Task Force on Climate-related Financial Disclosures

2022

Principality
Building Society
Cymdeithas Adeiladu

Where home matters
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Contents

Introduction

As real-world climate change places society at higher risk financially, socially and environmentally, our vision remains the same and our resolve remains strong. We continue to embed climate-related thinking and action into our decisions on governance, risk management, strategic direction and financial planning to fuel innovation, reduce our environmental impact, support the communities in which we operate and the customers we serve and to make a net zero future, a reality.

The global challenges and political volatility of 2022 focused our attention on the importance of living our purpose. As a mutual building society, we have a rich history of operating responsibly, it's in our DNA.

We believe in investing in people, processes and systems to ensure we're well-positioned for long-term success. Over the course of the last year, we've made progress with our net zero strategy, our carbon footprint, offsetting activity and colleague carbon awareness training. We've also developed and refined our Impact (ESG) Strategy to enable us to integrate climate-related risks and opportunities into our wider enterprise strategy. Our priorities will ensure the roadmap towards a sustainable future matches the changing needs of all our stakeholders and supports our strategic ambitions to achieve Better Homes, Secure Futures and a Fairer Society.

A newly formed Impact team will translate that vision into action; gathering and analysing the data we need; educating and empowering colleagues to embed a better understanding of our collective environmental responsibilities into a 'culture of sustainability'; develop knowledge, expertise and encourage co-creation of climate-smart initiatives across the business and drive the effective evaluation and disclosure of our climate-related risks and opportunities to ensure we're fully aligned with TCFD recommendations.

Becoming more agile in responding to the climate crisis is a practice not a project and it is a fundamental part of our culture. There's a long journey ahead and we acknowledge that we're at the start of that journey, taking considered and meaningful steps and building on our learning as we go. But our commitment to that journey and to making a positive difference is unswerving; not simply as a result of over 160 years of being a responsible business, but because, quite simply, it's the right and the only thing to do.

Governance

To comply with the Prudential Regulation Authority's Supervisory Statement 3/19 (SS3/19), intended to enhance banks' and insurers' approaches to managing the financial risks from climate change, we've obtained and analysed data relating to both the potential physical and transition risks arising from the portfolio of residential and commercial property mortgaged by the Society.

As our work evolves, and the impact of different scenarios is considered, we will assess financial risks by reference to our risk appetite and determine the most appropriate measures and targets to put in place. SS3/19 requires specific disclosures to be made regarding these risks, and these are included within this report.

Governance of our commitments to act on climate change sits at Board level. This is evolving in recognition of its growing significance for society and our increasing understanding of its impact on our business and our stakeholders.

Climate change considerations are embedded in the Society's governance model and future planning and, aligning to our Purpose, are intrinsic to how we operate. The Executive Committee and Board are fully engaged on climate strategy and proposition development, risk management and disclosures and have ultimate oversight of Principality's approach to considering, evaluating, and integrating climate-related risks and opportunities throughout the business on a day-to-day basis.

Recognising the importance of climate strategy to the business and to our wider stakeholders, the Board approved the Society's Impact Strategy in November 2022. Underpinning our overall enterprise-wide strategy, elements within the Impact Strategy are focused on climate and sustainability related initiatives and actions in addition to broader ESG considerations.

The Board Risk Committee (BRC) and Executive Risk Committee (ERC) are responsible for the oversight of the financial risks of climate change. In 2022, ERC received five updates and BRC received three updates and as a result of significant progress made, these Committees will be moving to six monthly reporting moving forwards now that all SS3/19 requirements have been fully met.

ERC is chaired by the Chief Risk Officer (CRO), with membership formed from the Executive Committee. It has delegated authority from BRC to monitor and review the risk exposures in accordance with the Society's Enterprise Risk Management Framework (ERMF), Board risk appetite, and the Society's strategy and medium-term plan.

Both ERC and BRC continue to receive regular updates on progress in meeting SS3/19 regulatory requirements, including the development of climate change risk management capabilities and associated management information, and the collection of data in order to

analyse the financial risk of climate change on the Society. The Board and members of the Executive Team also received bespoke climate risk training in November 2021.

The Society's Executive Committee received six reports in relation to climate-related activity in 2022, including updates on the net zero strategy, our carbon footprint, offsetting activity and colleague carbon awareness training.

In December 2022, the Board received the results of a carbon footprint 'deep dive', performed by leading climate change consultancy, ClimatePartner, and an associated net zero roadmap. In a clear demonstration of our commitment to tackling climate change by reducing our operational emissions, the Board agreed a set of clear priorities and targets for 2023.

Ownership for responding to climate change risk rests with the Risk Directorate and a Sustainability Manager was appointed in March 2021 to oversee this work. The Sustainability Manager reports directly to the CRO, who holds the Senior Managers Regime (SMR) accountability for managing the financial risk of climate change.

Throughout the year, ERC and BRC have:

- Monitored the Society's approach to climate change risk management and provided oversight by reference to delivery against the plan to meet requirements of SS3/19
- Agreed amendments to existing risk appetite statements to reflect our focus on sustainability and the development of a new risk appetite statement specific to climate change
- Agreed a suite of Key Risk Indicators to monitor the financial risk of climate change and reviewed the first set of metrics reported in October 2022
- Continued to recognise the importance of climate change to the Society's colleagues, Members and investors

Our journey to link our corporate strategy to our Environmental, Social and Governance proposition (ESG) started in 2021. We are proud of the progress we have made and will take a data led approach to becoming net zero in our business operations.

Key elements of the ESG proposition are detailed in our Impact Strategy, which outlines our plans to reduce our operational carbon footprint. We have defined targets within our Strategic Key Performance Indicators, which are reported to our stakeholders so we can evidence our progress.

Strategy

Path to delivery

We are currently creating a detailed carbon reduction roadmap, including a corporate carbon footprint assessment. This will inform specific strategies and help devise policies for us to become a more environmentally sustainable business.

Delivered to date

With a Head Office in Cardiff and 53 branches spread across Wales and the Borders, we recognise that our operations have an impact on the environment and will contribute to climate change. As mentioned above, as part of our commitment to achieve 'net zero' operational emissions, Principality partnered with ClimatePartner in 2021 to help us better understand our operational carbon footprint. They have supported us in identifying those parts of our operations which materially contribute to our footprint and by gathering and measuring the relevant data following the Greenhouse Gas Protocol Corporate Accounting and Reporting Standard (GHG Protocol).

A proportion of our current leased vehicle fleet runs on diesel fuel, so we've updated our Company Car policy to ensure that as each lease expires, replacement vehicles will run either on petrol with a maximum of CO_2 50g/Km or be supported by hybrid or fully electric technology. Our aspiration is that the use of diesel vehicles will be phased out over the next two years, with the intention to eventually phase out the use of petrol vehicles completely, but the timing of this is largely dependent on the development of an effective infrastructure for charging electric vehicles.

*read an update on this on page 20

Scope 3 Expansion

Principality has always fulfilled its obligations under the government's Streamlined Energy & Carbon Reporting (SECR) initiative and outputs have been monitored closely. This year, our Scope 3 operational emissions have been expanded to include the following material items:

- **Colleague commuting**
- **Water consumption**
- **Colleague home working**
- **Paper usage**
- **Waste disposal** including recycling and disposal of IT assets
- **Data centre usage**
- **Business travel** including accommodation

Mandatory carbon awareness training for all colleagues was launched in October 2021, helping to improve knowledge of what actions and activities contribute to climate change and how colleagues can reduce their own carbon footprint both at home and in work. Nearly all colleagues had received the training by October 2022 and a process is in place to ensure all new starters engage in this training and in evolving sustainability engagement programmes currently being developed by our Learning Experience team.

This learning has been augmented with other livestream Lunch & Learn events with thought leaders and key practitioners in the climate issues space and will include more exposure to climate-related content as we build a more holistic engagement and education-led approach to broader ESG activities. We have a number of colleague-led networks and Planet Friendly, our environmental network, provides the space for colleagues to engage in a climate action community, make climate-smart choices and focus on the practical skills that can create change within the organisation and beyond.

In 2021 Principality Commercial launched a £20m fund to support the development of low carbon housing in Wales. The Green Development Fund offers housing developers financial incentives for the delivery of low to zero carbon housing developments. In 2022 this fund was supported by the launch of a long-term loan product to specifically support Housing Associations with their sustainability ambitions.

Understanding the risks of climate change

We recognise that climate change is a complex and inherently systemic issue, particularly difficult to model given the long-term nature of the risks. It has potential implications across a number of risks defined through the Enterprise Risk Management Framework (ERMF).

We've identified the financial risks associated with climate change and plan to monitor our exposure through the current ERMF.

Climate change will either manifest itself as a physical risk - including acute risks (such as extreme weather-related events), and chronic risks (such as sea-level rise); or transition risk – including policy and legal risks, technology risks, market risks, and reputational risks. We also consider climate-related opportunities, including resource efficiency, energy sources, products and services, markets and resilience.

Physical risk

Physical risks relate to the increasing severity and frequency of climate and weather-related events that may severely damage property and other infrastructure, disrupt business supply chains, impact agricultural output and more broadly can lead to loss of life and population migration. This reduces asset values, results in lower profitability for organisations, damages public finances, and increases the cost of settling underwriting losses for insurers. Indirect effects on the macroeconomic environment, such as lower output and productivity and increased costs, exacerbate these direct impacts.

Transition risk

Transition risks arise from the adjustment towards a carbon-neutral economy and require significant structural changes. The transition will, among other things, prompt a reassessment of a wide range of asset values, a change in energy prices, and a potential fall in income, credit worthiness and wealth of some borrowers. In turn, this may result in credit losses for lenders and market losses for investors. However, the transition to a carbon-neutral economy also presents opportunities for the financial sector.

Qualitative analysis

Physical risks are relatively well recognised, but we believe that the scope and materiality of transition risks are less well understood. The acute and chronic impacts of physical risks have been considered, but crystallisation would occur over the long term. The potential impact of a number of transition risks were considered, including government policy, market sentiment and legal and technology risks. Policy change is expected to represent the highest risk as the implementation of proposed government policies has the potential to influence the value of the housing stock.

Scenario analysis

Scenario analysis does not predict the future, but it allows us to better understand the impact of climate change and how it could affect our company. Scenario analysis is a critical tool for strategic planning, risk management and assessing our strategic resilience.

To understand fully the risks associated with properties currently held as security in support of the Society's mortgage portfolio, we partnered with Hometrack and others to capture relevant physical and transition risk data. Physical risk data includes an assessment of the likelihood of flooding (data provided by Ambiental) and subsidence and coastal erosion (data provided by Terrafirma). Transition risk data uses EPC ratings for currently mortgaged properties with Hometrack sourcing the data from the Department for Levelling Up, Housing and Communities (DLUHC).

The Intergovernmental Panel on Climate Change (IPCC) has derived Representative Concentration Pathways (RCPs) which were used to assess the impact of physical risk on the book, with Hometrack data using the following pathways for their modelling:

RCP	CO_2 Emissions	Global Temp	Net Zero
2.6	Halved by 2050	Unlikely to exceed 2^0C (in line with Paris Accord)	Achieved by 2070
6.0	Peak in 2080	More likely to exceed 2^0C by 2100	Not Achieved
8.5	Continue on current trajectory	As likely as not to exceed 4^0C increase by 2100	Not Achieved

We'll be using this approach to scenario analysis each year to re-assess whether our current climate-related risk management controls are sufficient, and as part of this we'll continue to upskill our internal stakeholders on the impacts of climate change.

In 2022 the results of our scenario analysis identified the following impacts:

Physical risk impact

Physical risks related to climate (i.e. flood, subsidence and coastal erosion) have been identified within the current portfolio and scenario analysis has been used to assess the change in risk over time and approximate the potential financial impact.

Financial risk impact

The risks in the most severe scenario are not considered material at this stage. We will monitor exposure in the future and determine whether any changes to strategy or policy are warranted.

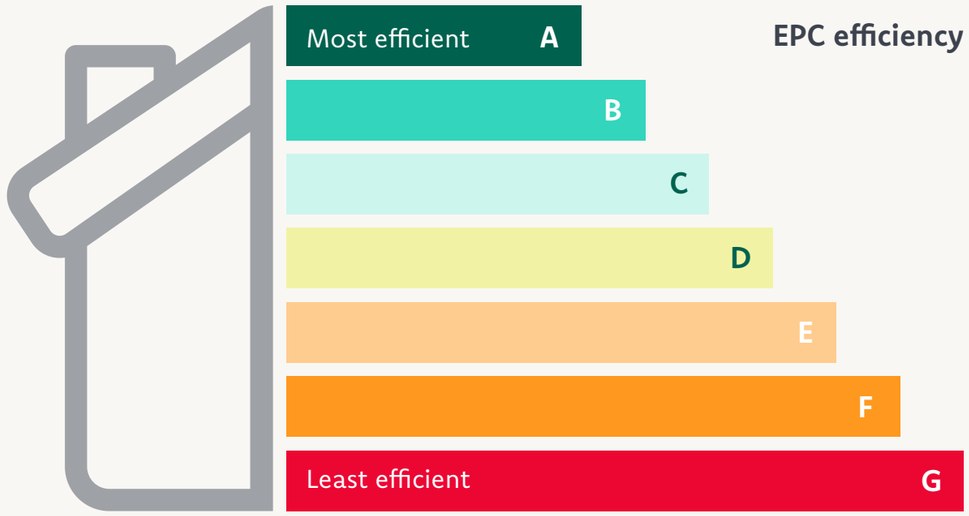
Transition risk impact

Potential transition risks are broad, with little available data from which to quantify impacts. The Society's analysis was therefore driven by data availability and potential impacts assessed, based on current knowledge.

Potential changes to EPC (Energy Performance Certificate) legislation meets these criteria, as the Government could make changes in order to influence CO_2 emissions. We recognise that there is already legislation in place setting minimum EPC ratings for Buy-to-Let properties, which could be tightened and/or expanded in the future.

The EPC data for properties is readily available in order to complete this analysis. Emissions included in the EPC data are also needed to calculate Scope 3 financed emissions for the total mortgage portfolio.

Our analysis was based on the assumption that the Government applies a policy for minimum EPC rating for domestic properties, where currently the minimum for rented properties is band E. A severe but plausible scenario where all domestic properties are required to have an EPC of at least C has been modelled.



EPC Overview

EPCs were first introduced by the UK government in 2007 in England and Wales to meet the requirements of the EU Directive on the energy performance of buildings. Initially these were included as part of the Home Information Pack (HIP), required for sales of properties of four bedrooms or more. The requirement to have an EPC for buildings that are either sold or rented has been extended to include all domestic and commercial properties, and are still a key requirement.

An EPC rating is a review of a property's energy efficiency and a score is allocated to each property ranging from A (most efficient) to G (least efficient). The expected energy costs and carbon emissions are calculated taking into consideration the building structure, heating and hot water systems and lighting.

There are some limitations to using EPCs:

- They are only valid for ten years
- They are only required when a homeowner sells a property
- They can be sensitive to fluctuations in energy prices
- Improvements made to a property following purchase are not reflected in the EPC rating
- The rating does not reflect the level of emissions generated from a property, much of which is determined by the behaviour of the occupants
- The rating does not reflect all electrical consumption, only lighting

In order to perform an analysis of the transition risk of the mortgage book, EPC ratings were acquired for all properties where available and an analysis of the distribution of the book was completed. Scenario analysis was based on the introduction of a minimum EPC rating and the potential impacts it may have on our mortgage book. There is a great deal of uncertainty around the implications of transition risk and as such we will incorporate them in future assessments once more detail is known.

From a governance perspective, we will continue to disclose our risk management process and key roles and responsibilities for oversight relating to climate-related risks and opportunities; continue to learn from and implement best practices from other organisations and third parties with expertise in climate change; and continue to consider how the Board includes climate-related issues in decision making on strategy and performance.

Risk management

Climate change creates implications and impacts right across our business. Rigorous and consistent risk management practices are embedded across our Enterprise Risk Management Framework (ERMF) and are designed to identify, assess and mitigate risks to minimise their potential impact and support the achievement of our business strategies.

The framework outlines the strategic approach for risk management and provides an integrated and holistic view of vulnerabilities and risks across the business by describing responsibilities, delegation of authorities and the methods by which risks are identified, measured, monitored and controlled. Principal risks within our ERMF are assessed, where relevant, using climate change as an optic to better understand any potential impact, and our assessment process ensures that management can review and understand whether the risk exposure is within or outside the agreed appetite.

There are two key elements to the assessment:

- A forward-looking view of the **probability** of an event occurring
- The **impact** should the event occur

Each principal risk is evaluated against criteria which measure the probability of that risk occurring and the impact it would have on the business. The assessment considers a number of variables and a quarterly residual value is derived for each risk that considers, amongst other things, the potential impact of climate change.

When assessing the impact of climate change on our principal risks, we will consider the potential transition risks, for example those that arise from the adjustment towards a low-carbon economy, and physical risks that relate to the increasing severity and frequency of climate-related events.

We operate a 'three lines of defence' model, created to strengthen communications on controls (1st line), risk management (2nd line) and assurance (3rd line) by clarifying essential risks and controls across all aspects of governance, management, and day-to-day operations. All three lines are responsible for considering both the financial and non-financial risks of climate change when performing their roles.

As our understanding of the risks posed by climate change evolves, we will assess the potential impact on the business, and our customers, by reference to a range of factors that include the following:

Risk category	Potential impact (Transition & Physical risk)
Credit risk The risk that borrowers or counterparties do not meet their financial obligations as they fall due.	• Impact of a greener economy on employment (lack of skills) and increases in energy costs leading to default • Impact on house prices due to government policy such as the stipulation of minimum EPC ratings • Physical damage to property caused by climate change e.g. flooding • Impact of increased household insurance premiums leading to uninsured and/or underinsured homes
Operational risk The risk of loss arising from inadequate or failed internal processes, systems, human error or from external events.	• Physical damage to the property portfolio including branches and offices • Loss of systems and data due to physical impacts • Increased use of our services resulting from the crystallisation of a physical risk • Availability of employees during a physical event and the impact this would have on our ability to provide Members with a service • Impact on the supply chain in relation to costs and services • Reconsideration of third-party relationship due to their attitude to climate change risk
Conduct risk The risk that the Society does not treat its customers fairly resulting in inappropriate or unfair outcomes.	• Potential for customers to be treated unfairly because climate-related physical or transition risks impact their circumstances
Liquidity and funding risk Liquidity risk is the risk that the Society has insufficient funds to meet its obligations as and when they fall due. Funding risk is the risk that the Society is unable to access funding markets or is only able to do so at excessive cost.	• Reduced savings balances due to economic impact of climate change risk on customer wealth • Reduced wholesale funding access following lower investor appetite due to negative perception of Principality in relation to the management of risks associated with climate change
Business risk The risk arising from changes to the business model and the risk of the business model or strategy proving inappropriate due to macroeconomic, competitive, geographical, regulatory or other factors.	• Reputational damage caused by a negative perception of Principality and its perceived response to the climate risk agenda • Managing and meeting member expectations • Macroeconomic market impacts arising from physical or transition events
Interest rate risk The risk that the value of income derived from the Society's assets and liabilities is adversely impacted because of changes in interest rates.	• Macroeconomic market movements impact value of balance sheet assets and liabilities as a result of interest rate movements
Solvency risk The risk that the Society does not maintain sufficient capital resources in excess of minimum regulatory requirements	• Deterioration of balance sheet assets following physical impacts or as a consequence of a fall in the value of collateral held to support mortgage loans

Our culture and risk management philosophy reflects a strong awareness of the current and emerging risk landscape that could affect the delivery of our strategy.

Metrics and targets

Having accurate data is fundamental to being able to properly measure and monitor our climate related risks so that we have a good understanding of where we are starting from and can clearly work out where we want to be.

In 2022 we spent a lot of time investigating what data we have and how we can improve its quality going forward to make it even more accurate. This improved data quality has resulted in some changes to our emissions figures, detailed below. Where appropriate, we have explained the reason for these changes.

Operational emissions

For the second year, we have worked with ClimatePartner to fully review our operational emissions and as mentioned previously, have worked on improving the accuracy of the data used.

Scope 1 emissions are created directly by the Society from self-generated heat and from our fleet vehicles. Scope 2 emissions are indirect emissions from purchased electricity and Scope 3 covers all other indirect emissions from our operations occurring from sources that are not owned or controlled by the Society. Financed emissions relate to the emissions of the financed element of properties included in the mortgage portfolio and whilst part of scope 3, are reported separately here.

2022 emissions summary	Total [t CO_2e[1]]	Total [%]
Scope 1	297.18	22.7
Direct emissions from company facilities	**287.45**	**21.9**
Heat (self-generated)	241.55	18.4
Refrigerant leakage	45.91	3.5
Direct emissions from company vehicles	**9.72**	**0.7**
Vehicle fleet	9.72	0.7
Scope 2	0.25	0
Purchased electricity for own use	**0.25**	**0**
Electricity (vehicle fleet)	0.25	0
Electricity (buildings)[2]	0	0
Scope 3	1,013.85	77.3
Purchased goods and services	**153.52**	**11.7**
Print products	131.35	10
External data centre	17.33	1.3
Office paper	4.47	0.3
Water	0.36	0
Fuel- and energy-related activities	**134.78**	**10.3**
Upstream emissions electricity	96.04	7.3
Upstream emissions heat	36.23	2.8
Upstream emissions vehicle fleet	2.52	0.2
Waste generated in operations	**20.5**	**1.6**
Operational waste	20.5	1.6
Business travel	**41.31**	**3.2**
Rental and private vehicles	27.67	2.1
Rail	7.47	0.6
Hotel nights	6.17	0.5
Employee commuting	**663.74**	**50.6**
Home office	351.29	26.8
Employee commuting	312.46	23.8
Overall results	**1,311.28**	**100**

[1] t CO_2e stands for tonnes of carbon dioxide equivalent, the recognised measure of emissions per the GHG Protocol

[2] Purchased electricity was calculated using the market-based method. Using the location-based method, emissions amount to 511.81 t CO_2e.

2021 v 2022 comparison

	2022	2021	Change YoY	
Emission Source	Emissions [t CO_2e]	Emissions [t CO_2e]	Emissions [t CO_2e]	%
Scope 1	**297.2**	**243**	**54.2**	**22.30%**
Direct emissions from company facilities	**287.5**	**238.3**	**49.2**	**20.60%**
Direct emissions from company vehicles	**9.7**	**4.7**	**5**	**106.80%**
Scope 2	**0.3**	**0.6**	**-0.3**	**-55.40%**
Purchased electricity for own use	**0.3**	**0.6**	**-0.3**	**-55.40%**
Scope 3	**1,013.90**	**1,520.80**	**-507**	**-33.30%**
Purchased goods and services	**153.5**	**469.1**	**-315.5**	**-67.30%**
Fuel- and energy-related activities	**134.8**	**148.7**	**-13.9**	**-9.40%**
Waste generated in operations	**20.5**	**62.6**	**-42.1**	**-67.30%**
Business travel	**41.3**	**31.8**	**9.5**	**29.70%**
Employee commuting & home working	**663.7**	**808.6**	**-144.9**	**-17.90%**
Employee commuting	351.3	381.9	-30.6	-8.00%
Home office	312.5	426.7	-114.2	-26.80%
Overall results	**1,311.30**	**1,764.40**	**-453.1**	**-25.70%**

We are very pleased to see that overall, our operational emissions have reduced by 25% in 2022.

While some of this is due to actual reductions, some is a result of either improved data quality or a change in calculation methodology. Where there has been a change in methodology, the 2021 figures have been re-baselined to enable a like for like comparison. For this reason, 2021 emissions are 166 t CO_2e larger than the figure reported last year.

Key changes are explained below:

The direct emissions from company facilities increased by 20% due to a small refrigerant leak in May 2022, which has now been rectified.

The key contributor to the reduction in purchased goods and services emissions relates to the use of paper. The reduction is largely a result of collecting more granular data and revisiting some of the assumptions we made in 2021. In addition, while we sent the same number of leaflets to our Members this year, the paper we used was pre-purchased in 2021 and accounted for in that period. Therefore there are no emissions directly attributed to this activity in 2022, although we are capturing and reporting the emissions relating to the printing process. We're committed to actively reducing our paper consumption enterprise wide. As the associated data is complex and extends across a range of business functions, we're continuing to consolidate and streamline the process for collecting this data more efficiently and effectively.

We recognise the scarcity of our natural resources and were pleased to see our water consumption reduce by 70% at head office and 32% across our branches. As our colleagues returned to Principality House following its re-opening in June, we naturally saw the level of waste increase, although the recycling rate increased by 282%. Our amazing branch colleagues reduced the amount of waste they generated by 56%.

Our move to hybrid working and migration towards cloud-based services (from on-premises data centres) resulted in a significant investment in technology, which meant that old and redundant IT equipment, some of which had been stored throughout the pandemic, was recycled in 2022. This resulted in the weight of our disposed IT equipment increasing by 1167% when compared to 2021, but as this was recycled there are no associated emissions.

Following the lifting of Covid restrictions, we saw the expected increase in business travel, both in scope 1 measures from use of company vehicles, and Scope 3 measures from privately owned vehicles and train travel. This increased our emissions in this area, although the scope 3 calculation also includes hotel accommodation, which was not calculated in 2021.

We are pleased to note a significant decrease in energy used for colleague home working and commuting. However, we believe this is, at least in part, the result of collecting much more granular data from our colleagues in 2022.

We are a carbon neutral organisation

As agreed by the Board in 2021, we continue to offset our operational emissions while we work on reducing them. We offset our 2021 operational emissions by purchasing carbon credits in a hydropower project in the Democratic Republic of Congo[3]. For our 2022 emissions, our colleagues voted to offset by supporting a forest protection project in Colombia. The Society purchased carbon credits in this scheme, allowing us to retain ClimatePartner's carbon neutral status. You can find out more about this **here.**

[3] 2021 offsetting information

Financed emissions

Category 15 of Scope 3 emissions relate to investments. For Principality, this means the financed emissions from our retail mortgage portfolio.

As discussed in the Strategy section of this document, despite its limitations, we believe that EPC data currently represents the best available methodology for calculating carbon emissions generated from a property. The table below gives an overview of the carbon emissions of the retail mortgage portfolio. Total CO_2 emissions per square metre are calculated for the mortgage portfolio using property level data and adjusted by the loan to value ratio to derive estimated carbon emissions financed by the Society.

Methodology

The calculation of Scope 3 financed emissions aligns to the PCAF (Partnership of Carbon Accounting Financials) standard, using estimated carbon emissions based on EPC ratings. A weighted LTV of the mortgage is then applied to calculate the proportion of the property value that is financed by the Society.

PCAF guidance suggests using the property value at origination, but there are drawbacks of using this metric as it does not accurately reflect current financing for customers who have increased their borrowing as house prices have increased. Using a more recent house valuation would therefore give a better representation of the loan to value ratio and estimated financed emissions of the book.

Property values as at June 2021 were used to establish an initial benchmark in 2021, derived through internal calculations using HPI (House Price Index). These values have been retained in this year's disclosure to remove further HPI fluctuations from any analysis. Loans originated after June 2021 retain their value at origination.

Data quality score

A weighted data quality score of 3.58 has been calculated for financed emission data by:

- Using emissions data in publicly accessible EPCs available for approximately 73% of the total mortgage book. These are given a data score of 3.
- Interpolated EPC data across the remaining 27% of the portfolio. Properties without an EPC are assumed to have the same EPC characteristics as the properties with an EPC. These are given a data score of 5.

The calculation of data score is based on allocating a score from 1 to 5 based on the accuracy of the data used. The closer the score is to 1 the higher the data quality. A score of 1 or 2 is based on actual building emissions, a score of 3 or 4 is based on estimated building emissions based on floor area and a score of 5 is estimated building emissions based on number of buildings. Principality does not have access to actual building emissions, therefore a score closer to 3 would indicate higher data quality for the Society.

Comments

Estimated total emissions have decreased 0.01 M tCO_2e per year from the 2021 disclosure (0.28 from 0.29) largely due to a reduction in the number of properties, with a similar reduction of 1kg CO_2e per square metre per year (40.89 vs 41.82).

Financed emissions have increased 0.75 kg CO_2e per square metre per year since 2021, as average LTV has increased as property values for properties already on the book in 2021 have been held in line with June 21 and the strategic focus on supporting first time buyers, who tend to have a higher proportional borrowing requirements. The data score has marginally improved in 2022 due to a higher proportion of new business written having a valid EPC.

Scope 3 mortgage emissions:	2022			2021		
	Total	Owner Occupier	BTL	Total	Owner Occupier	BTL
Property Metrics						
Volume of Properties – With a valid EPC	55,078	37,855	17,223	55,657	37,715	17,942
Volume of Properties – Total book	75,904	54,039	21,865	78,364	55,412	22,952
Property floor area in million metres square (i) – With a valid EPC	4.95	3.61	1.34	4.98	3.59	1.38
Property floor area in million metres square (i) – Total book	6.83	5.15	1.70	7.01	5.28	1.77
Absolute scope 3 carbon dioxide emissions (CO_2e) in million tonnes (Mt) per year (y) for mortgages						
On properties with a valid EPC (ii)	0.20	0.14	0.06	0.21	0.15	0.06
On whole book using interpolated EPC data (iii)	0.28	0.20	0.08	0.29	0.22	0.08
Absolute carbon dioxide emissions in kilograms per square metre of floor area per year ($kgCO_2e/m2/y$) using interpolated EPC data	40.89	39.32	45.11	41.82	40.83	44.39
LTV weighted scope 3 carbon dioxide emissions (CO_2e) in million tonnes (Mt) per year (y) for mortgages						
On whole book using interpolated LTV weighted data (iv)	0.16	0.12	0.04	0.16	0.12	0.04
LTV weighted carbon dioxide emissions in kilograms per square metre of floor area per year ($kgCO_2e/m2/y$) using interpolated data (v)	23.70	23.56	23.78	22.95	22.41	24.36
Data Score (vi)	3.55	3.60	3.42	3.58	3.64	3.44

[i] Total floor area is taken from the EPC reports and interpolated for the total book.

[ii] Calculations are based on number of mortgaged properties with a valid EPC. This is approximately 73% of the mortgage portfolio (up from 71% in 2021).

[iii] Calculations are based on estimating EPC data across the whole mortgage portfolio using interpolation based on housing data. The carbon dioxide emissions account for EPC covered emissions only (space and water heating, and lighting). Indirect emissions from other energy uses by the household have been excluded such as those resulting from the use of domestic appliances.

[iv] LTV adjustments have been applied to the total CO_2 emissions predicted for the whole mortgage book. The property value as at 31 June 2021 was used to establish a baseline for the portfolio in 2021 and has been retained in the above analysis for comparability purposes (with loans written after June 2021 using loan origination amount).

[v] Improvements in the data approach have resulted in a restatement of 2021 emissions to reflect a more accurate LTV.

[vi] Data scoring aligns with PCAFs Global GHG Accounting and Reporting Standard, with 1 representing high data quality and 5 representing low data quality. Data score has been restated for 2021 to better reflect interpolated data quality.

Targets

When analysing our 2021 carbon footprint data for operational emissions, we used SBTi methodology and scenario analysis to understand the emission reduction targets required to limit the global temperature increase to well below 2°C compared to pre-industrial levels.

We now have a much better understanding of the size of the task involved to achieve net zero emissions in our operations.

We had previously indicated our aspiration to achieve this goal by 2030. However, we are now in possession of more data which has enabled us to forecast more accurately the steps we will need to take in order to meet this outcome. Given the significant scope and scale of activity required, we have determined that while 2030 represented an ambitious target, it will not be achievable. A new plan was therefore submitted to our Board in December 2022 and the following revised targets have been approved:

1. **Net zero in Scopes 1 & 2 by 2030**
2. **Net zero in Scope 3 by 2040** (excl. the mortgage book), but with a significant reduction being achieved by 2030

Although we would like to set a target for the decarbonisation of the mortgage book, we do not believe it is possible to set a meaningful target until there is more certainty over the UK Government's policy and investment plans in relation to achieving its net zero commitment under the Paris Agreement. We continue to support this initiative in a number of ways, including contributing to various working groups led by organisations such as UK Finance and the Building Societies Association to lobby and influence government policy on issues including the decarbonisation of the UK housing stock.

As a mutual building society, climate change action is at the heart of what we do – protecting and supporting both our local and global communities. Our dedicated Sustainability Manager drives this work forward across all areas of the business, always looking at ways in which we can make a positive change, big or small.

However, as detailed in the Annual Report, we know that to make a material reduction in our carbon footprint and achieve our net zero ambitions we're going to need to make big changes to our systems and processes. Realistically, some of these things may take years to implement before we start seeing the benefits.

One example is the need to update our systems and data so that we can better capture and act upon customer communication preferences. This should help us reduce the amount of paper we generate and send and we'll be making 'paperless by default' a priority for 2023, requiring sustainability to be considered as part of all internal business cases. We're also working on embedding sustainability into the procurement process and our value chain to ensure that our suppliers are as committed to reducing their emissions as we are.

At Principality, we consider ourselves an ethical organisation and strive to ensure that all ESG-related risks across the business are well managed. We are therefore working closely with ESG rating providers to ensure that this is reflected in our ESG assessment scores as far as possible.

Summary

	Delivered to date	Current focus	Future deliverables
Governance	Board kept updated on climate change issues Climate risk training for Board and Executive Committee Sustainability Manager appointed in March 2021	Continue to engage Board on risk management and disclosures Embed climate change governance at Board and management level Link variable remuneration to carbon reduction targets	Continued discussion on climate change and the risks and opportunities it presents
Strategy	Developed approach to climate change scenario analysis and reporting Developed relationships with third parties to supply climate-related data Use physical and transition risk analysis to inform decision making	Continue to use physical and transition risk analysis to inform strategic decision making Targeted paper reduction project Embed sustainability into supply chain	Explore further risks and opportunities Monitor and enhance understanding of physical and transition risks
Risk management	Assessed physical and transitional risks Amended current risk appetite statements Developed climate change risk appetite statement Developed suite of Key Risk Indicators (KRIs) for climate change risk	Monitor climate change risk through current risk framework Six monthly reporting of KRIs to Board Risk Committee	Continue analysis of transition risks
Metrics and targets	Financed emissions calculated via PCAF methodology Operational emissions calculated and data quality improved Scenario analysis used to develop net zero roadmap for operational emissions	Continued improvement of data quality for carbon footprint Improve data quality and data capture for the assessment of transition risk, while monitoring industry evolution in this space	Continue to work with partners to develop and improve climate change reporting

ONLINE

Visit us at **principality.co.uk** or on our social channels **@principalitybs** for the latest updates, including our opening hours.

VISIT

Visit **principality.co.uk/branch** to find your nearest branch and for our service updates.

CONTACT

If you would like to get in touch call us on **0330 333 4000**• or email us at **enquiries@principality.co.uk**

MEMBER PULSE

Have your say by joining our online community at **principalitypulse.co.uk**

This leaflet is available in large print, Braille and audio tape on request by calling 0330 333 4012•

- To help us maintain our service and security standards, telephone calls may be monitored and recorded.

TCFD 03/23-1

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