion of the houses to which we are exposed via equity release mortgages deemed to be at very high or extreme risk grows from 3.5% currently to 4.4% by the end of the scenario. This does not pose a significant financial risk but we now have a tool that can be used to adjust our underwriting so that we do not unwittingly concentrate lending in any of those few areas which are exposed to little immediate risk but may be suffer from increased severity and frequency of flooding over the long term.

Transition risk modelling

Residential energy use is responsible for around 20% of GHG emissions in the UK. Since April 2018 privately rented dwellings must be rated E or better with a consultation in progress raising the potential to strengthen this standard to level C.

Following an assessment last year in which Rothesay reviewed the impact on the Equity Release Mortgage Market portfolio in a scenario in which a minimum C rating is required before a house may be offered for sale, we have updated the work to align with the requirements of the Bank of England in their 2021 CBES. We looked at the following more detailed scenarios:

1. What is the cost for the property to transition to its highest potential EPC rating? For this, the BoE published a table indicating the costs that a property is likely to incur to be upgraded.
2. Households incur an additional £5,000 to install a heat pump. This is to be applied to the costing table and to 65% of properties in each EPC band.
3. Households receive a subsidy covering two-thirds of their retrofitting costs, plus the heat pump cost, up to a maximum of £5,000.

Overall we saw that scenario 2 had the greatest impact on our portfolio because it adds a higher cost per property, regardless of the current EPC rating and because we applied the cost to the 65% of properties in each EPC banding with the lowest value. This stress to property values fed through to a reduction in the mortgage portfolio value of ~1%. Such a loss is significantly smaller than the capital already required to be held by Rothesay against declining property values.

The exercise highlighted, as with the prior year, the lack of known EPC data. We used Landmark’s data for EPCs which gave us both the known EPC rating for the property if one was registered and a modelled rating if it was not. To help improve the reliability of this data, we are working with our UK lending partners to offer free EPCs to customers. The idea is that the customer will also receive a copy of the EPC so they will be aware of the energy efficiency of their property. EPCs provide an indication of improvements that can be made so we hope that some of the ERM holders will take action to increase the energy efficiency of their homes.

Our portfolio metrics

> Rothesay is committed to transitioning our investment portfolio to net zero greenhouse gas emissions by 2050, aligned with a maximum temperature rise of 1.5 degrees above pre-industrial levels as outlined in the Paris Agreement.

In order to track our progress on transitioning our investment portfolio to net zero, we also have a number of additional targets in place:

Target	Base year value (2019 unless stated otherwise)	2021 value	Change (%)
20% reduction in the carbon intensity of our portfolio by 2025	211	197	-7%
20% reduction in the carbon intensity of our NZAOA aligned sub-portfolio	222	184	-17%
1.5°C portfolio temperature alignment	2021 is our first year recording this metric	2.7°C	N/A

In the industry there are a wide range of ESG metrics that can be reported to support ESG risk assessments. Rothesay has expanded its coverage of climate metrics from Carbon Intensity to also include Financed Emissions and Temperature Alignment.

As mentioned in the Risk Management section, broader ESG factors such as alignment with compliance policies and participation in controversial activities are screened at the point of new asset purchase but are not currently aggregated at a portfolio level.

As our approach to assessment and reporting evolves, we will introduce additional portfolio metrics if we find them useful or stakeholders expect to see them. In the assessments described below, in addition to publishing the numbers as completely and transparently as possible, we try to explain drawbacks and unintuitive features of the metrics we use, allowing the reader to better gauge how much importance to attach to each.

Data sources and availability

Third party data sources utilised by Rothesay include Trucost (a subsidiary of S&P), CDP, Planetrics (a subsidiary of McKinsey), Vigeo-Eiris (a subsidiary of Moody's) and the Transition Pathway Initiative (TPI).

The ESG data universe is continuing to evolve, with better coverage, new metric requirements and improved methodologies becoming available each year. As part of this, we continue to review the third party data providers we use with reference to our own needs going forward. For example, whilst we do not currently utilise as a portfolio metric external ESG scores (due to significant variations between providers of the ratings assigned to any given issuer), we continue to monitor this area for developments.

An industry-wide challenge to the integration of ESG risk is the continuing issue of data coverage and accuracy, especially relating to climate metrics. We take great effort to report data, where available, utilising a number of data sources and estimation methodologies in our Carbon Intensity approach. For our climate data, only 20% of data was sourced using commercial vendors due to such challenges, with manual sourcing providing more significant input than last year. The aforementioned scarcity of reliable data means that c.50% of our data is currently estimated to some extent.

This report evidences progress made to continuously improve our methodology and we are constantly looking to enhance our approach, in line with industry best practice. In addition, we have undertaken stringent verification of underlying data, as outlined in the Appendix (Carbon Intensity methodology).

One consequence of evolving data standards is that as methods and accuracy improve from year to year it is necessary, for some issuers, to restate numbers disclosed in previous years. In the portfolio metrics section of this report we describe that process in detail.

Our portfolio metrics

continued

Aggregated Carbon Intensity for the Rothesay Investment Portfolio

Rothesay reports the Carbon Intensity (CI) of our investment portfolio on a revenue basis, covering Scope 1 and Scope 2 emissions for the constituent issuing entities. For Rothesay these make up the bulk of our Scope 3 emissions and we analyse them independently from the rest of the emissions with which the firm is associated.

We report emissions data associated with all investment groups in our portfolio, with an overall coverage by market value (including actual and estimated data) of 90%. For this portion of the portfolio, as constituted at year end 2021, the **average Carbon Intensity is 197 t CO_2e / mm USD revenue.** For the 10% of the portfolio without data, we were able to find the relevant numbers neither in the datasets we have purchased nor in public disclosures by the issuer nor as a result of direct engagement with the issuer.

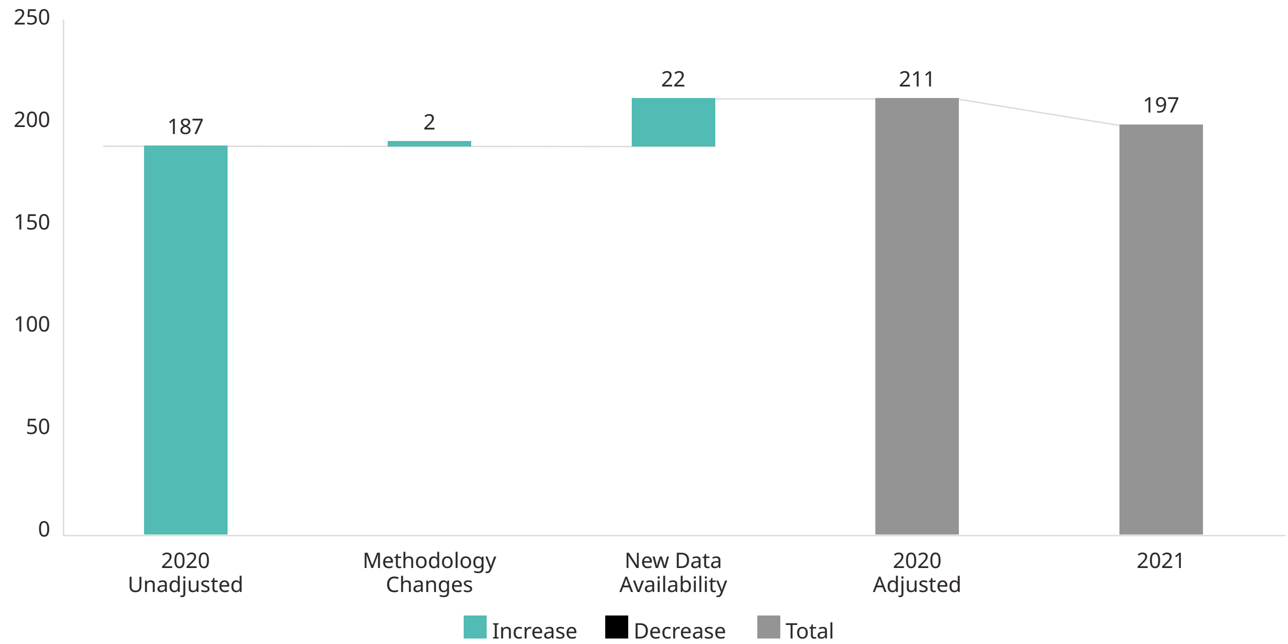
Note that due to misalignment between the publishing of emissions data and our reporting dates, this disclosure is based on data reported by companies in 2021, which is related to their YE 2020 data.

Climate data availability continues to evolve so we have obtained data for certain entities for the first time, and have made some improvements to our emissions estimation methodology this year. In the interests of transparency, we first explain the effect of these additions and changes on the numbers reported in 2020. We then study the year on year changes that have resulted both from the passive, on our part, evolution of the emissions generated by the issuers themselves and from the active alterations we have made to the portfolio.

The adjustments rebase the starting CI for the 2020 year-end portfolio (2019 climate data) from 188 to 211, The subsequent reduction in CI to 197 at year end 2021 represents a decline of 6.6%.

The graphic below indicates how the CI number presented last year has been re-based. This change is primarily driven by improvements in our Sovereign and UK Mortgage methodologies, and the availability of new data for a number of our material assets.

CI rebasing exercise



Portfolio Breakdown

The breakdown of our portfolio is shown in the table below. Details on the methodology used for each asset class can be found in the **Appendix**:

WACI per revenue table with year-on-year comparison

Category	2021 YE WACI per Revenue (tCO_2e / $m)	YoY % Change to WACI per Revenue	2021 YE CI contribution	Data Coverage (% MV)	Covered MV (£m)	Total MV (£m)	Unadjusted 2020 YE WACI per Revenue (tCO_2e / $m)	Adjustment for new or amended data (tCO_2e / $m)	Adjusted 2020 YE WACI per Revenue (tCO_2e / $m)	2020 YE CI contribution
Supra/Sov/ Public	**196**	**-12%**	**65.2**	**84%**	**17,705**	**21,043**	**140**	**82**	**222**	**65.0**
UK Sovereign	140	-2%	17.7	100%			160	-17	143	17.1
UK Sovereign Guaranteed	19	-26%	1.5	68%			160	-135	25	2.0
US Sovereign	281	-6%	6.2	100%			320	-20	300	3.3
EU Sovereigns	147	-27%	1.4	91%			205	-5	200	0.3
Other Sovereigns	282	-9%	0.4	100%			310	-2	308	0.5
Supranationals	0.25	21%	0.0	99%			0.21	0	0.21	0.0
UK Sub-Sovereigns	231	9%	0.9	23%			212	0	212	0.9
EU Sub-Sovereigns	101	16%	1.1	100%			87	0	87	1.0
Other Sub-Sovereigns	2410	-17%	34.0	76%			0	2897	2897	38.6
UK Public Finance	20	-9%	0.0	54%			22	0	22	0.1
US Public Finance	54	2%	2.1	90%			53	0	53	1.3
Corporate	**172**	**-5%**	**48.2**	**95%**	**14,952**	**15,702**	**201**	**-20**	**182**	**59.7**
Infrastructure and Utilities	430	-10%	37.3	96%			480	0	480	42.6
Other Corporate Bonds	66	-21%	10.6	96%			83	0	83	13.4
Covered Bonds	6	-17%	0.1	98%			7	0	7	0.1
Secured Financing	4	-15%	0.0	70%			6	-1	4	0.2
Bonds with CDS protection	33	-87%	0.2	98%			255	0	255	3.4
Property	**215**	**-5%**	**83.1**	**92%**	**20,634**	**22,309**	**212**	**15**	**227**	**85.8**
Ground Rent Funding	145	-9%	9.7	100%			159	0	159	9.1
Social Housing	362	0%	40.1	100%			364	0	364	40.0
REITs	69	-20%	3.3	93%			86	0	86	4.3
UK Mortgages	233	-7%	23.7	100%			212	39	251	25.0
Dutch Mortgages	150	-6%	2.8	100%			159	0	159	3.6
CRE	85	-12%	3.5	60%			53	44	97	3.8
Overall Portfolio (ex. UCTIS MM Fund/Cash)	**197**	**-7%**	**196.6**	**90%**	**53,292**	**59,054**	**188**	**23**	**211**	**211**

Our portfolio metrics

continued

The largest data adjustments to the numbers contained in the 2020 report arise in the UK Sovereign Guaranteed line and the Other Sub-Sovereigns line. Previously we used either the CI of the guarantor or excluded the asset from reporting. This year we have managed to source data for the underlying entities. In the case of Network Rail, the CI is lower than that of the UK. In the case of the other entities which are based in the US and involved in the energy and shipping sectors, the CIs are much higher than the 2020 average for the Other Sub-Sovereigns line.

The other material adjustments are:

i) The inclusion of certain secured lending facilities that we excluded last year but now include and treat in line with the borrower's CI as opposed to that of the collateral which would be a possible alternative.

ii) A change in the data source for sovereign data due to a failure of our original source to publish updated data for 2021. While there is no change to the CO_2 data, the new source makes a lower estimate of other greenhouse gas emissions.

iii) A change to the estimation of rent for the properties backing our ERM portfolio. We have obtained more granular rental yield data showing lower yields at the upper end of the range of property values which has led to a corresponding increase in the CI, though no change in emissions.

iv) A small number of non-reporting CRE loans were erroneously assigned zero emissions instead of being excluded from the average in the previous result.

It is crucial, however, to understand the wider context of this data before drawing conclusions on portfolio performance and extrapolating to future performance. Data for YE 2020 was heavily impacted by COVID-19, affecting both the emissions generated and the revenue earned for issuers within our portfolio. As explained earlier when we discussed our sovereign strategy, the enforced reduction in activity during the pandemic cut emissions but also led to revenue reductions driven by both volume and price effects, with both variations outside of regular norms.

Even in a normal year fluctuations in CI are to be anticipated. Inflation and variations in foreign exchange rates can affect the denominator while emission increases associated with short-term activity necessary for an issuer to transition to a low carbon economy (e.g. construction of low carbon infrastructure) are positive for emission reduction over the longer term. These are reasons for establishing targets across periods no shorter than five years such that current high emitters, with steep reduction targets, have leeway to act before they are considered unsuitable for the portfolio.

Provided the drawbacks are understood, the use of CI to identify and track the potential climate risks for issuers is beneficial although differences in methodology, coverage and the impact of non-emission related fluctuations, reduce the utility of directly comparing numbers across different asset owner balance sheets.

NZAOA sub-portfolio

We track the CI of both the whole portfolio and what we call our NZAOA sub-portfolio defined as listed issuers with an ISIN and reported data in: The Corporate category (excluding Secured Financing) plus; the REITs component of the Property category. The NZAOA sub-portfolio has a size of £14bn and represents 24% of the full portfolio.

Our near term target is for a 20% reduction in CI by 2025 from that of the base year, 2020 which used 2019 climate data (recall that emissions data from year Y-1 is used to assess Rothesay's balance sheet emissions for year-end Y). While the CI for the whole portfolio, after rebasing, is down a little under 7%, that for the NZAOA sub-portfolio is lower by 17%. We reiterate, however, that extrapolation for future years should be avoided given abnormal emissions and revenue patterns during 2020 due to COVID-19 impacts.

The evolution of CI has two key sources: that caused by the organic changes in the activities of issuers themselves and that caused by the activities of Rothesay in altering the composition of its portfolio. To understand the specific drivers of change within the NZAOA sub-portfolio, we have first computed what the CI at year-end 2020 would have been had the year-end 2021 portfolio been held at that time. This showed that the issuers held were responsible for a 7% reduction over the course of the pandemic year of 2020 which is similar to the average annual reduction observed in the pre-pandemic years 2014-2019. The total reduction of 17% in the CI of the NZAOA sub-portfolio, therefore, included 10% attributable to the active management of portfolio composition during 2021.

At a more granular level there are some further observations to record:

i) During the pandemic, as we have previously mentioned, the transport sector was deeply affected with reduced services everywhere and a consequent drop in emissions. What varied between nations was the degree to which revenues were supported. In the UK the support was strong and so CI also declined. This explains the 26% fall in CI for the UK Sovereign Guaranteed line which is dominated by Network Rail. The EU Sub-Sovereign line which includes SNCF and Deutsche Bahn shows a 16% increase and while some of this relates to changes in asset allocation, it is also true that revenues in those entities fell at least as precipitously as emissions.

ii) The large drop in CI for EU Sovereigns is due to a reweighting in favour of France.

iii) The overall reduction in the corporate category is smaller than that in any of the constituent parts. This is explained by an increased weighting towards the utility and infrastructure sector which, while of higher CI currently, is the sector where Rothesay's investment can have the greatest influence over the transition to a decarbonised economy while retaining a strong risk/return profile.

iv) In the property category we were able to obtain refreshed emissions and revenue data for most CRE loans, many REITs and Social Housing providers as well as for the Dutch properties. For the UK residential mortgage and ground rent sectors we did not obtain sufficient new data to make an adjustment to emissions even though they were likely reduced. The relatively modest CI reduction in these lines is due solely to imputed rent increases for which we were able to obtain updates.

Financed Emissions

In our 2020 ESG report we provided an inventory for the CI of our investment portfolio. As noted in the 2020 ESG report, our definition of CI for an entity is as follows:

$$CI = \frac{\sum_{Scope=1}^{2} Emissions_{Scope}\ (t\ CO_2 e)}{Revenue\ (mm\ USD)}$$

The purpose of the denominator is to allow a degree of normalisation making comparison between entities of different sizes possible. While this has many advantages such as allowing a simple calculation of a market value weighted CI for the whole portfolio, it comes with the drawback that from year to year the CI will vary with revenue measured in US dollars (USD) which may not be the ideal measure of size. If changes in earnings match changes in units of production, then the outcome is likely to be intuitively reasonable. The climate cares about the numerator, however, and we need to be alert to the possibility that a company may happen to increase its earnings faster than it increases its production and emissions and note that a declining CI in that case is no guarantee that the company is on a 1.5°C trajectory.

There are two other sources of variation in the denominator that tend to obscure the link between the path followed by Carbon Intensity and that followed by emissions:

(i) Even if a UK company achieves a 5% reduction in emissions and maintains a constant sterling annual revenue, it may be that sterling weakens 10% vs USD so that overall the Carbon Intensity grows by 5%.

(ii) Over the long term the effect of inflation, especially at current elevated levels, will be to tend to bring about increasing revenues. In other words, CI will be inflated away while emissions themselves will not.

Our portfolio metrics

continued

One way to attempt to eliminate these last two effects would be to measure revenue in different units. For example, instead of the unit being $1mm, it could be 200,000 Big Macs (to reference a concept popularised by The Economist). The dollar equivalent **price** of a Big Mac in any country will vary with both exchange rate and inflation but its **value** as a nutritious meal remains constant through space and time. In practice this concept could be extended to a much broader basket of goods that happened to cost a million dollars in the US in, say, 2017. That same basket of goods could be repriced today in the UK and however many pounds it cost would define the current sterling equivalent of a million 2017 "purchasing power parity" USD (PPP USD). Fortunately, the World Bank publishes exchange rates vs 2017 PPP USD which would allow us to calculate an alternative version of the portfolio's Carbon Intensity using the formula:

$$CI_{2017PPP} = \frac{\sum_{Scope=1}^{2} Emissions_{Scope}\ (t\ CO_2e)}{Revenue\ (mm\ 2017\ PPP\ USD)}$$

Unfortunately, it is not easy for us to find disaggregated revenues for a single corporation by country of origin in order to then recombine them into a single 2017 PPP USD equivalent and so the sectors of the portfolio where this technique can be applied are limited.

Areas where it works well, however, include sovereign debt and the portfolio of property loans because we know the geographical origin of the GDP and rent respectively. The Carbon Intensity for the sovereigns in the table in the previous section is calculated using this method.

While we may have found a metric that avoids some of the problems we have identified with traditional CI, we haven't eliminated the strong dependence on year to year variations in revenue. To do this we have turned to the concept of financed emissions in which, for each entity in the portfolio where we have sufficient data, we estimate the fraction of their emissions which we report as our responsibility by virtue of our stake in the entity's capital structure. This is most easily understood in property lending. For example, if we hold a mortgage with a loan to value ratio (LTV) of 80% against a Dutch house that gives rise to 5 t CO_2e in annual emissions then we are financing 4 t CO_2e and the owner occupier's equity is financing the rest.

For a corporate bond holding, the LTV is more difficult to determine but the convention is to proxy the asset value of the company by adding the market capitalisation of ordinary and preferred shares to the book value of total debt but without making any subtraction of cash and cash equivalents found in the conventional definition of Enterprise Value. We refer to this quantity as EVIC (Enterprise Value Including Cash).

The most difficult portion of the portfolio for which to define a notion of LTV is the sovereign bonds. The Partnership for Carbon Accounting Financials is steering the investment community to choose one of two proxies for LTV. The first is proportion of outstanding sovereign debt held; the second is ratio of sovereign debt held to the sovereign's annual GDP. In our view, both these methods are likely to attribute too large a proportion of emissions to debt holders and thus cause an unwarranted incentive for portfolio managers to reduce their sovereign debt weightings. The first method suffers from the fact that, for most sovereigns, debt only finances a portion of the balance sheet with that portion varying widely according to government policy in different countries. As for the second method, since we argue that debt stock is already too small a proxy for total asset value and we know that there exist countries where sovereign debt exceeds GDP, it is clear that GDP is also an inadequate proxy. Of the two methods, we believe calculating LTVs as a fraction of GDP delivers a better basis for comparing the emissions attributable to the debt of one sovereign with that of another, especially when we measure that GDP in terms of 2017 PPP USD. In terms of attractiveness to bondholders concerned about the quantity of emissions they are financing per bond owned, measuring LTV as a fraction of outstanding debt penalises countries, often in emerging markets, which are unable to sustain high debt to GDP ratios, a penalty that can be compounded by the effects of inflation and a weakening currency.

When making a comparison between the emissions financed by owning sovereign debt and by owning corporate debt, however, both accounting methods will leave the sovereign debt unfairly laden and act both to discourage investment and to distort the result of adding all financed emissions to obtain a portfolio total. We think it is worth considering an LTV calculation that is based on a more complete analysis of national balance sheets although we appreciate that the information will not be readily available for all countries. Fortunately, the UK, which issues the bulk of our sovereign holdings, publishes detailed national balance sheet estimates produced by the Office for National Statistics. The so called Net Worth comprises produced non-financial assets (buildings, equipment, weapons, R&D, software, entertainment), non-produced non-financial assets (land) and net financial assets (e.g. currency, gold, bonds, loans, shares: owned netted off against owed). At year end 2020 the UK's Net Worth was 5.25x annual GDP for that year and stood at GBP 10.7 trillion having evolved as follows:

In summary, new for the 2021 ESG report, we provide financed emissions data across the three sections of the portfolio for all assets where we are able to gather sufficient data. For a given entity:

$$FE = LTV \times \sum_{Scope=1}^{2} Emissions_{Scope} \, (t\,CO_2e)$$

For each asset the numerator in the loan to value ratio is the nominal amount of Rothesay's holding. The denominator chosen varies by asset class as follows:

i) For property loans it is the market value of the property

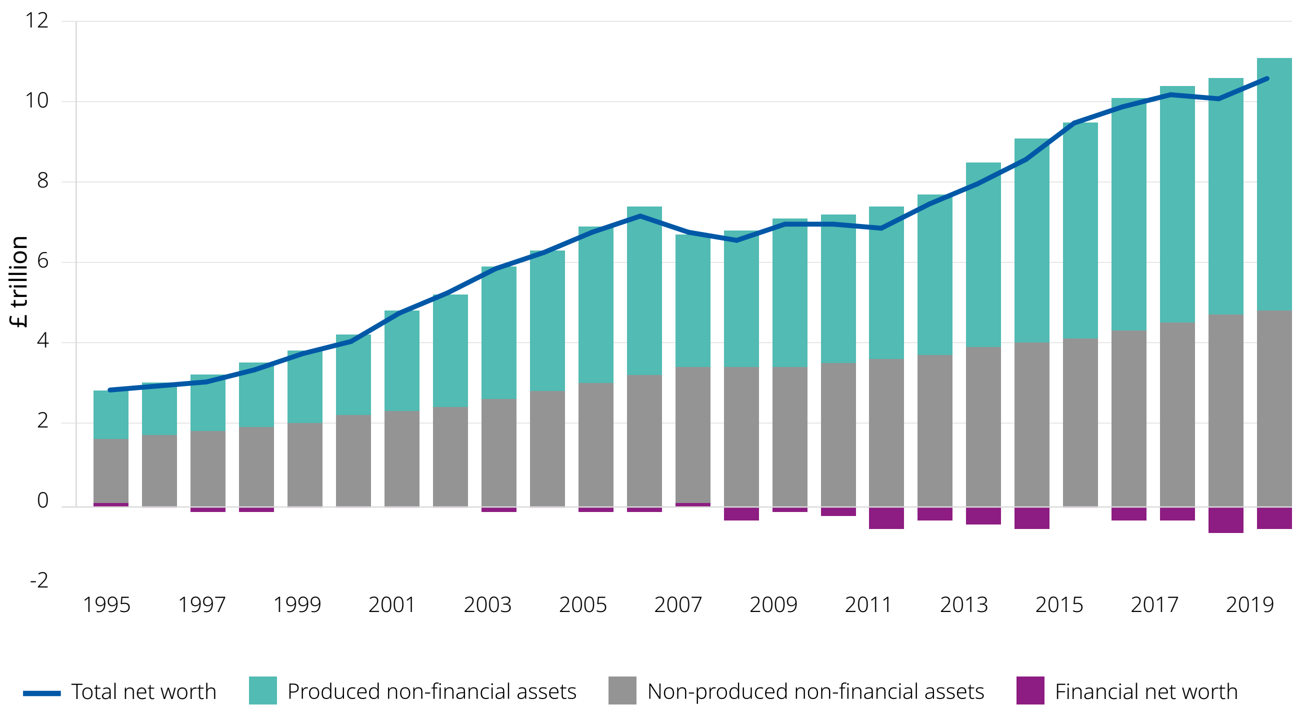
ii) For corporate bonds it is the EVIC of the corporation

iii) For sovereigns it is 2017 PPP USD GDP

iv) For the UK only, we provide an alternative using Net Worth.

Finally, we express the financed emissions per mm GBP of investment.

UK net worth, current prices, 1995 to 2020



Our portfolio metrics

continued

An alternative to the revenue normalised CI that we have considered so far is EVIC normalised CI in which a company's emissions are measured per unit of enterprise value. The market value weighted average CI per EVIC for the portfolio is calculated in the same way as for the portfolio weighted average CI per revenue. For Rothesay, the result is 118 tCO_2e / £mm EVIC. It is worth noting, however, that the weighted average CI per EVIC for the portfolio would be equal to the financed emissions per unit of investment if the weighting were calculated with respect to notional instead of market value. Financed emissions per unit of investment for the part of the Rothesay portfolio where we have data are 92.4 tCO_2 / £mm invested. Using EVIC in CI metrics is not currently without its drawbacks and data coverage for EVIC is lower than for our revenue based Carbon Intensity, with 73% coverage of our portfolio.

Our approach to the calculation of EVIC and financed emissions is aligned with Partnership of Carbon Accounting Financials (PCAF) methodology[11].

WACI per EVIC and finance emissions

Category	2021 YE Financed Emissions (t CO_2e)	2021 YE WACI per EVIC (tCO_2e / £1m EVIC)	Data Coverage Financed Emissions (% MV)	Covered MV (£m)	Total MV (£m)
Supra/Sov/Public	**1,558,226**	**146**	**67%**	**14,057**	**21,043**
UK Sovereign	800,669	173	100%		
UK Sovereign Guaranteed	11,179	5	65%		
US Sovereign	437,160	367	100%		
EU Sovereigns	66,032	182	91%		
Other Sovereigns	25,593	376	100%		
Supranationals	0.4	0.01	6%		
UK Sub-Sovereigns	2,456	20	19%		
EU Sub-Sovereigns	10,950	36	79%		
Other Sub-Sovereigns	194,595	1220	24%		
UK Public Finance	561	9	38%		
US Public Finance	9,030	23	18%		
Corporate	**1,497,258**	**160**	**74%**	**11,678**	**15,702**
Infrastructure and Utilities	1,255,835	426	77%		
Other Corporate Bonds	222,325	40	74%		
Covered Bonds	822	1	97%		
Secured Financing	898	4	32%		
Bonds with CDS protection	17,379	120	40%		
Property	**925,066**	**68**	**78%**	**17,362**	**22,309**
Ground Rent Funding	48,411	13	100%		
Social Housing	768,899	238	72%		
REITs	3,084	4	34%		
UK Mortgages	67,533	14	100%		
Dutch Mortgages	13,559	13	100%		
CRE	23,580	11	60%		
Overall Portfolio (ex. UCTIS MM Fund/Cash)	**3,980,550**	**118**	**73%**	**43,098**	**59,054**

Financed emissions per MV	**92.4**
Financed emissions per policyholder (tCo_2e)	**6.5**

11 Further information on this methodology can be found here: https://carbonaccountingfinancials.com/files/downloads/PCAF-Global-GHG-Standard.pdf

UK Sovereign Financed Emissions (Net Worth denominator in LTV) = 170,000 t CO_2e

The Weighted Average Carbon Intensity per EVIC (118 t CO_2e / mm GBP) is, as described above, very closely related to the Financed Emissions per mm GBP invested (3,988,340 / 43,098 = 92.4 t CO_2e / mm GBP) with the only difference being due to the weighting by Notional in the latter rather than Market Value in the former.

It is interesting to note that with £59bn of assets supporting 837,000 pensions, the average pension pot of £70,500 finances 6.5 t CO_2e of emissions per year which happens to be an amount about twice that produced by powering the average home. There has been commentary within the financial industry about the viability of offsetting portfolio emissions in the voluntary markets with the consensus conclusion being that the supply of high quality offsets will not be sufficient over the long term. Even if supply were not a problem, the expense would be because the purchase of carbon offsets sufficient to counter the emissions associated with the average annuity would cost about £250 per year, depending on their quality, which represents around 10% of the annual payment that such a pension would provide.

Our portfolio metrics

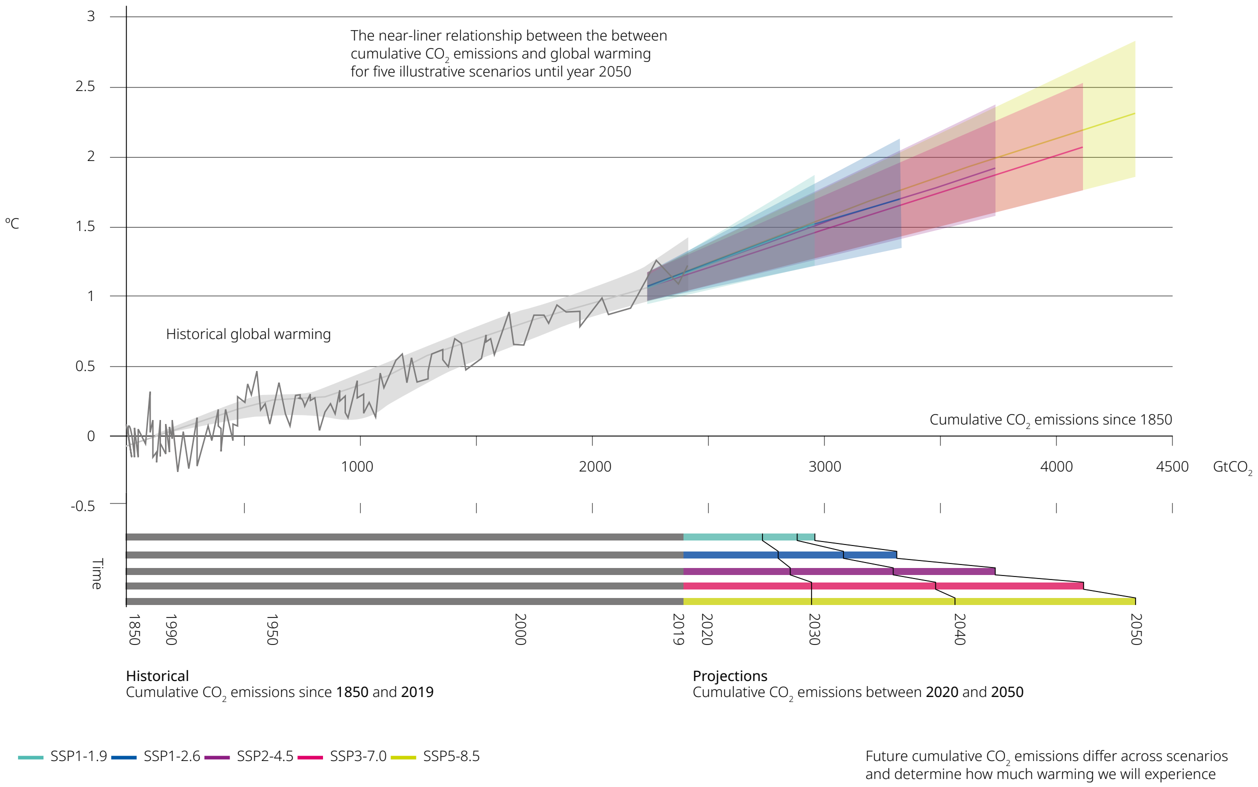
continued

Allocation of the Carbon Budget and Portfolio Temperature Alignment

It is a tempting idea to imagine that it is possible to attach a single number to any portfolio, expressed as an implied temperature rise since the pre-industrial era, that indicates progress towards achieving whatever climate goals may have been set. In this piece we explore the theory and some of the drawbacks that make this metric somewhat less objective than it might appear.

First we should understand the distinction between "net zero by 2050" and "global warming of 1.5°C". There are many paths to net zero by 2050, but only those that follow a sufficiently steep trajectory over the course of the next decade will limit global warming to 1.5°C. This is because the ultimate rise in temperature is determined by cumulative emissions, not just the emissions in 2050. The recent AR6 round of IPCC papers illustrates this as follows:

Global surface temperature increase since 1850-1900 (°C 1900) as a function of cumulative CO_2 emissions ($GtCO_2$)



We can make several observations:

i) The x-axis is linear in cumulative emissions, but because the rate of GHG emissions has been ever increasing, the first 100 years occupy less space than the last 20.

ii) Climate scientists predict that the relationship between temperature rise and cumulative emissions is approximately linear, and this has been born out in observations with every 1000 $GtCO_2$ causing 0.45°C of warming.

iii) Of the various Shared Socioeconomic Pathways (SSPs), only one (SSP1 – 1.9) cuts total emissions fast enough to limit global warming to 1.5°C. In all the other scenarios, even if there were a sudden switch to net zero in 2050, the 1.5°C threshold is predicted to be breached.

iv) With the current temperature rise estimated to be 1.07°C, and a goal of not exceeding 1.5°C, it would appear from point ii) above that we have a remaining carbon budget of close to 1000 $GtCO_2$. The IPCC points out, however, that once all the uncertainties in cumulative emissions to date and the climate response to those emissions are properly taken into account, then in order to have a 50:50 chance of staying below 1.5°C the remaining carbon budget from 2020 is only 500 $GtCO_2$.

v) At current rates of emission this global budget would be used up in little more than a decade.

The key idea in developing temperature alignment metrics is that this global carbon budget must be allocated between all the emitting entities on the planet whose “business plans” can then be assessed to determine whether they are on track to exceed, meet or use less than their allocated share. Armed with the linear relationship between additional cumulative emissions and additional temperature rise beyond 1.5°C, we can convert expected budget overruns by a company into an effective temperature alignment.

Just as a single company can be assigned a carbon budget, so, theoretically, can a portfolio of investments. For each entity in which it invests, the portfolio deserves to be allocated a portion of that entity’s budget, corresponding to the percentage stake in the full capital structure of the entity (i.e. the EVIC) held by the portfolio. The portfolio’s financed emissions can then be compared with its aggregated budget allocation and a temperature alignment determined.

In practice there are several drawbacks that make the numbers for a portfolio’s temperature alignment more uncertain than the other metrics we consider:

i) The initial allocation of the global carbon budget among countries, sectors and companies is subjective and can lead to markedly different outcomes depending on the approach taken.

ii) It is not clear how much history should be taken into account in the budget allocation. Should companies have their budgets cut just because they have already made progress? Should those companies that have delayed action get away with a larger budget?

iii) Various data providers have attempted to assign temperature alignment numbers to companies, but in the absence of detailed information about the underlying carbon budget allocations it is not easy to aggregate the numbers on a portfolio basis in the manner described above. Instead we must resort to using a weighted average of the numbers provided.

iv) There is more than one way of weighting the numbers. Weighting by market value in the portfolio seems a poor choice because we care most about the temperature alignment of the biggest emitters in the portfolio. We therefore weight our numbers by the emissions financed for each entity.

Our portfolio metrics

continued

Despite these limitations, we acknowledge that the metric is growing in popularity due to its association with the well-known Paris alignment commitment of keeping a global temperature rise well below 2°C (with an ambition to keep the rise below 1.5°C) compared to pre-industrial levels. We have chosen to report an implied temperature rise (ITR) using data provided by MSCI who consider Scope 1, 2 and 3 emissions in their analysis which, when compared to that of other providers that we considered, was the most thorough in its attempt to consider the full future pathway of a company. Data is only available at this stage for certain corporate issuers so the sub-portfolio with coverage is small (£9bn or 15% of all holdings) and has a temperature alignment score of 2.7°C.

It is useful to provide additional information about the origin of this score by subdividing the sub-portfolio in a few different ways. First a breakdown by temperature alignment of issuers shows that around two thirds of the market value is in the vicinity of Paris alignment depending on one's interpretation of "well below 2°C". We also see that almost two thirds of the emissions are produced by just the 8% of the issuers that are less well aligned than 3°C.

Temperature	MV (£bn)	MV %	% Emissions
<1.5°C	**2.0**	**22%**	**2%**
Paris aligned (1.5-2°C)	4.0	45%	11%
2-3°C	2.2	25%	23%
>3°C	0.7	8%	64%

Subdividing by CI confirms the intuition that the issuers with the most intense emissions are also those with the poorest temperature alignment scores.

CI (Scope 1,2&3)	MV (£bn)	MV %	Temperature
<50	**1.9**	**21%**	**1.6**
50-150	2.5	28%	1.6
150-500	2.4	27%	2.5
>500	2.2	24%	3.1

As a final comment on the subjectivity involved in the allocation of the carbon budget we noted the following anomalous result: auto companies, despite having clear plans for electric vehicle manufacture that are already being executed, have a temperature alignment that is further above 1.5°C than that of oil and gas majors whose plans for net zero are far less well developed if they exist at all. Accepting that transition is very difficult for the latter leads to a more generous carbon budget allocation at the expense of the former.

Verification

Due to the importance placed on our climate metrics, we undertake detailed review and verification of this data. Utilising a materiality led approach to verification, the greatest level of scrutiny is given to sectors and/or issuers which have the greatest impact on our portfolio CI. This includes issuers identified as climate material (as defined above), large holdings and where material change at an issuer level has been identified.

Review and validation of any sector estimate methodologies has been completed to ensure consistent and comparable approaches have been used. This ensures that the combined portfolio CI is based on appropriate numbers.

In addition, although we have not sought external review of our results, Internal Audit did undertake a review of last year's ESG report and we have sought to address their findings in this year's report. Part of our work before producing next year's report will be to decide upon the breadth and depth of external review to which it should be subjected.

Securing positive outcomes for our stakeholders

Our people

The commitment and quality of our people are integral to Rothesay's success.

359
permanent employees

92%
employment engagement survey participation rate

Rothesay's culture has been built by employing very talented people who take pride in their work and are able to take ownership of what they do. Our people do what it takes to be amongst the best in our industry and we have always trusted our employees to work in the way that lets them achieve that.

In 2022, Rothesay formally introduced an element of flexible working for all employees. Different teams and different roles have different needs and dynamics so, for this reason, our flexible working model necessarily varies team-by-team. The pandemic has shown us the benefits of working remotely but also its limitations. We continue to believe in the exceptional value of people being together face-to-face and we feel strongly that being in the office at Rothesay is exciting, fun and conducive to doing our best work so we will remain an office-centric organisation.

Our business has continued to grow and as at the end of 2021, Rothesay had 359 permanent employees, including 11 in Rothesay Asset Management US, an increase across Rothesay of 18% from 2020.

Our people
continued

Our culture and brand

As a founder-led business, Rothesay has been committed to creating a culture that actively values difference from day one. Our culture is an important part of our commercial strategy as we know it makes us a stronger, more dynamic business.

We pride ourselves on having a non-hierarchical structure which ensures that everyone is treated as an individual, whose opinion is valued and who has an opportunity to thrive in their career.

We welcome open and honest feedback from colleagues and conduct regular employee engagement surveys to measure their opinions and to hear what we can do better as an employer. Some details are listed below.

In the last year, we entered an exciting three-year sponsorship deal with the LTA, the national governing body of tennis in Great Britain. Rothesay is now the LTA's official pensions partner and title sponsor of three showpiece televised LTA summer grass court events known as the Rothesay Summer Series (the Rothesay Open in Nottingham, the Rothesay Classic in Birmingham and the Rothesay International in Eastbourne). The Rothesay Summer Series will take place throughout June in the run up to Wimbledon each year.

Cultural values

1 Original & Creative	3 Dedicated, Genuine & Accountable
2 Collaborative & Diverse	4 Meticulous & Fast-paced

Health and safety

Rothesay's health and safety policy is the responsibility of the facilities team and approved by the Executive Committee. It is also published on our website and intranet and reviewed at least annually.

In the 2021 employee engagement survey, 78% of our employees agreed or strongly agreed with the statement "Rothesay actively looks after the wellbeing of its employees". Health benefits include private healthcare for employees and their families, subsidised gym memberships, subsidised health assessments, free flu jabs and comprehensive online resources including a corporate membership with Headspace and WorkLife Central (previously known as CityParents).

Access to mental health support and services is made available to all employees, including access to confidential counselling services. In 2022, as a post-pandemic action, we've supported the training of 11 employees to become Mental Health First Aiders, both in London and New York and established a Mental Health Forum across the business. The purpose of the Forum is to raise awareness of strategies for having good mental health.

Accidents at work are very rare, with the last one being reported in 2017. No accident has required more than basic first aid and there has never been a need to make a submission under the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations.

Rothesay's response to COVID followed government guidelines at all times which meant there were extended periods when all employees worked from home. In order to ease this burden, we provided Easter and Christmas care packages for everyone and made a grant of up to £1,000 that any employee could use to furnish comfortable and productive home offices.

When restrictions were lifted we opened the office to people who felt they could work more productively there than at home. We instituted a regime of daily testing for anyone attending the office which gave confidence to all colleagues that the work environment was safe. This was enhanced by a sparse seating plan, enhanced ventilation and the introduction of Perspex screens separating individual work spaces.

78%

of our employees agreed or strongly agreed with the statement **“Rothesay actively looks after the wellbeing of its employees”**

Our people
continued

Engaging our employees

In the last year, we have continued to focus on strengthening our internal communications capability through the appointment of a new member of the Communications team and have continued to develop our Company intranet. We have ensured that there is regular communication from all parts of the business through various channels including our monthly company newsletter.

Our offices at The Post Building mean that all our UK-based employees can work together on one floor. This facilitates the absence of functional silos – an integral part of the Rothesay culture. The Chairman and other members of the Board have frequent, informal interactions with Rothesay's employees. In addition, our executive team host Townhall meetings throughout the year, at which employees are provided with an update on Rothesay's business strategy and are encouraged to ask questions to members of our management team.

In 2021, we repeated the employee engagement survey. We were delighted to receive an outstanding response rate of 92% (2020: 95%), with 92% of employees saying that they were "proud to be part of Rothesay" (2020: 92%). In common with other organisations, the results showed a reduction in engagement score to 74% (2020: 81%) and we have identified a number of areas of focus for 2022. In addition, 85% of our employees agreed or strongly agreed with the statement: "My co-workers respect my thoughts and feelings", with only 5% disagreeing.

The survey design was reviewed by the Chairman and senior management and the results were discussed at the Board. Each year, the survey provides areas of focus for the business, resulting in the identification of key actions which are then progressed.

92%

of employees are **"proud to be part of Rothesay"**

85%

of our employees agreed or strongly agreed with the statement: **"My co-workers respect my thoughts and feelings"**

Investing in our people

We continue to deliver a comprehensive learning and development programme, designed to support an environment where our employees can thrive and fulfil their career ambitions. Our people are encouraged to own their career development and select their learning activities from the programmes which have been tailored to Rothesay's requirements. We continue to invest in partnerships with suppliers to deliver training and learning platforms that augment the technical skills and soft skills of our people.

We offer a range of benefits to all employees, which we continue to review annually. In 2022, we improved employer pension benefits in two ways: we increased the non-contributory employer contribution from 8% to 11% of salary and, for employees with a full-time equivalent salary at, or below, £75,000 p.a. we introduced a further 2% employer matching benefit, where employees pay up to 2% and Rothesay will match on a 1:1 basis giving a maximum contribution of 15% (13% employer, 2% employee).

Rothesay supports all employees in gaining a range of professional qualifications and we also sponsor a number of apprentices, internships and work experience programmes. In addition, our graduate programme provides junior hires with the training, support and responsibility required to allow them to contribute meaningfully to the business from day one.

Managers are encouraged to provide employees with continuous feedback and coaching conversations throughout the year. On top of this, mid-year and end-year reviews provide an opportunity for employees to reflect on their achievements, give 360-degree feedback and set objectives to drive their career forwards.

Remuneration policy

Remuneration packages combine a base salary, cash bonuses, a long-term share-based incentive plan (the RL SIP) and a long-term share appreciation rights plan (the SARs plan).

The Remuneration Committee is responsible for ensuring that Rothesay's remuneration policy appropriately rewards and incentivises our people.

Rothesay's remuneration policy is intended to:

- Promote sound and effective risk management.
- Align individuals' incentives with multi-year performance.
- Discourage excessive or concentrated risk-taking.
- Allow Rothesay to attract and retain proven talent.
- Align aggregate remuneration with the performance of Rothesay as a whole and encourage teamwork.

This is achieved by ensuring that variable remuneration is linked to performance across a range of financial and non-financial metrics. The Chief Risk Officer provides input to the annual appraisal process and profit metrics are ignored when evaluating the performance of staff whose primary responsibility is the control of risk.

Considerable attention is paid to non-financial matters in assessing performance, including policyholder experience, operational risk management, compliance, conduct, teamwork and contributions to the firm's effort to combat climate change.

The Remuneration Committee retains an independent expert adviser from FIT Remuneration Consultants LLP to provide benchmarking, independent input and industry insights and he generally attends meetings.

Diversity and inclusivity

Rothesay is committed to promoting equality and diversity, and a culture that actively values difference. Our policies are designed to ensure that our people are not disadvantaged in any way as a result of their age, race, gender, disability, religion or belief, sexual orientation, gender reassignment, marriage and civil partnership or pregnancy and maternity.

We recognise that people from different backgrounds and experiences can bring valuable insights to the workplace and enhance the way we work.

In the 2021 employee engagement survey, our Diversity and Inclusion scored a positive 77% and the gender difference in engagement score has equalised, with women on 75%, and men 74%. In addition, 80% of our employees agreed or strongly agreed with the statement "My co-workers value my input even if it is different from their own".

During 2021, our CFO was appointed as Rothesay's diversity and inclusivity champion and led an initiative to encourage employees to provide information on ethnicity, gender, disability, religion, sexual orientation and socio-demographic background. This led to a majority of staff providing this data, allowing Rothesay to better track progress on increasing the diversity of our workforce and support ongoing and new Diversity and Inclusion initiatives.

We continue to look at ways of identifying a more diverse range of talent for the long term including participating in #10,000BlackInterns and partnering with Crankstart, an organisation which provides enhanced support to students from low income socio-economic backgrounds for career success.

We offer training and support to new parents and their managers and all employees taking extended parental leave are offered one-to-one coaching to support their return to work.

In the case of workplace issues, our grievance procedure is designed to encourage a fair, consistent and speedy approach to resolving matters. Where issues cannot be dealt with through informal discussions with HR or managers, formal procedures ensure that grievances can be resolved in a swift and satisfactory manner. All our grievance and disciplinary procedures are confidential in nature.

Our people

continued

Gender pay gap

The table below provides a summary of our gender pay gap data:

	2021 Mean	2021 Median	2020 Mean	2020 Median
% by which hourly pay is lower for female employees	28%	28%	29%	32%
% by which bonuses are lower for female employees than male	53%	55%	50%	56%

The proportion of women on Rothesay's Board is four out of 12[12].

The table shows little change between 2020 and 2021. In common with many other organisations, our gender pay gap arises as a result of having a higher number of men in senior roles than women and low turnover of staff means that progress in closing the gap is likely to be slow. For a more detailed discussion of this topic and information on the actions we are taking to address it, please see our separate Gender Pay Gap report.

Our suppliers

Rothesay's procurement spend spans a wide range of companies and sectors, from professional services, marketing and goods such as IT systems and desktop hardware and software. Our spending generates a positive economic impact in the marketplace and supports the development and growth of our suppliers and companies that supply them.

We work closely with our suppliers to understand how materials are sourced, making sure they respect human rights, promote decent working conditions and improve sustainability across the supply chain. As required annually by the Modern Slavery Act 2015, we published a statement on our website describing the steps taken by Rothesay to ensure that slavery and human trafficking is not taking place in any part of our business or in any of our supply chains.

The statement notes that we expect our suppliers to ensure fair employment practices. For example, we require our cleaning suppliers to pay their personnel, who work at our premises, a salary which is equivalent to (at least) the London Living Wage.

12 Excluding the two shareholder appointed Non-Executive Directors.

We conduct annual reviews of all our critical and highly important suppliers which spans not only their financial and operating performance but looks closely at areas such as cyber security to ensure our policyholders' data is protected. We also consider any environmental risks associated with the goods or services procured and look at supplier's emissions and climate targets.

Third Party Administrators

From the point of view of our policyholders, the companies in our supply chain with whom we are most closely entwined are those performing pension administration: Capita, Mercer and WTW. They make payments to pensioners, track life events that affect pensions (e.g. divorce, retirement and death) and are the first point of response to customer queries. We have attempted to satisfy ourselves that these companies pursue ESG goals that are compatible with our own and have done so by analysing their Vigeo-Eiris assessments and by reading their public disclosure, bearing in mind that ESG scoring for these firms is largely a reflection of the comprehensiveness of their reporting.

Scope 1 and 2 emissions are not material in this sector but only Capita attempts a full reckoning of the Scope 3 emissions associated with its purchases of goods and services while WTW does not state its emissions. All three have net zero commitments.

All our TPAs have clear codes of conduct, commitments against human trafficking and modern slavery as well as Anti Money Laundering policies. Mercer and WTW have received awards for their diversity and inclusion. All three state a commitment to protect client information but only Capita reports any relevant measures.

We monitor TPA governance procedures. Capita's board is 50% independent and undergoes regular third party evaluation with results and actions taken both disclosed. Mercer and WTW score less strongly on governance.

To the extent we are unable to source satisfactory information, the Rothesay team intends to engage directly with our contacts at the companies. In particular, we will seek information regarding the location of their data centres which will enable us to assess their vulnerability to possible physical manifestations of climate change such as flooding.

80%

of our employees agreed or strongly agreed with the statement:
“My co-workers value my input even if it is different from their own”

Our policyholders

Since our core mission to provide over 830,000 policyholders with a safe and secure pension is self-evidently of great social benefit, it is worth taking time to describe some aspects of how we serve our customers.

As a business, Rothesay is designed to protect pensions even through the most difficult times and it continues to be a matter of pride for us, and comfort to our policyholders, that every pension we protect is as secure now as it was before the pandemic. Despite the continuing impact of COVID-19 that, for much of 2021, meant our people and our teams at our third party administration partners continued to work remotely, we are delighted to have continued to provide our policyholders and clients with industry-leading standards of customer service.

In 2020 we rolled out our online service to policyholders which allows them access to information on their policy and the information we hold on them 24hrs a day, seven days a week. During 2021, as part of an on-going programme, we introduced new functionality and improved the look and the feel of the websites.

Prudential transaction

On 24 November 2021, the High Court approved, on appeal, the full transfer of nearly 370,000 Prudential annuity policies to Rothesay. The business had already been reinsured by Rothesay in 2018 and this judgement provided clarity for us and the sector as a whole about the operation of Part VII transfers. The transfer was effective from 15 December 2021 and we now anticipate that policy administration will transfer to our strategic administration partners in 2023. We look forward to providing the former customers of Prudential the same high standard of service which we provide to all our policyholders. Our focus is now on ensuring that the transition is as smooth as possible for them.

Access to Finance - Enabling flexibility with small pots

For most of our policyholders their Rothesay pension will provide a vital component of their retirement income but we recognise that for those with the smallest annuities it may be more helpful to have immediate access to their full pension pot. Under our 'small pots' initiative, pensioners with relatively small annuities (i.e. those with a benefit value of less than £10,000) can, at any time, make a one-off election to receive a lump sum payment. This initiative has been discussed with the Financial Conduct Authority (FCA) and is overseen by our Customer and Conduct Committee. The exercise was paused during the COVID-19 lockdowns of 2020-21 but recommenced later in 2021.

Reliable service delivery

We pride ourselves on the level of service we provide and we are delighted that we have maintained our high service standards during the challenges of remote and hybrid working.

During 2021, over 94% (2020: 95%) of policyholders rated the quality of service received as good or excellent and the frequency of complaints declined markedly from an already low level to an annual rate of 0.64 per 1,000 policyholders (2020: 0.98 per 1,000). We take all complaints seriously and after thorough investigation just 0.24 complaints per 1,000 policyholders (APM) (2020: 0.42 per 1,000) were upheld.

We are a member of the Institute of Customer Service, an independent, professional body for customer service. During 2021, we worked with the Institute to independently benchmark ourselves against other companies, providing us with invaluable feedback. We achieved an excellence score well above the average for insurance companies and at a similar level to companies known for their focus on customer service. We are pleased by the results and are working through the details to see how we can improve further.

Our commitment to consistently high quality administration continues to be recognised by the Pensions Administration Standards Association (PASA), the independent body dedicated to improving standards in UK pension administration. We were re-accredited with their Gold standard in January 2022.

Pension trustees

Rothesay provides pension de-risking solutions to the trustees of over 200 pension schemes. Before offering to transact with pension scheme trustees, we consider ESG criteria, including both the current and former operations of the scheme sponsor. Nonetheless, our overarching view is that people deserve a safe and secure income in retirement and hence, in most instances, ESG limitations at the sponsoring company are unlikely to lead to our declining to insure their pension scheme liabilities, though there are occasions when we have discouraged inconsistent treatment of different groups of pensioners by the same sponsor.

During 2021, Rothesay assisted ten pension schemes to de-risk their liabilities, resulting in new business premiums (APM) of £3.0bn. Most of this business was completed with all parties working remotely.

Rothesay is a Technical Partner of PensionChair, a leading industry network for pension scheme Trustee Chairs. In this role, we provide expert insight to the PensionChair membership. We are also a premier sponsor of the Association of Member Nominated Trustees, a body that provides training and support to member-nominated trustees.

During 2021, Rothesay facilitated an initial workshop panel in partnership with mallowstreet which had a membership comprising of trustees from some of the UK's largest defined benefit pension schemes. The objective of the panel is to provide a forum for pension schemes to share ideas and discuss the challenges of producing ESG and climate-related disclosures.

In 2021, we published the second of our "Journey to Buy-out" guides. These guides explore the issues and processes associated with reaching buy-out. We also run education sessions through a variety of forums, including the Association of Professional Pension Trustees.

During 2021, we decided that we would start to undertake the administration of new pension buy-ins in-house, rather than outsourcing this activity. Doing the work in-house ensures that we can build and maintain close working relationships with pension administrators at the scheme instituting the buy-in (rather than TPAs sitting in between us) and allows us to leverage our risk management systems to minimise discrepancies and ensure that we fund our clients accurately and on time. As well as following this approach for new business, we anticipate in-sourcing administration for some existing buy-ins where conversion to buy-out is not envisaged in the next few years.

Rothesay undertakes a regular survey of trustees. Individual trustees are asked a series of questions by an independent facilitator who then produces a report summarising the results. This report and Rothesay's planned actions in response to the feedback are discussed at the Board.

In addition, Executive Directors and management of Rothesay have ad hoc meetings with pension scheme trustees throughout the year.

Our community

Charitable giving

In 2021, we pledged over £3.9m (2020: £4.1m) to charitable causes.

Rothesay supports Tax Help for Older People, a charity service providing free, independent and expert help and advice for older people on lower incomes who cannot afford to pay for professional tax advice.

On an annual basis we choose an employee-nominated charity of the year (COTY). In 2021, this charity was MIND, an organisation dedicated to ensuring that everyone experiencing a mental health problem gets support and respect. In 2022, employees have elected Brain Tumour Research which is the only national charity in the UK focused on finding a cure for all types of brain tumours. Our Social and COTY Committee has employee volunteers from across the business organising inclusive and varied social and fundraising events throughout the year.

We are a corporate partner of the British Museum and support a number of other charities. We encourage our employees to support charities personal to them through our matched giving policy, which gives everyone an annual matched allowance of £1,000. In response to COVID-19, we introduced an additional three-for-one matching for donations of up to £300 and this was maintained for 2021. We are proud that so many people have engaged in fundraising and social events designed to give back to the community.

To support the response to the urgent humanitarian need in Ukraine, Rothesay has donated £500,000 to the International Committee of the Red Cross.

Rothesay Foundation

In 2019, Rothesay established the Rothesay Foundation with the aim of supporting organisations that seek to improve the quality of life for older people, helping them to live their lives in a happy, safe and fulfilling way.

In order to better understand where the Rothesay Foundation could have the most impact, we launched a pilot campaign in the London borough of Lambeth called 'Lambeth Winter Cheer'. Partnering with Iceland Foods and Age UK Lambeth, the campaign was designed to support the 8,000 older people the Foundation had identified as living in poverty in the Lambeth area over the festive period.

We are pleased with the results of the campaign, which provided pensioners, who were solely reliant on the State Pension or benefits, with a £30 voucher to help them celebrate over the Christmas period. In total, the Lambeth Winter Cheer campaign helped 2017 older people living in deprivation in Lambeth. Importantly, it also increased the number of people aware of Age UK's local Lambeth branch, and the support services it offers, by over two thirds and has helped Age UK in Lambeth to make contact with many local people who are in need of the services they provide. The Rothesay Foundation is now working to develop a programme of ongoing support throughout 2022, bringing in other partners to further expand and deepen the services that can be offered.

Associations and memberships

Rothesay is a member of a number of industry associations. These include the Association of British Insurers (ABI), the Confederation of British Industry, the Investment Association, UK Finance and the British Property Federation.

We support our associations in a number of ways, including attending and leading various committees and participating in relevant consultations and policy reviews. Our CEO also sits on the Board of the ABI and its climate change subgroup. Our CFO sits on the ABI's Audit and Risk Committee while our Head of Communications and Public Affairs sits on the ABI's Long-Term Savings Committee.

Taxation

Rothesay's tax strategy is designed to ensure compliance with the tax laws of those countries in which Rothesay operates (primarily the UK). Any tax planning undertaken has commercial and economic substance and has regard to Rothesay's corporate responsibilities and brand and the potential impact on shareholders, policyholders and other stakeholders.

We do not undertake planning that is contrived or artificial. Rothesay has zero tolerance for tax evasion of any kind.

Rothesay makes a significant tax contribution in the UK, with £431m remitted to UK tax authorities in 2021 (2020: £458m). Rothesay had an effective corporation tax rate of 19.0% during 2020 (2020: 18.8%). Other taxes include property taxes, employer payroll taxes and irrecoverable indirect taxes.

Taxes paid	2021 £m	2020 £m
Corporation tax	229	294
Other taxes	15	13
Taxes collected	187	151
Total remitted	**431**	**458**

Running a responsible business

Governance

Effective management of ESG opportunities and risks must be reinforced by a strong governance framework to ensure that ESG considerations are factored into every business decision.

At Rothesay, we structure our governance framework so that our strategy, purpose and values are clearly projected down from our Board and can be understood and acted upon throughout the business. This approach, alongside the processes and controls we have in place, means that we can effectively manage our risk profile and secure the future of every one of our policyholders.

The board committee structure is shown below:

Rothesay Limited Board

Responsible for:

- Strategy and business plans
- Material transactions
- Acquisitions and disposals
- Capital management policy including dividends and debt

Audit Committee

Responsible for:

- Financial reporting
- Internal controls
- Internal and external audit
- Regulatory compliance

Board Risk Committee

Responsible for:

- Risk appetite
- Risk management framework
- Ongoing monitoring and controls of risks

Remuneration Committee

Responsible for:

- Executive Director and other Senior manager remuneration
- Remuneration policy
- Share incentive plans

Nomination Committee

Responsible for:

- Reviewing the size and composition of the Board
- Board and Senior Manager appointments
- Succession planning

Customer and Conduct Committee

Responsible for:

- Treating customers fairly
- Regulatory conduct

Board Committee Hybrid Committee

The ESG Working Group is a subgroup of the Executive Risk Committee which in turn reports to the Board Risk Committee:

Board Risk Committee

Executive Risk Committee

ESG Working Group

Governance

continued

Board oversight

A strong Board with an effective supporting committee structure is a key component of the governance framework of Rothesay. The Board is responsible for overseeing the delivery of the overall strategy of the Group and as part of this is also ultimately responsible for the business' approach to ESG-related risks and opportunities.

Since the presentation of the results of the 2019 PRA climate stress test, the topic of climate change has become a regular item at both BRC and Board meetings with the material presented falling into three categories: general information designed to educate and ensure a broad understanding; Rothesay's climate-related metrics (for business operations and the investment portfolio); and sector specific information that provides a guide to decision making at a granular asset by asset level. The Board has requested that from 2022 members receive an overview of other ESG risks in addition to those related to climate change.

Rothesay's CEO also sits as a member on the climate change committee for the ABI, helping to drive a co-ordinated strategy for the industry on climate change and sustainability.

As shown in the outline above, the Board is supported in its oversight by the following committees whose functions are described in more detail below:

Nomination Committee

The Nomination Committee is responsible for monitoring the balance of skills, knowledge, experience, independence and diversity on the Board, identifying and recommending Board, Board Committee and senior management appointments to the Boards of the various Rothesay Group entities as appropriate, and monitoring succession plans for the Executive Directors and the development plans of senior management within Rothesay.

Audit Committee

The Audit Committee is responsible for assisting the Board in fulfilling its oversight responsibilities for the financial reporting process, the system of internal control, the internal and external audit processes and Rothesay's process for monitoring compliance with laws and regulations and the business principles. The Committee also oversees financial reporting procedures and recommends for approval the annual report and accounts, including ESG-related disclosures.

Remuneration Committee

The Remuneration Committee is responsible for reviewing and making recommendations to the Board regarding the remuneration policy of Rothesay and for reviewing compliance with the policy in so far as it relates to senior managers and other employees. The Committee also considers the way in which non-financial metrics, including ESG-related contributions, are reflected in compensation.

Customer and Conduct Committee

The Customer and Conduct Committee is responsible for ensuring that customers, clients and counterparties are treated fairly by Rothesay and its strategic business partners. The Committee also oversees Rothesay's approach to regulatory conduct. Following the 2021 annual review into Board effectiveness, the Customer and Conduct Committee has now been promoted to a full Board committee.

Board Risk Committee

The Board Risk Committee is responsible for ongoing monitoring and control of all risks associated with the activities of Rothesay, including ESG-related risks. The Committee regularly receives updates on Rothesay's sustainability initiatives, our climate metrics and reviews in-depth reports of the high ESG risk sectors in our asset portfolio.

More information on our Board and Board Committees can be found in our **Annual Report.** Terms of reference for these Committees can also be found at **rothesay.com.**

Management oversight

Although ESG risk is directly embedded in our business, we have nominated specific members of the Executive team to be responsible for the oversight of climate change and Diversity & Inclusion at Rothesay. These roles are described in more detail below.

The PRA requires that Senior Management Functions be nominated to take overall responsibility for identifying and managing the risks from climate change, and Rothesay has elected to share that role between the Head of Asset & Liability Management and the Chief Risk Officer representing both business management and risk control.

Our CFO is the diversity and inclusion champion at Rothesay. More information on how diversity and inclusion is valued at Rothesay can be found on page 57.

Day-to-day responsibility for the implementation of Rothesay's climate change risk and ESG framework has been delegated to the ESG Working Group (EWG), a sub-committee of the Executive Risk Committee. In line with Rothesay's philosophy of ensuring that ESG considerations are not confined to one team, the EWG draws membership from across the business and is chaired by the Head of Investment Strategy.

The EWG discusses developments each week, meets formally once a month and is the forum at which all ESG-related work is first discussed. Duties and responsibilities of the EWG include:

- Supporting the implementation of the ESG risk management framework plan.
- Acting as an internal knowledge centre on the financial implications of ESG, including monitoring of emerging risks and opportunities.
- Monitoring the changing regulatory landscape across all relevant jurisdictions is performed by the representative from Compliance.
- Supporting the wider sustainability of Rothesay and its employees.
- Reviewing and monitoring ways to reduce our exposure to potential and emerging ESG issues.
- Supporting the development of Rothesay's approach to public disclosures and communications relating to ESG.

Recommendations from the EWG are subsequently presented for approval to the ERC and ultimately the Board Risk Committee (BRC) or the full Board.

Governance

continued

At Rothesay, however, we do not want ESG risk management to solely be the responsibility of the members of the EWG and our dedicated ESG analysts. We are keenly aware that the input of every employee is required to provide a better future for our stakeholders. From 2021, alignment with, and contribution to, Rothesay's ESG objectives forms part of every employee's annual performance review. In addition, we want every department in the business to feel empowered and informed to make ESG considerations in their work. Some examples of this are provided below:

- **Asset Origination:** The Assets Origination team thoroughly assess the ESG risks and opportunities of any potential asset during the due-diligence processes. The team also run regular analyses of potential financial impacts that transitional and physical climate risk could have on our property based assets.
- **Operations:** The Operations team is responsible for ensuring that all of our policyholders are provided with reliable service delivery. The team works diligently to seek to maintain our high standard of customer service levels and satisfaction and, as noted above, were re-accredited by PASA, the independent body dedicated to driving up standards in pension administration, with their Gold standard in January 2022.
- **Risk and Compliance:** The Risk and Compliance team surveys and internally reports on our exposure to ESG risk. The team also monitors changes in industry guidance and regulatory requirements on ESG related items and assesses their potential impact on Rothesay.

Shareholders

Following the sale, by Blackstone, of its stake in Rothesay in 2020, GIC and MassMutual each hold 49% of Rothesay Limited with the remainder being held by the Employee Benefit Trust, Directors, management and staff. GIC and MassMutual are two of the world's leading institutional investors and provide Rothesay with exceptional long-term support and a stable platform for growth in the future.

The shareholder Directors attend Board and other Board Committee meetings, providing an important contribution to the effectiveness of the Board and to the overall performance of Rothesay. The shareholders receive regular management information and their teams also interact directly with management.

Going forward, it is also anticipated that members of their teams will attend relevant parts of Board and other Board Committee meetings as observers.

The shareholders also support Rothesay in other ways, for example assisting in the sourcing and evaluation of investments, providing debt financing and providing longevity reinsurance.

GIC

GIC is a leading global investment firm established in 1981 to manage Singapore's foreign reserves. A disciplined long-term value investor, GIC is uniquely positioned for investments across a wide range of asset classes, including equities, fixed income, private equity, real estate and infrastructure. GIC invests through funds and directly in companies, partnering with its fund managers and management teams to help world-class businesses achieve their objectives. GIC has investments in over 40 countries and has been investing in emerging markets for more than two decades. Headquartered in Singapore, GIC employs over 1,700 people across ten offices in key financial cities worldwide.

For more information about GIC, please visit: **gic.com.sg**

Massachusetts Mutual Insurance Company (MassMutual)

MassMutual is a leading mutual life insurance company that is run for the benefit of its members and participating policyowners. Founded in 1851, the company has been continually guided by one consistent purpose: helping people secure their future and protect the ones they love. With a focus on delivering long-term value, MassMutual offers a wide range of protection, accumulation, wealth management and retirement products and services.

For more information about MassMutual, please visit: **massmutual.com**

Bondholders

Rothesay's bonds are its only public market securities and senior management meet with debt investors and analysts on a regular basis to make presentations regarding the state of the business.

Rothesay also has a regular dialogue with its relationship banks.

Our operations

Our Scope 1, 2 and 3 emissions from internal operations

Rothesay is committed to lowering our own operational emissions and our UK office has been supplied by 100% renewable energy since the beginning of 2021, as certified by the Carbon Trust. The table below displays Rothesay's energy consumption, CO_2 and other greenhouse gas emissions, and emissions intensity metrics for 2021 and 2020, as per Streamlined Energy and Carbon Reporting (SECR) requirements. Note that the UK office remained open throughout all of 2021 for employees who were unable to work from home due to COVID-19, while it was fully closed for a number of months in 2020.

We do not include our portfolio emissions in our Scope 3 calculations in this section, as we believe these are best analysed independently and indeed are much more important. They are addressed in the earlier sections of this report following the TCFD recommended format.

We consider the market based metric to be the most accurate reflection of our emissions, as it reflects the actual emissions associated with the electricity that Rothesay has consumed. We have also included location based metrics for comparison, which use the average emissions associated with the electricity grid of the UK. More detailed analysis can be found in the SECR section of our latest annual report.

Taxes paid		2021	2020
Energy consumption (kWh)		1.215m	1.197m
Total CO_2e emissions (in tonnes)	Market based	112	N/A
	Location based	240	263
Scope 1 CO_2e emissions (tonnes)[13]		111	59
Scope 2 CO_2e emissions (tonnes)[14]	Market based	0	N/A
	Location based	129	203
Scope 3 CO_2e emissions (tonnes)[15]		0.4	1
CO_2e emissions intensity			
Total CO_2e tonnes per FTE	Market based	**0.3**	**N/A**
	Location based	**0.7**	**0.9**

13 Scope 1 covers CO_2 emissions occurring from sources owned or controlled by Rothesay (e.g. gas). These are primarily calculated using meter readings, with the Area Method used to estimate Rothesay's contribution for communal office areas as detailed by The Climate Registry's General Reporting Protocol v3.0.
14 Scope 2 covers CO_2 emissions from the generation of electricity purchased by Rothesay. These are primarily calculated using meter readings, with the Area Method used to estimate Rothesay's contribution for communal office areas. Location based values are estimated using conversion factors from the UK Government's GHG conversion factors for Company Reporting in 2021.
15 Scope 3 covers CO_2 emissions occurring from business travel in rental or employee-owned vehicles where Rothesay is responsible for purchasing the fuel. These are estimated from total mileage by using the 'Average car' and 'Petrol' conversion factor from the UK Government's GHG conversion factors for Company Reporting in 2021.

Our operations

continued

For 2021, we have also estimated the operational emissions arising from our US office, which was occupied by 11 full time employees at year end 2021. With detailed meter readings not available, emissions have been estimated through our percentage occupation of total office floor space.

Our low Scope 1 emissions in the US can be attributed to the office building using electricity as a heat source, with gas only used as a backup component.

Note that US office Scope 3 emissions are captured as part of the SECR calculations listed above.

US Office	2021
Energy consumption (kWh)	0.071m
Total CO_2e emissions (in tonnes)	13
Scope 1 CO_2e emissions (tonnes)	<1
Scope 2 CO_2e emissions (tonnes)	13
CO_2e emissions intensity	
Total CO_2e tonnes per FTE	**1.2**

Waste

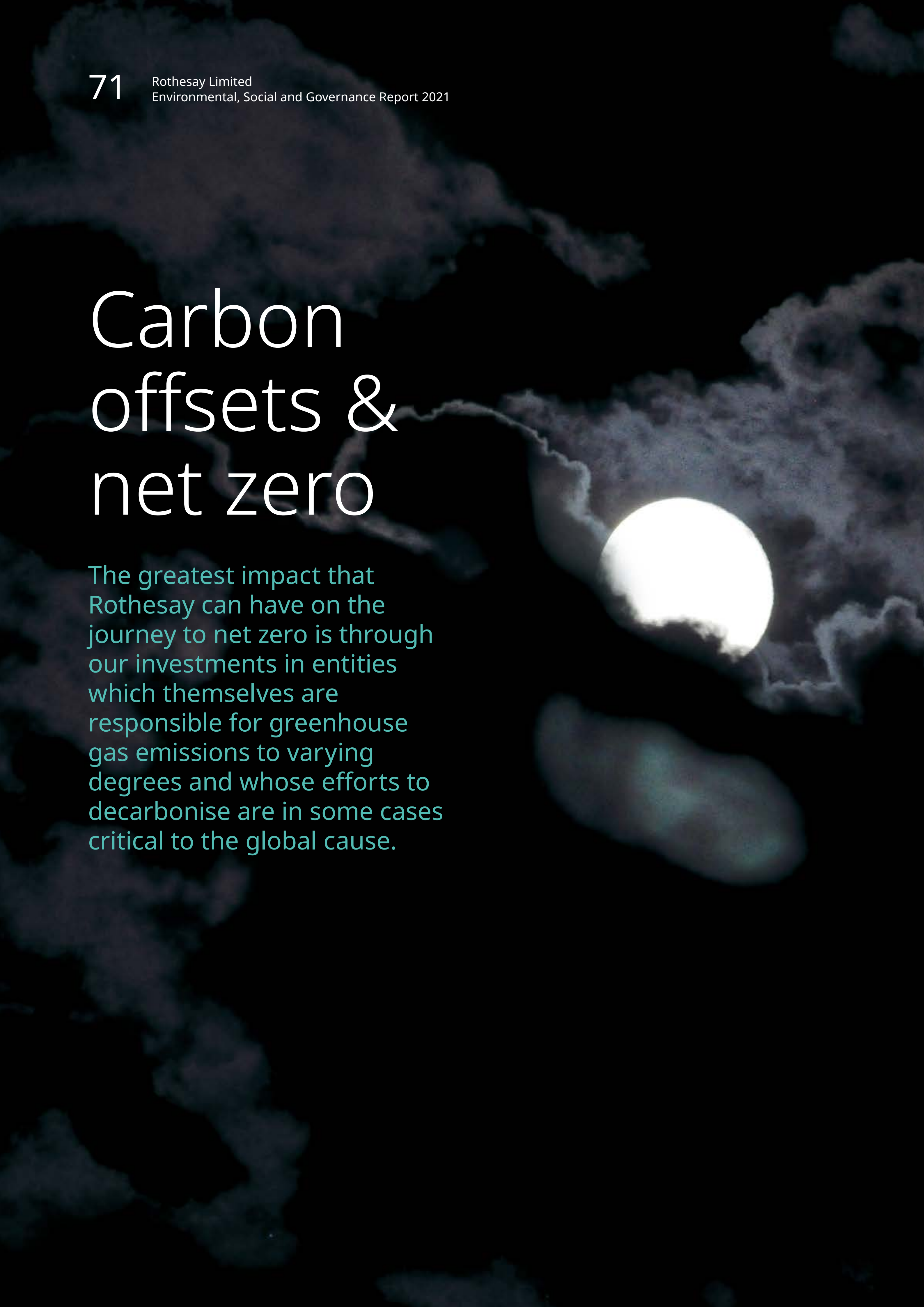
Rothesay has estimated its production of waste in the UK office as a fraction of the total building's waste pro-rated by floor space. Again, it should be noted that for both 2021 and 2020 our total waste usage was affected by the COVID-19 pandemic's impact on office occupancy. Recycled waste now represents 26% of our total waste output, up from 18% in 2020.

In 2021 Rothesay's people produced an average of 72kg of waste per employee.

The Post Building – Rothesay Share (kg)		
Stream	2021	2020
Recycled	6,436	3,199
Anaerobic digestion	7,342	5,904
Waste to energy	11,237	8,217
Total	**25,016**	**17,320**

Water

Rothesay's water consumption in our UK office, including its share of the building's common area usage, was 1,906m^3 in 2021 (1,532m^3 in 2020). This value will have been affected by the COVID-19 pandemic's impact on office occupancy.



Carbon offsets & net zero

The greatest impact that Rothesay can have on the journey to net zero is through our investments in entities which themselves are responsible for greenhouse gas emissions to varying degrees and whose efforts to decarbonise are in some cases critical to the global cause.

Our operations
continued

Nevertheless, it is important that Rothesay doesn't forget to look inward and do what it can to minimise emissions generated as we carry out our own work. Rothesay has consciously taken steps to reduce its Scope 1, 2 and non-portfolio Scope 3 emissions by occupying a highly heat efficient building (EPC grade B), switching to a supplier of certified renewable electricity and attempting, where practical, to replace business travel by videoconferencing.

We have taken steps to counteract residual emissions from our own operations by achieving:

- CarbonNeutral® company certification for 2020 in accordance with The CarbonNeutral Protocol, a service of Natural Capital Partners.
- Net zero emissions over the coming decade through a contract for direct air capture and storage with Climeworks.

Before explaining these projects in more detail it is worth taking a moment to describe what we understand the terminology to mean, because on the face of it carbon-neutral and net zero are very similar terms and yet in the technical sphere, they are being taken to mean subtly different things along the following lines:

Carbon-neutral	Net zero
Achievable without first reducing emissions	Reduction of all but hardest to abate emissions a prerequisite
Offsetting allowed via carbon reduction projects	Any residual offsetting requires carbon removal
Can cover Scope 1 and 2 emissions only	Typically include Scope 1, 2 and 3 emissions
Certification can be obtained	Standards still under development in certain respects
Can refer to a single product or part of a business	Ought to encompass the whole organisation
Can be achieved immediately and temporarily	Ought to be achieved over the long term

When considering the quality of projects from which one can buy carbon offsets there are several metrics to optimise and factors to consider:

- Permanence – carbon should be removed from the atmosphere for as long as possible. Planting trees in an area susceptible to wildfire may only cause carbon to be stored as wood for a few years before it burns and is released again as CO_2.
- Additionality – the project would not be taking place without the income derived from selling offsets. Solar or wind generation projects are now often commercially viable without the sale of offsets and are therefore less likely to be more additional than a project to plant new forest on degraded land entirely paid for by the sale of offsets.
- Avoiding social and environmental harms – for example, indigenous communities should not be uprooted in order for new trees to take root.
- Verifiability – the net effect of the project should be accurately estimated by scientifically valid methods.
- Exclusivity – the offsets purchased should not be claimed by anybody else. A country hosting a project to reduce emissions that sells its carbon offsets overseas cannot claim the project makes any addition to its Nationally Determined Contributions in furtherance of the Paris Agreement.

Rothesay has worked with Natural Capital Partners to assess our 2020 operational emissions. Against this (and allowing for a substantial permanence buffer) we have purchased a total of 460t CO_2 of offsets arising from four projects, all of which were independently verified by third parties according to either the Gold Standard or Verified Carbon Standard. Three of the projects achieve carbon removal through afforestation in Chile, China and East Africa while the fourth is a clean water project in Sub-Saharan Africa which reduces emissions by curtailing the use of firewood that would otherwise be burned to sanitise water by boiling. Further information on these projects and the United Nations Sustainable Development Goals (SDGs) to which they contribute is provided below:

Degraded Land Afforestation

Chile

This innovative project applies natural soil microbes called mycorrhizae to improve the health and growth rate of trees planted across degraded lands in Chile. Carbon finance enables the adoption of the mycorrhizal technology to saplings while they are in nurseries, it also facilitates loans for landowners to do the initial planting.

Community Reforestation

East Africa

This project organises community-based tree planting initiatives with over 12,000 small groups involving 90,000 farmers in Kenya and Uganda. Forestry projects such as this combine carbon sequestration with sustainable development, helping to improve community livelihoods through education and training, and create additional sources of income beyond smallholder farming.

Zhangye City Afforestation Portfolio

China

This project is planting trees on more than 23,000 hectares of barren land in the province of Gansu, supporting a drive to improve soil and water conservation and enhance local biodiversity. The project uses native species including: Willow; Poplar; and Pine.

Improved Water Infrastructure

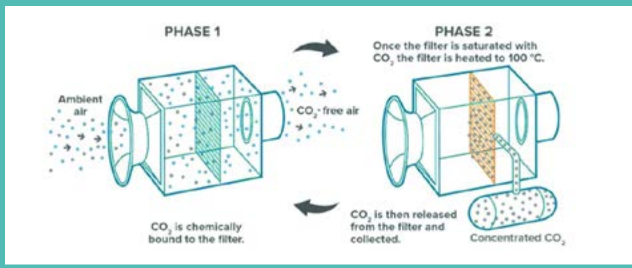
Sub-Saharan Africa

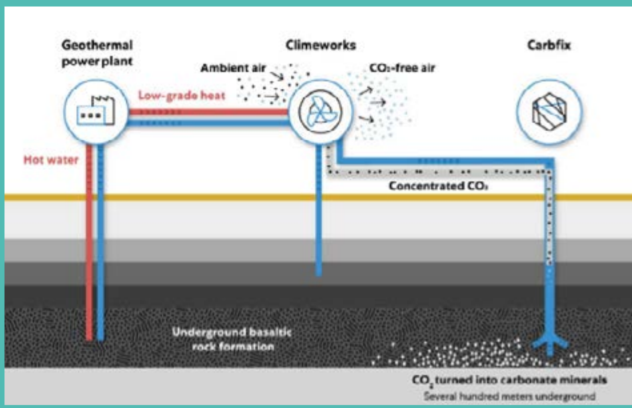
This project, based primarily in Uganda, Malawi, Rwanda and Eritrea provides clean drinking water to small rural communities by repairing and drilling new boreholes, providing access to water even during dry seasons. By providing clean water, communities no longer need to purify water through boiling. This alleviates pressure on local forests – the predominant source of firewood – and reduces GHG emissions.

Our operations
continued

Rothesay recognises that while nature based carbon removal via afforestation is currently effective for modest volumes it cannot be a long term or large scale solution because there is not enough land area available to be converted from agriculture to arboriculture.

This is why, for the medium to long term, we have chosen to partner with Climeworks and pay them to make use of their industrial direct air capture and storage technology to remove, on average, more CO_2 per annum than we expect to emit over the decade 2021-30. Powered solely by renewable energy, Climeworks' direct air capture plant in Iceland extracts CO_2 from the air, before its storage partner Carbfix mixes the CO_2 with water and pumps it deep underground where it reacts with the basaltic rock formations and mineralizes: the CO_2 literally turns into stone and is thus permanently removed from the earth's atmosphere. Climeworks' technology is scalable and does not compete with arable land. This project is therefore fully permanent, undoubtedly additional and has no harmful side effects. While it has not yet received VCS or Gold Standard verification, that process is underway and the project technology lends itself to relatively straightforward scientific assessment. The drawback is the price which, per tonne, is currently many multiples more expensive than offsets in either the rest of the voluntary markets or in compliance markets such as the EU Emissions Trading System. Given the steps we have taken to reduce our own operational emissions and noting that portfolio emissions are treated separately, our arrangement with Climeworks is, therefore, in accordance with what is envisaged by a net zero goal and is only really required to cover the hard to abate emissions associated with our share of the use of our building's boiler. Furthermore, our contract supports a nascent industry that is not yet suitable for investment grade lending but which is part of all successful climate scenarios with the IPCC projecting a need for cumulative carbon dioxide removals of order 100 – 1,000 $GtCO_2$ during the 21st century.





Controls and risk management

Categories of risk and key controls

Rothesay's prudential risks are grouped into one of six categories: strategy, insurance, market, credit, operational and liquidity risk.

Rothesay has developed appropriate processes and documented procedures, appropriate controls and other risk mitigation techniques in order to manage risks effectively. A policy framework ensures that an appropriate suite of risk management policies is maintained which sets out the principles and standards for risk identification, measurement, mitigation, control and monitoring.

Regulators

Rothesay is regulated by the Financial Conduct Authority and authorised and regulated by the Prudential Regulation Authority. We aim to maintain a good relationship with them and endeavour to engage with each of them in an open, cooperative and timely fashion.

Countering financial crime, corruption and money laundering

The Group is committed to complying with all applicable laws and regulations in relation to combating money laundering, terrorist financing and other financial crimes. The Group has various policies and procedures associated with aspects of financial crime and the overall financial crime policy is reviewed, including an annual risk assessment, on a regular basis, and is approved by the Board.

The approach toward financial crime is overseen by a dedicated team in Compliance, which reports to the Chief Compliance Officer, who is also the Money Laundering Reporting Officer (MLRO). The MLRO reports on financial crime matters to the Board on an annual basis and the regular reporting to the Board and other committees routinely includes management information on financial crime matters. Our financial crime controls are reviewed by our Internal Audit team to ensure they are fit and proper.

We have in place a financial crime policy covering the following areas:

- Anti-Money Laundering;
- Anti-Bribery and Corruption; and
- Sanctions.

Rothesay has in place a number of controls to prevent financial crime, including sanctions screening, gifts & entertainment monitoring and the performance of due diligence on all its counterparties including those associated with liability side transactions. Rothesay utilises a risk-based approach to its counterparty due diligence determined by the sector, jurisdiction and nature of the relevant counterparties. That risk-based approach is demonstrated in the degree of diligence that is undertaken during the on-boarding process and the frequency with which it is reviewed. This due diligence will consider all areas of financial crime including, where relevant:

- the identity of the ultimate business owner(s) of the counterparty
- the existence of a sanctions nexus
- the source of wealth or funds for any High Net Worth Individuals or Family offices that may own business in which Rothesay is considering investing
- any involvement of Politically Exposed Persons or state owned/state invested entities
- the use of any proceeds
- the use of intermediaries, including an assessment of any fee or commission payments to related parties
- negative media reviews

Rothesay refers to the Wolfsburg questionnaire/standards and uses various tools to help assess its approach to financial crime, including external data sources and regular screening of payments and accounts against current sanctions lists.

As well as its Financial Crime Policy, Rothesay also has the following policies in place:

- Market Abuse Policy; and
- Conflicts of Interest Policy.

These policies support Rothesay in identifying, managing and mitigating the risks, inherent within our business model, of the misuse of inside information and conflicts of interest that may negatively impact the outcomes experienced by our policyholders, shareholders and other stakeholders and market participants.

Rothesay also has in place a detailed compliance manual that covers the principles and standards to which we expect all our employees to adhere when conducting business. It acts as our internal code of conduct.

Controls and risk management
continued

Training
All senior managers at Rothesay have an obligation to take reasonable steps to try to ensure that their business areas operate appropriately and that obligation is cascaded down from the Board through to individual employees and contractors. Adherence to Rothesay's standards and expectations is regularly assessed and awareness is fostered and developed though regular training often involving external specialists, and available to all staff, whether permanent employees or fixed term contractors, on the following topics:

- Anti-Money Laundering and Know Your Customer obligations
- The 13 compliance standards in the compliance manual including specific standards with respect to financial crime and abiding by proper standards of market conduct
- Conflicts of Interest
- Market Abuse
- Personal compliance obligations in relation to whistleblowing/speaking up, gifts and entertainment, personal account dealing and outside business interests. Discussions and training on personal obligations also focus on the conduct rules that apply to all employees.

Whistleblowing
It is important that Rothesay maintains a culture where all employees feel they can speak up if they believe that something is not right. Where people may not feel comfortable raising concerns directly with their management, HR or Compliance, other avenues for whistleblowing are made available as part of the employee conduct policy. This includes a dedicated and anonymous whistleblowing hotline under the control of a whistleblowing champion who is also an independent non-executive director on the Board.

Lobbying and government relations
Rothesay is politically neutral and does not engage in party political campaigning or make party political donations.

Rothesay actively monitors the political landscape on issues relevant to our business, policyholders and people. Where appropriate, Rothesay engages with policymakers, or responds to consultations, which may directly impact our business. We take steps to ensure that any communication undertaken is honest, comprehensive and as accurate as possible.

We are committed to being transparent in our government relations activity and where Rothesay retains the services of public affairs agencies we expect them to adhere to relevant codes of ethical practice as well. The Head of Communications and Public Affairs is responsible for oversight of Rothesay's public affairs agencies and coordination of our public policy work.

Cybersecurity
Rothesay is dedicated to building robust controls to develop security and digital resiliency across the business. Our information security strategy falls under the responsibility of the Head of Information Security and is built upon four key group objectives for the business.

Protect valuable Rothesay data
We view information as a critical and valuable asset and as such, our proactive and reactive information security controls span across our employees, technology and processes. Our employees adhere to security controls relative to data sensitivity levels, our technology controls protect the confidentiality, integrity and availability (the so-called CIA triad) of data across our digital estate and our processes are reviewed regularly to apply best security practices, build resiliency and facilitate new business innovation.

Protect the brand
We vigorously defend and protect both our reputation and brand and have several initiatives that prevent the illegal use of our branding, logos and content for malicious purposes. In addition, we have programmes in place to ensure policyholders can receive support in cases of pension fraud and have integrated links on our website to redirect users to guides on how to avoid scams, from Age UK and Money Helper.

With expanding security risks in our industry, we have joined several initiatives to encourage information exchange and collaboration with other pension insurer leaders. We are a member of the Security Awareness Special Interest Group, a forum allowing members to discuss current security issues and topics, including industry best-practices and new security risk developments.

We are also a member of the Financial Services Information Sharing and Analysis Center, a global cyber intelligence sharing community focused on preventing security threats and building cyber resiliency in the financial services industry.

Create a cyber-aware company culture

Our Information Security team have developed an extensive annual security awareness programme to train all staff on security risks in the workplace, reduce knowledge gaps and apply best practices. An interactive, online security programme introduces security concepts to new members of staff and is integrated as part of the on-boarding process. In order to test the effectiveness of the annual security training, we conduct multiple phishing simulation tests to test staff vigilance The Board is kept aware of Rothesay's exposure to cyber risk through biannual updates to the Board Risk Committee. As mentioned in the Governance section, during the year the Board conducted a cyberattack exercise to rehearse Rothesay's response to a major cyber incident and this resulted in a number of steps being taken to strengthen our preparedness for such an attack.

The Information Security team also focuses on engagement with staff, providing advice on personal security awareness, to ensure our employees know how to protect their personal data online. This includes delivery of infographics and communications on security scams, as well as responding to ad-hoc security requests or concerns.

Secure the future

We are committed to maintaining and building our infrastructure to align with industry standards. We have obtained certifications for the ISO 27001 – Information Security Management Systems (ISMS) and ISO 22301 – Business Continuity Management. We align to multiple frameworks, including National Institute of Standards and Technology 800-53 and the Center for Internet Security controls. We have developed an extensive cloud controls framework to manage our security controls and to align with industry best practice have introduced recognised tools to monitor security risks across multi-cloud environments.

In addition to industry certifications, we have procured independent, external security testing providers to conduct multiple security tests on our infrastructure, including internal and internet-facing systems. This ensures that we can identify security vulnerabilities efficiently and apply recommended remediation strategies early in the software development lifecycle. Our security controls and policies are also subject to review from our external auditor.

Appendix

Carbon Intensity methodology

There is currently an acknowledged lag in the production of emissions data from companies. Consistent with the approach taken last year, the emissions data within this report is, where possible, based on 2020 information, reported in 2021 where possible. For a small subset of issuers where no new data has been published, 2019 data has been utilised.

Due to current data availability, our primary focus remains on reporting Scope 1 and Scope 2 data. Where available we also track Scope 3 emissions because, for sectors such as oil & gas and automotive, it is useful for risk assessment. This aligns with PCAF's acknowledgement that the comparability, coverage and reliably of Scope 3 data still varies greatly. As the position improves for Scope 3 emissions, we will look to increase our reporting to include this data.

The sector and overall averages are calculated by weighting individual borrower carbon intensities by the market value of the corresponding assets as a proportion of the total market value of assets for which we have obtained data.

For the preponderance of issuers (Corporates and sub-Sovereigns) our first source for information is the Trucost database which feeds into Rothesay's integrated pricing and risk management system and updates automatically as new information is released. Where data is not available via Trucost but an issuer has reported data, we have also utilised CDP disclosures and manual data extraction from issuer climate reporting to collate data. The numbers used have been checked for consistency with data from earlier years, with any outliers being further investigated.

The following notes describe the approach we have taken for sectors not covered by the above approach:

- UK, US, EU and Other Sovereigns: The Carbon Intensity measure is defined as annual t CO_2e / mm USD GDP. The underlying data is provided by EDGAR. Some extrapolation is required to estimate non CO_2 GHGs. The country-level emissions are divided by $m of GDP (which represents the most similar metric to revenue at country level). The emissions refer to those produced within the country and do not include those generated in producing imported items.
- Public Finance: Emissions reporting within this sector remains limited. For the hospital sector, we created an estimation methodology calibrated to those issuers for which emissions data is available, in order to attribute estimates to the wider sub-portfolio. The vast majority of emissions can be attributed to the daily running of hospital services, predominantly made up from the burning of fossil fuels to provide electricity, heating and hot water. Emissions for entities with disclosures are normalised by their number of care sites. This "emissions per care site" metric is then multiplied by the number of care sites maintained by any given, non-disclosing issuer in the sub-portfolio to provide an estimate of its emissions.
- Property: The Carbon Intensity measure is defined as annual t CO_2e / mm USD achievable rent. When lending to an owner occupier the emissions in Scope 1&2 are derived from all energy used to heat, light and air-condition the building. When lending to a landlord, however, it is more usual for the Scope 1&2 emissions to be limited in source to the energy supplied to the common areas by the landlord while the tenants' energy use is deemed to generate Scope 3 emissions which may not always be reported. Where possible we have sought to include tenant generated emissions in our numbers. Also where possible we use actual energy consumption data in our emissions calculations, but due to the limited data available, we frequently need to use the estimated numbers that appear in Energy Performance Certificates.

Carbon Intensity methodology
continued

Taking the individual sectors in turn:

- Loans secured on freeholds with ground rents: We have address and rental valuation data for all properties. Where properties have EPCs on file we use the emissions estimate therein, and in all other cases we extrapolate from the EPC information and we are able to obtain for neighbouring properties within the same postcode. This sector is dominated by modern apartment blocks with emissions well below those for the average UK dwelling.
- Social Housing: Disclosure from this sector has improved in 2021, including greater granularity of data to include reported emissions from properties under management, which is the most material contribution to social housing providers' footprint. However, direct reporting still results in partial coverage. From the entities that disclose information we are able to calculate an average "emissions per dwelling" metric which we assume applies across the rest of the sub-portfolio that provides no disclosure. Multiplying this metric by the number of units at any given provider and more generally across the whole sub-portfolio should give a reasonable estimate of total emissions.
- UK Mortgages: We followed the same method used for loans secured on freeholds with ground rents.
- Dutch Mortgages: Every property has been individually assessed for both its emissions and its achievable rent.
- CRE lending: Most of the lending in this sector is against single large properties. In the UK and Europe, we have engaged with most borrowers to obtain the emissions data for the buildings in question or, where such data is not available, we have been able to make use of recent EPCs. In the US, it has proved more challenging to obtain data. The buildings we finance are generally modern and energy efficient, leading to a low Carbon Intensity.
- Where emissions data is estimated using EPCs, the raw numbers will usually not change year on year because EPCs only need to be renewed after ten years. We can, however, expect emissions from properties to vary in line with the decarbonisation of the national energy supply.

Further information about Rothesay is available at

rothesay.com

In recognition of the carbon impact of this publication we are investing in Woodland Carbon Code certified woodland creation in the UK that will not only capture CO_2 over time, but will also offer a host of other benefits, including flood alleviation, water quality improvements, habitat creation, employment, public access, sustainable timber and cleaner air. We are mitigating our activities, helping the UK landscape and economy adapt to a new climate, and helping the country meet its Net Zero ambitions. As it is difficult to be sure of the exact footprint of a single publication like this we have made an investment we consider to be significantly more than its likely impact.

Rothesay

Rothesay
The Post Building
100 Museum Street
London WC1A 1PB

www.rothesay.com
T: 020 7770 5300

RECYCLED
Paper made from recycled material
FSC® C001785