Climate-related Financial Disclosures 2022

Nationwide
Building Society

Ambition and overview
Strategy
Governance
Risk management
Metrics and targets

Climate-related Financial Disclosures

Climate change presents a risk to Nationwide and its members, and so managing climate change risk and greening the UK's homes is integral to our strategy. Helping to address the impact of climate change aligns with our mutual purpose which is why Nationwide has joined the Net-Zero Banking Alliance (NZBA), aspiring to achieve net-zero emissions by 2050 at the latest. As part of this, Nationwide is developing a set of intermediate science-based targets for its scope 1, 2 and 3 emissions aligned to the methodologies of the Science-based Target Initiative (SBTi). Nationwide made it clear to public policymakers, at the time of joining the NBZA, that science-based targets are particularly aggressive for residential mortgages, and that the Society would not be able to achieve these targets without broader policy changes.

This year, Nationwide delivered its plan to meet the requirements of the Prudential Regulation Authority's (PRA's) Supervisory Statement 3/19 (SS3/19) - Enhancing banks' and insurers' approaches to managing the financial risks from climate change, by further enhancing and embedding its capabilities to monitor and manage climate risk. In addition, Nationwide took part in the Bank of England's Climate Biennial Exploratory Scenario (CBES), further developing its climate scenario analysis capabilities. The information set out opposite is provided in line with the requirements of SS3/19, to disclose the financial risks from climate change, and is aligned with the Financial Stability Board's Task Force on Climate-related Financial Disclosures (TCFD) recommendations and its objective to improve and increase the reporting of climate-related financial information.

This information details our understanding of the impact of climate change on the Society and its members. In addition, it explains how the risks from climate change are managed and incorporated into the Society's governance model, and the metrics and targets used to monitor the risk.

Nationwide's climate change ambition

Environmental and climate consciousness are aligned to our purpose of *building society, nationwide*. This compels us to take meaningful action to help members green their homes (so that they are warmer, more comfortable places to live, and more cost effective to heat in the long term) and manage better the impacts of a more unpredictable climate.

Nationwide is committed to a net-zero future (to achieve an overall balance between greenhouse gas (GHG) emissions produced and taken out of the atmosphere) and achieving our Mutual Good Commitments. These include our ambition to lead the greening of UK homes. Our aim is to demonstrate Nationwide's mutual difference in areas where we can make the most positive difference to our members, communities and wider society.

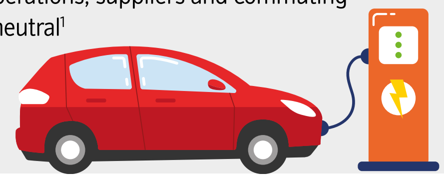
In the 19th century, Nationwide helped people build their homes, in the 20th century, we helped people buy their homes, and in the 21st century, our additional challenge will be to help people green their homes.

Nationwide supports the UK's ambition to be net-zero by 2050.

Nationwide's ambition, to lead the greening of UK homes, is central to our net-zero aspiration.

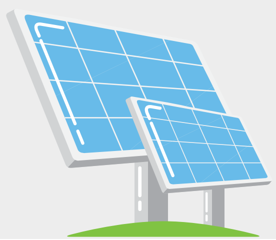
This is supported by our Mutual Good Commitments, that by 2030...

- At least 50% of homes in our mortgage portfolio (owner-occupier and buy to let) will be rated EPC C or better
- Our business operations, suppliers and commuting will be carbon neutral[1]



With around 16%[2] of the UK's carbon emissions coming from the home, and many of the homes being built today not meeting the highest energy efficiency standards, achieving the reduction in emissions to deliver net-zero will require a significant cross-industry collaborative effort, led by government.

Nationwide has convened the Green Homes Action Group – a group of 15 companies and leaders from across the housing, construction, financial services, academic, energy and charity sectors with the aim to remove the main barriers to reducing the emissions of UK homes nationwide.



Using the collective voice of Nationwide's Green Homes Action Group, we are campaigning for a more comprehensive national retrofit strategy through seven policy asks...

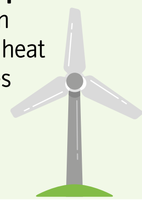
Build green homes for the future now – government and industry to work together to bring the Future Homes Standard implementation forward

Create new jobs in green retrofitting – government and industry to work together to stimulate demand in new, good quality, green jobs

Make it fairly financed – government to provide financial support to people to encourage the uptake in green solutions, including support for those who cannot afford to pay

Make property fit for the future – create a building passport, updated in real-time, to reflect changes and upgrades made to the home

Support green homes with green power – deliver clean energy and heat to UK homes



Regulate green retrofitting – ensure all installers undertaking retrofits are certified and compliant with high standards

A public information campaign that inspires – help people understand what is possible for their home

[1] Carbon neutral is no net release of carbon dioxide into the atmosphere, achieved by removing or eliminating emissions, or through funding equivalent carbon savings through renewable or offsetting projects.
[2] Department for Business, Energy & Industrial Strategy, 2020 UK Greenhouse Gas Emissions, Final Figures (February 2022).

Climate-related disclosures overview

Nationwide continues to focus on further embedding and improving its climate change risk management capabilities whilst enhancing its understanding of climate change and the impacts it has on the Society and its members.

	Achievements	Future activity
Strategy	• Committed to supporting the UK's ambition to be net-zero by 2050 • Further enhanced our approach to scenario analysis and participated in the CBES • Launched a solar panel pilot with our partner, MakeMyHouseGreen • Convened a cross-industry Green Homes Action Group which is taking action to influence and drive change in the greening of homes • Commissioned research into potential retrofit opportunities and barriers to the greening of UK homes, working with Element Energy • Held our inaugural investor webinar on Environmental, Social and Governance (ESG) strategy and the greening of UK homes • Launched a Sustainability Linked Loan to registered social landlord (RSL) borrowers • Climate change incorporated into our ICAAP and Pillar 2A capital assessment • Participated in CDP and S&P's ESG assessments • Enhanced our physical risk assessment capabilities to include assessment of coastal erosion and storms • Developed internal capabilities to assess transition risk across our residential and commercial mortgages and unsecured lending portfolios • Requested around 200 third parties join EcoVadis to disclose their ESG credentials	• Further embed climate change considerations into Nationwide's strategy and proposition development processes, including the identification of additional risks and opportunities • Explore climate change scenario analysis opportunities to provide an ongoing view on physical and transition risk exposures, including implementing learnings from the CBES • Leverage the learning from the solar panel pilot to develop further green, including retrofit, propositions • Continue to convene and participate in cross-industry working groups to drive real change in the greening of UK homes • Continue to influence government on the challenges of greening UK homes to encourage further policy action • Develop a net-zero aligned transition plan to help track against Nationwide's net-zero ambition • Further enhance our climate-related financial disclosures in line with TCFD recommendations and consider the implications of the future UK green taxonomy, and sustainability disclosure requirements • Perform additional assessments of the impact of climate-related factors on UK residential property valuations and affordability • Incorporate climate risk factors into our expected credit loss assessment process • Continue to actively engage with third-party climate and ESG rating agencies to ensure Nationwide's credentials are fully understood and reflected in any scores / ratings • Continue to encourage third parties to join the EcoVadis platform, and disclose scope 1 and 2 emissions and emissions reduction targets through our Third Party Code of Practice
Governance	• Further increased Board engagement on climate change risk management, with a particular focus on our approach to climate change scenario analysis and our participation in the CBES • Embedded enhanced governance during the CBES to ensure appropriate senior management and Board engagement • Discussed green proposition development at our annual Board Strategy Conference • Appointed a climate specialist Board advisor	• Continue to evolve and optimise the climate change governance model to ensure even greater focus at Board and management level • Further engage the Board on strategy and proposition development, risk management and disclosures
Risk management	• Embedded climate change risk management to meet the requirements of SS3/19 • Launched new climate change risk appetite metrics • Delivered Society-wide climate change training to raise awareness of the risks and opportunities of climate change	• Deliver Nationwide's extended climate change risk implementation plan to further enhance its climate change risk management capabilities, recognising the recommendations of the Basel Committee on Banking Supervision's (BCBS's) principles for the effective management and supervision of climate-related financial risks • Incorporate climate factors into Nationwide's business as usual financial forecasting activity • Consider the inclusion of transition risk factors into borrower affordability credit assessments • Further expand Nationwide's consideration of climate risk beyond financial implications • Continue to review lending policy to ensure members are not unduly exposed to physical and transition risk
Metrics and targets	• Broadened our investment scope 3 carbon emissions data to cover commercial real estate (CRE) and RSL portfolios in addition to mortgages, aligning with the Partnership for Carbon Accounting Financials (PCAF) methodology • Calculated upstream scope 3 emissions for purchased goods and services, capital goods, and transportation and distribution • Tracked uptake of our green propositions	• Develop a set of intermediate science-based targets for scope 1, 2 and 3 emissions, aligned to a net-zero pathway • Evolve Nationwide's internal climate change management information to track better our climate change ambitions and support management decision making

Strategy

Nationwide's approach to considering climate change, the opportunities it presents, and how the associated risks are measured and managed.

Strategy

Leading the greening of UK homes and supporting the transition to a net-zero economy

Climate change and environmental sustainability are a core part of Nationwide's purpose of *building society, nationwide*. Our purpose aligns with our ambition to lead the greening of UK homes and supports our aspiration to transition our business to net-zero by 2050 at the latest.

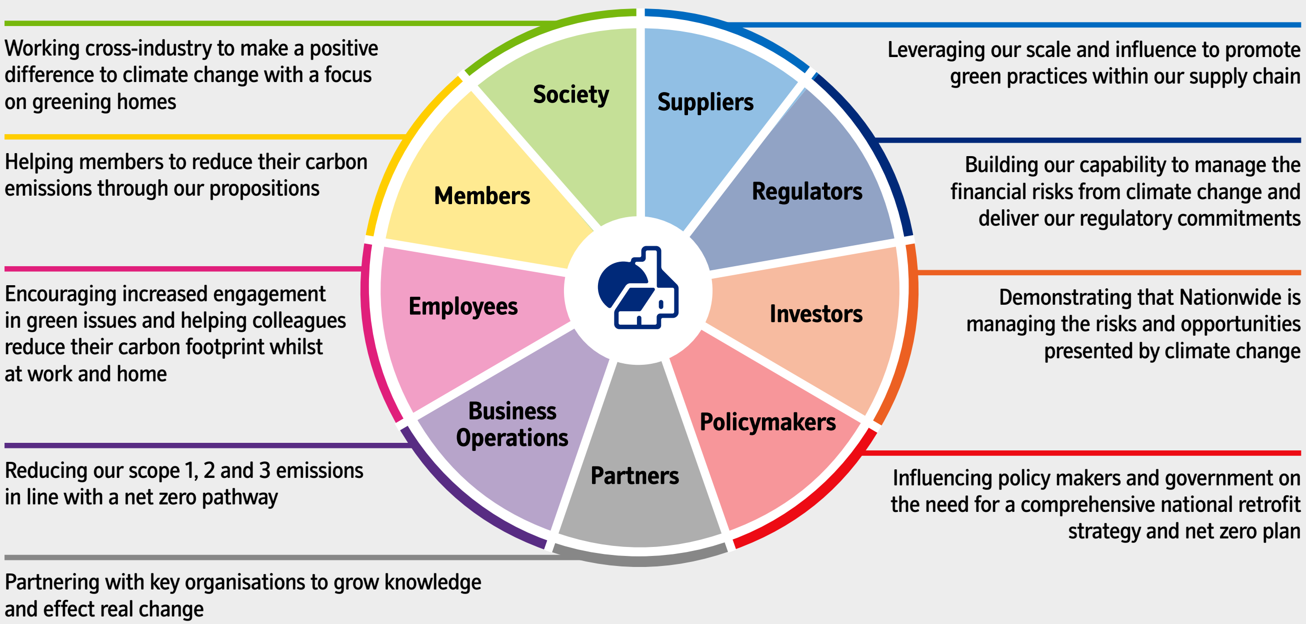
Nationwide exists to meet the needs of its members – it only has very limited corporate lending through small, closed commercial real estate and private finance initiative portfolios, and lending to registered social landlords.

Our business model means that our strategy does not involve lending to, or investing in, businesses which have a negative impact on society and the environment, such as those in the fossil fuels industry.

Climate change could have a significant impact on our members and stakeholders, which is why climate change considerations have been embedded into our strategic planning and execution processes.

We recognise the importance of taking early action to drive the transition towards a low carbon future and the impact climate change could have on our members, their homes and wider society. However, we know we cannot do this alone, so we'll continue to collaborate cross-industry and with government to support the changes needed to transition the economy to net-zero.

Nationwide's position on climate change is reflected in everything it does



Supporting society

In 2021, Nationwide joined the Net-Zero Banking Alliance (NZBA) with the aim of being net-zero by 2050 at the latest. In support of this, we are developing a set of intermediate science-based targets for our scope 1, 2 and 3 emissions, which will be aligned to a net-zero pathway. Given our concentration in UK mortgage lending, we will not be able to deliver the reduction in emissions needed to achieve net-zero without broader policy changes, significant cross-industry collaboration, and further government support focused on UK housing.

Definitions of scope 1, 2 and 3 emissions are as follows:

Emissions	Description	Control and influence indicator[3]
Scope 1	Direct emissions from owned sources, for example emissions from the Society's car fleet	High
Scope 2	Indirect emissions from the generation and consumption of purchased electricity and heating, for example the electricity bought by the Society to power its branches	High
Scope 3 - Investments	Scope 3 emissions cover all other indirect emissions that occur in our value chain. Investment emissions are from capital investment or financing, such as the Society's mortgage lending	Low
Scope 3 - Upstream	Upstream emissions are emissions which result from our supply chain, such as those from Nationwide purchasing goods and services, capital goods, and transportation and distribution	Medium

[3] The control and influence indicator provides an indicative view on Nationwide's ability to control its emissions exposure, with high being a high level of control and fully within Nationwide's abilities, and low being a low level of control with significant reliance on government and other industry parties.

Nationwide's ambition to lead the greening of UK homes is aligned to its intention to achieve its ambition to be net-zero by 2050 at the latest, which includes its commitment that by 2030, at least 50% of its mortgage portfolio will have an Energy Performance Certificate (EPC) rating of C or better. Currently, the percentage of our mortgage portfolio (owner-occupier and buy to let) that is EPC C or better is 37%, based on our modelled EPC data. This is a modest improvement on last year's EPC composition where 36% was EPC C or better.

EPCs, whilst not perfect, currently represent the best source of publicly available data on the energy efficiency of properties. Nationwide will continue to assess and use the best data possible, aligning with industry best practice, whilst recognising that this may change as new data sources become available and understanding increases. Nationwide is working to raise awareness of, and support its members with, potential improvements to the energy efficiency of a property through its Greener Homes Hub on its website, the promotion of retrofit lending products, and the development of innovative propositions.

The Society also recognises that it alone cannot improve the energy efficiency of UK homes, which is why Nationwide is working with government and industry to make the greening of UK homes a reality, and to encourage the following:

- Future Homes Standard to be introduced by the building industry at the earliest possible opportunity. This is currently due in 2025 and will require new-build homes to be fitted with low carbon heating, and high levels of energy efficiency (EPC A or B)
- Implementation of the Department for Business, Energy and Industrial Strategy's (BEIS) consultation recommendations[4] for the privately rented sector, which aims to upgrade all privately rented properties in England and Wales to EPC C or above by 2028 (all new tenancies from 1 April 2025, all existing tenancies by 1 April 2028)
- Long-term government financial incentives for owner-occupiers to retrofit, in particular supporting those on low incomes and those where the financial payback from retrofit is small. This would help facilitate the supply of retrofit materials, the trusted workforce to fit them and the willingness of homeowners to undertake works on their property.

Based on this, different scenarios have been considered for increasing the proportion of the Society's mortgage properties rated EPC C or better to 50% by 2030. To achieve our Mutual Good Commitment, we will need further government action, for key stakeholders to work together, and for members to do their bit, to collectively create greener homes. In the period to 2030, we expect energy efficiency improvements to be principally driven by buy to let properties and through the Society's share of lending to new builds (typically EPC rated B or above).

[4] Improving the energy performance of privately rented homes: consultation (publishing.service.gov.uk).

Researching greening the UK's homes

In 2021, Nationwide commissioned research into the retrofitting options for UK homes to understand the potential barriers and solutions that could help decarbonise the UK's homes and transition society towards net-zero. The work, conducted by Element Energy, is designed to be a "greenprint" laying out the steps required to achieve this.

Understanding the retrofit challenges

Nationwide's research indicates that around 90% of homes in the UK rely on fossil fuels to heat their homes (either through use of gas or oil), with the vast majority (around 83%) using a gas boiler. About 53% of homes have insulated walls, and of those homes that are uninsulated, only around 10% are easy to treat. Comparatively, less than half (around 39%) of homes have insulated lofts, but of those that are uninsulated around 31% are easy to treat. A very small proportion of homes (about 5%) have insulated floors.

Retrofitting homes will prove a significant challenge without addressing the barriers to uptake, which include:

- Financial – addressing the upfront cost of low-carbon measures and consumer payback period, as well as the lack of available government grant funding
- Informational – increasing consumer awareness of the need to act and the low-carbon solutions available
- Supply chain – addressing the shortage of skilled workers and immature heat pump supply
- Disruption – complexity of installation and changes required within the home to accommodate low-carbon solutions.

A number of interventions will be necessary to tackle these barriers, including:

- Financial – providing increased government funding to support private investment by homeowners. The current Heat and Buildings Strategy, and its associated heat pump grants, goes some way to support this. Financial firms should also continue to offer green finance options
- Consumer education – to inform homeowners of the need to, and how they can make the, transition to net-zero
- Long-term policy – national and local cross-government plans aligned to net-zero to balance both the incentive to act and the disincentives for inaction
- Innovation and skills – upskilling and increasing the workforce in low-carbon technologies and innovating more palatable solutions
- Regulation – ensuring existing and future standards are met and compliance issues are appropriately addressed.

There are also a number of opportunities that, if implemented, could improve the rate at which UK homes are decarbonised:

- Building net-zero compatible new builds from the outset could be up to five times cheaper than retrofitting an existing home[5]
- Better targeting of homes where heat pumps are easier to install and more cost-effective. Heat pumps could be more financially attractive to homes that have expensive heating costs, as well as homes that are well-insulated (due to the likelihood of them needing fewer and cheaper energy efficiency measures installed in readiness)
- Prioritising government funding for those in fuel poor and low-income households will help support those who may find energy efficient solutions unaffordable and will support a "Just Transition"
- Accelerating the decarbonisation of the electricity grid, in line with the Heat and Buildings strategy ambitions
- Focusing on the benefits that come from greening the home, such as increased warmth and being cheaper to heat in the long term, could help encourage and support uptake of retrofitting solutions.

Four case studies were undertaken on easy, medium, hard and very hard to decarbonise homes. These represented a good portion of the UK housing stock. The case studies are summarised as follows:

- **A medium-sized flat that's well-insulated with a gas boiler**. This property is a prime candidate for early adoption of low-carbon heating solutions such as communal ground source heat pumps. A large portion of these homes are social housing with this sector receiving greater levels of funding and policy support[6] to make energy efficiency improvements. However, more is needed to supplement budget constraints and support an orderly transition
- **A terraced house that's fairly well insulated with a gas boiler**. This property type represents a large portion of the housing stock and is mostly owner-occupied. With air source heat pumps being the likely low carbon heating solution needed, high upfront (and potentially ongoing) costs present a significant barrier to take-up. The immature nature of the heat pump supply chain will also need to be scaled up at pace to deliver the installations needed to achieve net-zero
- **A large, detached home that's poorly insulated with a gas boiler**. This property type will be harder to decarbonise due to needing to install several energy efficiency measures (such as insulation), prior to installing low carbon heating solutions (such as air source heat pumps). This will result in homeowners facing high upfront costs to achieve net-zero compatibility. Limited funding and regulation currently offer little incentive for homeowners to act
- **A detached heritage home that is off the gas grid**. This property type will be harder to treat due to the limitations of heritage constraints and the likelihood of solid walls. Properties that use oil will likely be required to move to electric storage solutions. There is currently lack of clarity on how heritage homes will be decarbonised.

Timely implementation of government policy, which ensures all homes can be feasibly and cost-effectively retrofitted, will have a large impact on reductions in the carbon emissions of UK homes necessary to achieve net-zero.

Energy efficiency impacts on house prices

In 2021, Nationwide conducted a review[7] of house price data to explore the extent to which home buyers pay a premium, or discount, due to a homes energy performance rating. Our analysis suggested that a more energy efficient property attracts a modest premium (around 1.7%) for EPC A or B homes, compared to a similar property rated EPC D (and little difference for EPC C and E homes compared to D). A more noticeable discount (around 3.5%) was seen for properties rated EPC F or G, compared to D.

The research concluded that for now at least, energy efficiency has only a modest influence on house prices for owner occupiers. An impact is only really evident for the best and worst energy efficiency ratings. However, Nationwide recognises that the value that people attach to energy efficiency is likely to change over time, especially as the Government takes measures to incentivise greater energy efficiency in the future to help the UK transition to a net-zero economy.

[5] Uk-housing-Fit-for-the-future-CCC-2019.pdf (theccc.org.uk).
[6] The current Energy Company Obligation (ECO3) aims to promote measures which improve the ability of low-income, vulnerable and fuel poor households to heat their homes, which include upgrades to more efficient heating systems.
[7] Energy efficiency ratings currently having limited impact on house prices despite push to go green (nationwidehousepriceindex.co.uk).

Ambition and overview
Strategy
Governance
Risk management
Metrics and targets

Supporting our members

With the UK's 29[8] million homes producing around 16% of the country's emissions[9], ensuring people have the awareness, knowledge, confidence, and ability to make green improvements to their homes is vital to tackling climate change. Many of the homes being built today do not meet the requirements for net-zero. Nationwide continues to develop new and innovative propositions to help combat climate change, and in the past year the Society has:

- Continued building its Oakfield development, consisting of 239 homes built to high environmental standards, including the fitting of heat pumps, and expected to be rated EPC A. It is hoped that the show home will be used as a blueprint for future sustainable homes
- Continued to offer our Green Additional Borrowing Mortgage for members, and our Green Further Advance Mortgage to The Mortgage Works (TMW) customers, which provide low-cost finance to support energy efficiency home improvements
- Post-Covid, re-introduced lending to TMW customers at greater than 75% LTV for properties rated EPC C or better
- Continued to provide our Green Reward Mortgage, which rewards members who choose to buy an energy-efficient home
- Launched a 'test and learn' solar panel pilot, targeting to 300 homes in the southwest region, with our partner, MakeMyHouseGreen. The pilot aims to simplify the journey, and support consumers in understanding their options, when buying solar panels, through a trusted supply chain to carry out the work
- Published new ESG content on our website to more fully articulate how we are a Responsible Business
- Published new Greener Homes content on our website, providing useful tips and tricks for a greener home, describing what Nationwide is doing to go greener, outlining green financing options, and providing details of our solar panel pilot.

Nationwide has also launched a Sustainability Linked Loan (SLL) to its Registered Social Landlord (RSL) borrowers which provides lower cost financing if ESG-related targets are met by the borrower. Access to an SLL is dependent on a borrower's ESG strategy, assessed alongside the borrower's business plan.

Exploring the opportunities arising from climate change

Nationwide is committed to exploring climate-related opportunities, across the short, medium and long term, to help our members, and wider society, transition to a net-zero economy. To address this our strategy ensures that we continue to:

- Work towards achieving net-zero and seek to lead the greening of UK homes
- Seek to achieve a "Just Transition" by making sure the most vulnerable in society are not left behind as we transition to a net-zero future
- Influence future policy through initiatives such as our Green Homes Actions Group
- Monitor the evolution of the markets and adapt our strategy as necessary
- Through our £1 billion green lending fund, continue to develop new propositions that consider both the transition and physical risks posed by climate change, to meet members' evolving needs
- Educate our members, customers and colleagues by raising awareness of the potential impact of both physical and transition risks, and the benefits of adopting a greener lifestyle
- Enhance our disclosures, aligned to the recommendations of the TCFD.

Nationwide will continue to enhance its climate strategy over the coming year whilst monitoring our exposure to potential liability and conduct risk.

Helping our people to go green

The Society's employees continue to have an important role to play in tackling climate change. Formed of over 400 employees, Nationwide's Green Network aims to lead the Society's internal conversations on green and sustainability to build and maintain a 'big picture' of all the green activity connected to the Society and its colleagues. Last year, the network delivered our first Green Colleague Assembly, which ran to coincide with COP26. Open to all colleagues, it encouraged them to share their thoughts and opinions on a diverse range of subjects relating to green and sustainability. Nationwide also runs a cross-community green working group and produces a green plan to help maintain awareness of the green activity taking place across the Society.

We are also running a pilot scheme, with our pension provider Aviva, to give all colleagues paying into Nationwide's Group Personal Pension access to the Tumelo platform. Tumelo allows colleagues to see which companies their pension pot is invested in and have a say on the decisions those companies should make in relation to issues they care about, like how the companies approach green and sustainability issues.

Greening our business operations

Nationwide is proud of its climate-related operational targets and initiatives. Nationwide continues to send zero waste to landfill and has been carbon neutral (no net release of carbon dioxide into the atmosphere) for its internal operations (scope 1) and purchased electricity (scope 2) emissions since 2020. This includes energy use and business miles from its vehicles. 100% of the Society's electricity has been supplied from renewable sources since 2018 and any remaining emissions are offset through verified carbon offsetting projects that actively remove carbon from the atmosphere.

We are also starting to remove the use of natural gas from our branch network (used for heating and hot water) and replacing it with electrical systems. This change will have a direct impact on helping to reduce our scope 1 emissions. We are aiming to be gas-free in our branches during 2022.

[8] UK-housing-Fit-for-the-future-CCC-2019.pdf (theccc.org.uk).
[9] Department for Business, Energy & Industrial Strategy, 2020 UK Greenhouse Gas Emissions, Final Figures (February 2022).

Sourcing services responsibly

Nationwide has partnered with sustainability consultancy, Carbon Intelligence, to calculate its upstream scope 3 emissions – those that result from its supply chain. Analysis performed by Carbon Intelligence confirmed that purchased goods and services, capital goods, and transportation and distribution account for around 92% of Nationwide's total upstream scope 3 emissions. It is these categories that Nationwide will track annually as part of its scope 3 emissions footprint. More details can be found in the 'Metrics and targets' section on page 25.

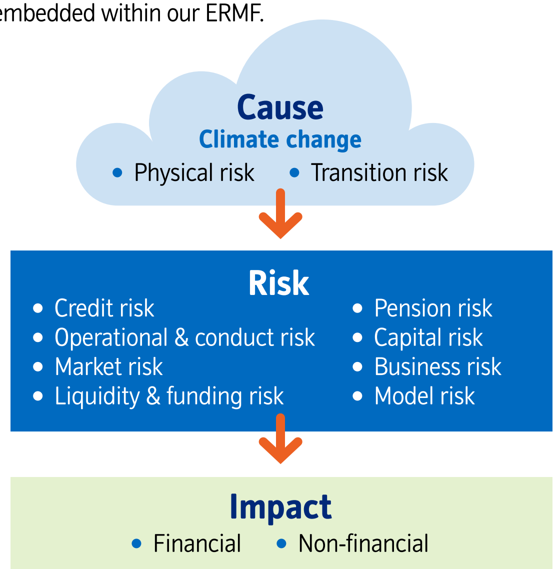
Nationwide has taken steps to build climate change considerations into its procurement and supply chain management processes. We have partnered with EcoVadis, a sustainability ratings provider, to collect environmental performance data from key third parties using their shared information platform. Since the start of the year, Nationwide has requested around 200 third parties join EcoVadis. Some were able to share their existing scorecards, with the remaining requested to complete one. Using the information on the platform, Nationwide is better able to understand a supplier's ESG credentials and its impact on the Society's targets. We are aiming to support more of our suppliers with onboarding to the EcoVadis platform in the coming year. Nationwide has also completed the EcoVadis questionnaire to help others understand the impact of our emissions on their activity.

Nationwide has enhanced the environmental requirements within its Third Party Code of Practice, including the need for all large third parties to monitor and disclose their scope 1 and 2 emissions and set reduction targets. We also recommend small and medium sized enterprises set targets. This activity supports our Mutual Good Commitment to be carbon neutral for purchased goods and services by 2030.

Embedding climate change risk and meeting regulatory expectations

Due to its nature, climate change has implications across the Society's entire Enterprise Risk Management Framework (ERMF). Climate change has been embedded as a cause to the Society's principal risks. Consideration as a cause ensures appropriate identification, monitoring and management across all existing risk categories, along with full traceability.

The following diagram explains how climate change risk has been embedded within our ERMF.



Climate change risk is considered to manifest across two main causes, physical and transition risk:

- Physical risk – the risks arising from the increasing severity and frequency of climate and weather-related events such as flooding
- Transition risk - the risks which could result from the process of adjustment towards a lower carbon economy such as through developments in policy and regulation, emergence of disruptive technology or business models, shifting societal preferences, or evolving legal interpretations

To form a view on materiality, and to understand the broad financial impacts across different time horizons (over the short, medium and long term), the ERMF was assessed through a climate change lens. More detail is provided in the Risk management section on page 20.

This exercise identified Nationwide's top three climate change risks as:

- Credit
- Operational and conduct
- Liquidity and funding.

Credit risk is the most material climate change risk due to the Society's mortgage portfolio exposures.

Assessing climate risk in capital allocation, financial planning and lending decisions

Climate change risk has been considered as part of the internal capital adequacy assessment process (ICAAP). This assessed the need to hold capital for climate-related risk. Using the outputs from our scenario analysis activity, an assessment of the physical and transition risks was undertaken. Based on our current assessment Nationwide believes it prudent to hold a small amount of capital for the potential credit losses which could arise from the impacts of climate change.

The impact of climate change on our liquidity requirements is also covered as part of the internal liquidity adequacy assessment process (ILAAP). Whilst the impacts from climate change are still emerging and could be wide-ranging, from a liquidity and funding risk perspective, we consider the impacts on funding from climate change to be no more material than those currently assessed as part of our business as usual liquidity assessment. The impacts of climate change will continue to be assessed within both the ICAAP and ILAAP on an annual basis.

Nationwide also considered the impact of climate change on its financial planning process as part of this year's scenario analysis activity. Upon completion of its scenario analysis (more detail is provided on page 13) the outcomes were not deemed significant enough, at this stage, to challenge the Society's approach to its five-year financial planning processes. However, as we continue to embed climate change risk capabilities, we are further enhancing our climate change plan to consider how climate change impacts can be incorporated within the macroeconomic variables used within our financial planning processes.

Nationwide is also considering climate change impacts within its business as usual expected credit loss assessment processes. It is our belief that the execution of our existing strategy remains the most effective mitigant to the risks arising from climate change.

Nationwide's approach to lending incorporates various environmental risk considerations. When evaluating new residential mortgage applications, climate-related risks, including flooding and subsidence are used to inform the potential impact on future property values. Further detail can be found in the 'Risk management' section on page 20.

Meeting the needs of our investors

Investor, and both credit and ESG rating agency, expectations of the minimum standards for ESG focused action and disclosures continues to increase, especially those in relation to climate change. Last year, ESG matters were raised in around 68% of investor meetings. As a result, the breadth and depth of our ESG-related disclosures continues to increase.

Nationwide has increased its ESG investor relations engagement activities over the past year, including:

- Enhancing the Responsible Business content on our website to make it easier for stakeholders to find what they are looking for. This includes information on all key themes and topics of interest to our investors and ESG rating agencies
- Running an investor webinar on our ambition to lead the greening of UK homes, and our progress so far. This included an overview of our purpose as a building society and the specific actions we have taken to drive our ambitions forward
- Engaging our investors to gain their views on Nationwide committing to net-zero, and the challenges for us in achieving it
- Participation in the CDP questionnaire for the first time, achieving a score of B which indicates that Nationwide is 'taking coordinated action on climate issues'
- Regularly engaging with a number of ESG rating agencies. We are proud of the most recent Sustainalytics ESG Risk Rating, which can be found on their website[10]. During the year, MSCI also upgraded our rating from BBB to A, and we are working with MSCI to improve this further
- Nationwide has also completed Standard & Poors' ESG Evaluation, obtaining a score of 78/100. We were considered "strong" with regards to our GHG Emission policies, targets and understanding, and our high overall Environmental score reflects our low exposure to sectors outside housing such as corporate lending and development finance
- Participating in ESG-focused investor discussions, involving Nationwide's subject matter experts, on how climate change risk and ESG issues are managed.

Nationwide is also in the process of developing a Sustainable Bond Framework, for investors looking to fund more sustainable financial activities, which we are hoping to launch in 2022.

Influencing policy change

The Society recognises that it alone cannot improve the energy efficiency of UK homes which is why, in 2021, Nationwide convened the Green Homes Action Group. The group is made up of 15 cross-industry companies and leaders[11] representing the housing, construction, financial services, charity and energy sectors. The group meets approximately every two months and aims to address some of the barriers to greener homes.

The Green Homes Action Group has called for the Government to do more – identifying seven policy asks to help encourage a more comprehensive national retrofit strategy. More details on the seven policy asks are on page 3.

Separately, and working together with Ipsos, in 2021 Nationwide launched its Future of Home Report, collaborating with over 45 cross-industry organisations to understand the impacts of the pandemic on our homes and how we live in them, and together create solutions to address systemic challenges, which includes those faced when supporting the greening of the UK's homes. Additionally, Nationwide sponsored ITV's Save Money: My Beautiful Green Home, a three-part series which taps into the challenges behind green retrofit.

Transitioning to net-zero and greening UK homes is a society-wide challenge. Nationwide is committed to continuing to work with government and industry to make the greening of UK homes a reality.

[10] Company ESG Risk Rating – Sustainalytics.
[11] Green Homes Action Group members include Nationwide Building Society, Ashden, B&Q, E.ON, the Energy Savings Trust, the Federation of Master Builders, igloo, Metropolitan Thames Valley, National Energy Foundation, Rockwool, Shelter, Switchd, Trustmark, and University College London.

Partnering for mutual success

By working with specialist organisations, Nationwide can increase its expertise and understanding around those areas where we can make the greatest impact.

Nationwide continues to partner, and play an active role, with the following key organisations to increase its knowledge and effect real change:	
CDP DISCLOSURE INSIGHT ACTION	**CDP** – *We are a participant in CDP's annual questionnaire* Nationwide completed its first submission in 2021 and received a score of B which represents that we are 'taking coordinated action on climate issues'.
CFRF CLIMATE FINANCIAL RISK FORUM	**Climate Financial Risk Forum (CFRF)** – *We are a participant in the CFRF's Working Groups* The Forum was established in March 2019 and co-chaired by the Prudential Regulation Authority and the Financial Conduct Authority. It brings together senior representatives from across the financial sector, including banks, insurers, asset managers and asset owners. In 2021 Nationwide participated in the Scenario Analysis and Retail Banking Working Groups, and in 2022 it is a participant in the Disclosure, Data and Metrics, and Transition to Net-Zero Working Groups.
GFANZ Glasgow Financial Alliance for Net Zero	**Glasgow Financial Alliance for Net Zero (GFANZ)** – *We are a member of GFANZ* Nationwide joined GFANZ in 2021 and is a participant in the Policy Call to Action and Implementation workstreams.
UN environment programme finance initiative	**Net-Zero Banking Alliance (NZBA)** – *We are a member of the NZBA* This industry-led, UN-convened alliance recognises the vital role of banks in supporting the global transition of the real economy to net-zero emissions. Nationwide joined the NZBA in 2021, committing to achieving net zero by 2050 at the latest and setting intermediate science-based targets for 2030 or sooner, within 18 months of sign up.
PCAF	**Partnership for Carbon Accounting Financials (PCAF)** – *We are a founding partner of PCAF UK* Nationwide joined PCAF UK in 2020 and is an active member of their Residential Property Working Group. We also follow PCAF's GHG Global Reporting Standard to calculate the emissions we finance through our lending activities.
BUSINESS AMBITION FOR 1.5°C	**Science-based Target Initiative (SBTi)** – *We have signed the SBTi 1.5-degree Business Ambition* Nationwide signed up to the SBTi's 1.5-degree Business Ambition in 2021, becoming a member of the We Mean Business Coalition, committing to a net zero future and aligning to net zero through the use of the SBTi's science-based target setting tools.
TCFD	**Taskforce on Climate-related Financial Disclosures (TCFD)** – *We are a supporter of the TCFD* Nationwide has been a supporter of the TCFD since 2019 and is committed to following the TCFD disclosure guidelines.
UN environment programme finance initiative	**UN Environment Programme Finance Initiative (UNEP FI)** – *We are a partner of the UNEP FI* The UNEP FI is a partnership between UNEP and the global financial sector to mobilise private sector finance for sustainable development. By partnering, Nationwide joins forces with more than 400 members, including banks, insurers, and investors, and over 100 supporting institutions.
WE SUPPORT UN GLOBAL COMPACT	**UN Global Compact** – *We are a signatory to the UN Global Compact* As a signatory to the UN Global Compact, we have reinforced our committment to social and environmental sustainability and our shared responsibility for a better world.
UN environment programme finance initiative Principles for Responsible Banking	**UN Principles for Responsible Banking (UN PRB)** – *We are a signatory to the UNPRB* The PRB provide the first-ever global sustainability framework for the banking industry. As a signatory, Nationwide is committed to aligning its business strategies to global goals such as the Sustainable Development Goals and the Paris Climate Agreement and is completing its first self-assessment in 2022.

Nationwide also continues to engage with the following organisations and activities to enhance its understanding of climate change and support others' understanding of the impacts of climate change on Nationwide:

- Member of the Green Finance Institute's Coalition of Energy Efficiency of Buildings (GFI CEEB) since 2019
- Joined the UK Green Building Council (UKGBC) in 2021
- Part of the London School of Economics Financing a Just Transition Alliance
- Member of the Imperial College Business School Centre for Climate Finance and Investment
- Active participant of UK Finance's Sustainability Committee
- Participant in Standard & Poors' ESG evaluation since 2021
- Contributor to publications in support of the UN Climate Change Conference (COP26) including PCAF UK's year one progress report, GFANZ's progress report and UK Finance's COP26 and Beyond 2021
- Respondent to key strategic consultations such as the Financial Stability Board's proposed changes to TCFD guidance.

Nationwide’s enhanced scenario analysis capabilities

Nationwide’s scenario analysis activity helps us to quantify our financial exposures to climate related risks and further build an understanding of the challenges posed to our business model and the potential enhancements needed to manage these risks.

Leveraging the approach used for our 2020 internal stress test, our climate change scenario analysis capabilities have been further enhanced to assess the impact of both physical and transition risk. These capabilities were also used to support our participation in the CBES.

The insights and methodology covered in this section are informed by the work undertaken to complete the CBES but no direct outputs of the exercise are shown as it is Nationwide’s understanding that the Bank of England intends to publish insights from the CBES exercise in 2022, which may include aggregated quantitative results across participating firms.

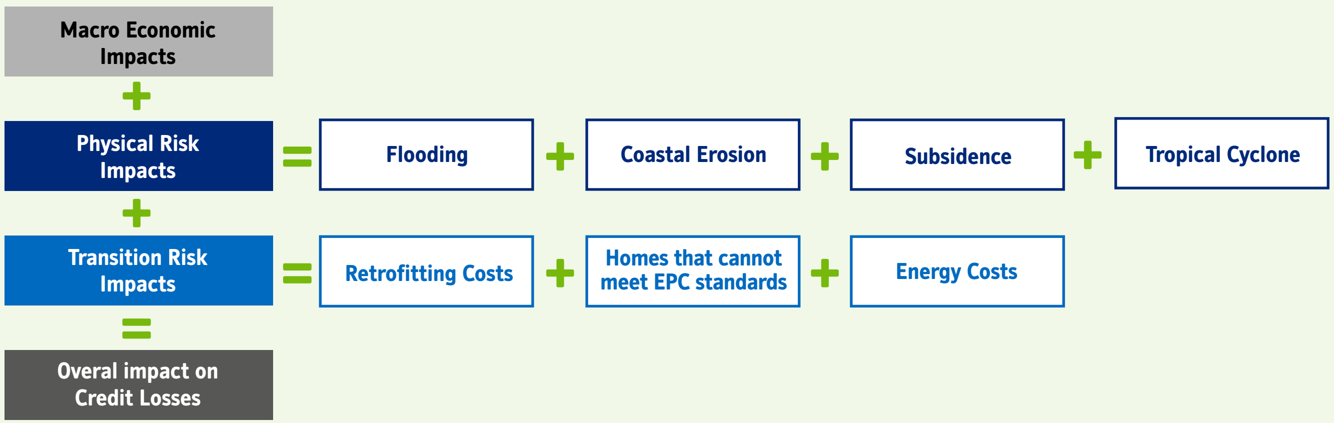
Nationwide’s scenario analysis was conducted on the three scenarios (outlined opposite), over a 30-year period, to assess climate risk impacts. To help simplify the assessment, Nationwide’s balance sheet was held static over the period.

The analysis included the assessment of both climate variables (for example, temperature pathways and energy costs) and macroeconomic variables (for example, unemployment rates and house price indices).

Early action (EA)	Late action (LA)	No additional action (NAA)
Physical risk (low)	Physical risk (low)	Physical risk (high)
Transition risk (medium)	Transition risk (high)	Transition risk (low)
Transition starts in 2021 so carbon taxes and othjer policies intensify gradually. Global CO_2 emissions are reduced to net zero by around 2050. Overall impact on Gross Domestic Product (GDP) growth is muted, particularly in the later half of the scenario.	Transition is delayed until 2031 and is then more sudden and substantial, leading to material short-term macroeconomic disruption. A sharp fall in GDP reduces employment, with knock-on consequencies for demand and spending.	Assesses the climate impacts for the period 2050-2080 reflecting a world where there are no climate policies introduced, leading to growing concentration of GHG emissions, increased global temperatures, chronic change in precipitation, ecosystems, sea levels, and a rise in frequency and severity of severe weather events such as heatwaves, droughts, wildfires, tropical cyclones and flooding. GDP growth is permanently lower and macroeconomic uncertainty increases.

Nationwide’s approach to scenario analysis

Nationwide took a modular approach to modelling the impacts of climate risk, modelling macroeconomic, physical and transition risk components separately. The effects of each component were incorporated into the Probability of Default (PD) and/or the Loss Given Default (LGD), typically at account level, enabling the compounding of risk where appropriate to generate the total impact on credit losses for each portfolio. The approach adopted for macroeconomic risk modelling was in keeping with our normal forecasting approach, except that the balance sheet was kept static, and the modelling period extended to a 30-year horizon. An overview of our approach is opposite.



Ambition and overview
Strategy
Governance
Risk management
Metrics and targets

Nationwide assessed the following portfolios as part of its scenario analysis activity:

- Owner-occupier mortgages
- Buy to let and legacy mortgages
- Unsecured credit
- Commercial lending
- Treasury (Sovereign, Sub-Sovereign, Government Related Entities, Supranational).

Our quality assurance process for our climate change scenario analysis activity followed the well-established approach used for traditional stress testing exercises. Independent oversight was provided by the Financial Risk Oversight function, who were actively engaged and offered robust challenge and provided model validation throughout the exercise.

As part of the governance process, our first-generation climate change risk models developed for our scenario analysis activities, including CBES, were validated and endorsed as fit for purpose at our Model Risk Oversight Committee (MROC). During scenario analysis, MROC:

- Reviewed and offered robust challenged on key models and assumptions
- Approved key and supporting climate scenario analysis models.

Mortgages physical risk modelling – flooding

Flooding impacted a relatively small number of properties

To support us with our flood risk modelling, we extended our partnership with Jeremy Benn Associates Limited (JBA) – industry experts in flood modelling – to convert the climate scenarios into detailed flood risk impacts for our mortgage properties at a six-digit postcode level. JBA supplied flood risk matrices with flood scores reflecting the likelihood (return period) and severity (depth) for river flooding, coastal / storm surge and surface water run-off. The higher the flood risk score, the greater the flood risk.

Where the risk of flooding increased, the PD was impacted, either through an increase in insurance premium or a single cost of repair for uninsured properties. Flood risk scores were also used to determine whether an individual property's value should be reduced and by how much, and hence the impact on LGD.

The most significant physical risk impacts occurred in the No additional action scenario.

Visualisation tools help Nationwide assess the specific risk events. Illustrative examples are contained in Images 1 and 2. Image 1 shows an example of the baseline undefended flooding risk profile for an area of the UK in 2020. Image 2 shows the undefended flooding risk profile for same area in 2080 under the No additional action scenario. It shows a significant increased flood risk score for many individual properties, with a change from green, to orange, denoting an elevated flood risk.

Image 1

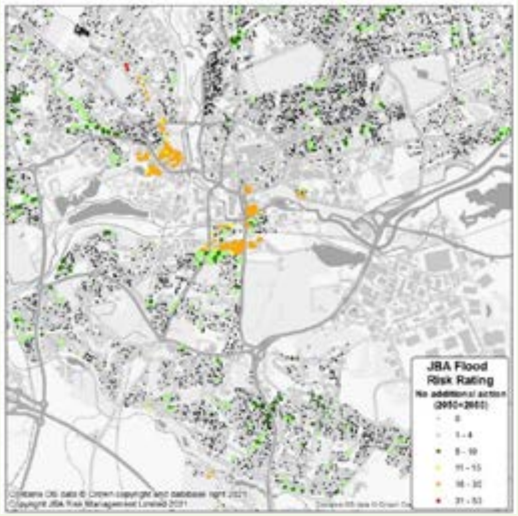


Image 2

More detail on JBAs approach to flood risk modelling, and how we use their analysis within our Property Risk Hub are in the 'Risk management' section on page 20.

Mortgages physical risk modelling – coastal erosion subsidence and tropical cyclones

Coastal erosion only impacted a very small number of properties; however the individual impact was significant

Nationwide sourced coastal erosion data from the Environment Agency and applied flood defence deterioration assumptions to calculate the proportion of the portfolio which could erode into the sea.

Subsidence data and risk scoring were provided by Cranfield University and matched to the portfolio data by Airbus Defence and Space. The effects of subsidence were applied as a one-off shock (once remediated it does not reoccur), affecting a small number of uninsured borrowers, through affordability by assuming unsecured borrowing was used to cover remediation costs. For insured borrowers, it was assumed remediation costs were met through insurance and hence there was no impact on losess.

Nationwide obtained tropical cyclone data from Climate Analytics' Climate Impact Explorer aligned to the Network for Greening the Financial Systems (NGFS) climate scenarios. The effects were applied as a shock to affordability across the whole portfolio either through increased insurance premiums for insured borrowers, or through assumed increases in unsecured borrowing for those without insurance.

Mortgages transition risk modelling – retrofitting costs

All mortgage borrowers were assumed to incur a retrofitting cost, which reduces their disposable income

Retrofitting costs were used to model the impact of all properties transitioning to their maximum EPC, from their current EPC, in both Early and Late action scenarios. It was also assumed that 65% of properties incurred an additional cost (£5,000) to cover the cost of fitting a heat pump. All properties rated EPC A were exempt from this cost.

In the Early and Late action scenarios, all properties were also assumed to receive a subsidy for two-thirds of the retrofit costs, capped at £5,000.

Nationwide modelled the impact of retrofitting costs as an impact on debt serviceability (as an impact on PD), rather than on property value (as an impact on LGD), as this was deemed to be more prudent.

Where borrowers incurred retrofitting costs, it was assumed these were funded via unsecured borrowing to assess the impact on affordability, and thus PD. In reality, some borrowers may fund retrofitting through savings, and others through mortgage further advances, but unsecured borrowing provided a prudent and consistent approach in the absence of more detail on likely borrower behaviour.

Around 50% of Nationwide's mortgage book (owner-occupier and buy to let) had a valid EPC, hence an EPC model was devleoped to fill any data gaps. Using artificial intelligence and machine learning algorithms, the characteristics of a property that did not have an EPC were used to estimate its EPC rating and other factors, for example, maximum EPC. The characteristics used include details of the home, owners, surrounding area and surrounding properties.

Properties that could not be retrofitted to EPC band E or higher became unmarketable, were assumed to have a nil value.

Mortgages transition risk modelling – energy costs

Homeowners and renters experience increasing energy costs throughout the scenarios, which reduce disposable income

Using both publicly available EPC data and outputs from the EPC model, the primary fuel source was estimated, along with the annual energy usage of a property.

Forecast energy prices were applied to energy usage and the energy costs used to reduce borrowers' disposable incomes and hence inform the impact on PD. As properties were retrofitted, their energy usage reduced, informed by their maximum EPC.

Commercial lending – physical and transition risk modelling

Nationwide also modelled the impact of climate change on its Registered Social Landlord (RSL), Commercial Real Estate (CRE) and Private Finance Initiative (PFI) portfolios across the three scenarios, using an expert judgement approach, informed from questionnaire responses which were issued to all our large counterparties (those with an exposure of greater than £10 million).

These responses provided data on transition and physical risk exposures. The same approach to measuring the impact of physical risk on the mortgage portfolio was used at the underlying property level. For transition risk, different approaches were used for RSL, CRE and PFI.

Treasury lending – physical and transition risk modelling

Our approach to modelling the impact on Treasury exposures focused on predicting the potential changes to credit ratings to inform the impact on PD and credit losses. Informed by both physical and transition risk factors, the approach calculated the maximum level of Sovereign credit rating downgrades under each scenario and then established a relative ranking index to calculate the appropriate level of downgrade for a given exposure.

Nationwide's expected credit losses

Nationwide's expected credit losses were predominantly driven by the macroeconomic factors, with lower losses resulting from direct climate impacts

Nationwide's scenario analysis indicated a limited threat of climate change to its current business model. Climate impacts were not extreme in the UK and our low-risk, predominantly secured, asset base helped mitigate the worst impacts. The key learnings from our scenario analysis activity, outlined below, are based on the three scenarios detailed on page 13. These scenario's contain simplified assumptions such as using a static balance sheet.

- **Transition risks were greater than physical risks**. The transition risks were wide ranging and impacted the majority of the portfolio (for example energy cost rises), whilst physical risk had a greater unit impact but on a very small proportion of the portfolio.
- **Energy costs had a greater impact than retrofit costs on transition risk**. Higher energy prices, due to carbon taxes and elevated energy costs in the Early and Late action scenarios impacted both homeowners and renters over an extended period of time, whilst retrofit costs only impacted a proportion of the portfolio over a shorter time frame and were partially offset by a government subsidies.
- **Coastal erosion was the largest physical risk**. Although coastal erosion affected fewer properties, the impact was greater than that of other physical risks due to large individual losses. Coastal erosion was most severe in the No additional action scenario but the overall impact on properties was low due to existing lending controls.
- **RSL, CRE and PFI losses were low**. Losses were low reflecting the low risk nature of Nationwide's commercial exposures, with the majority of losses due to macroeconomic effects.
- **Treasury losses were immaterial.**

Incorporating scenario analysis learnings into our strategy

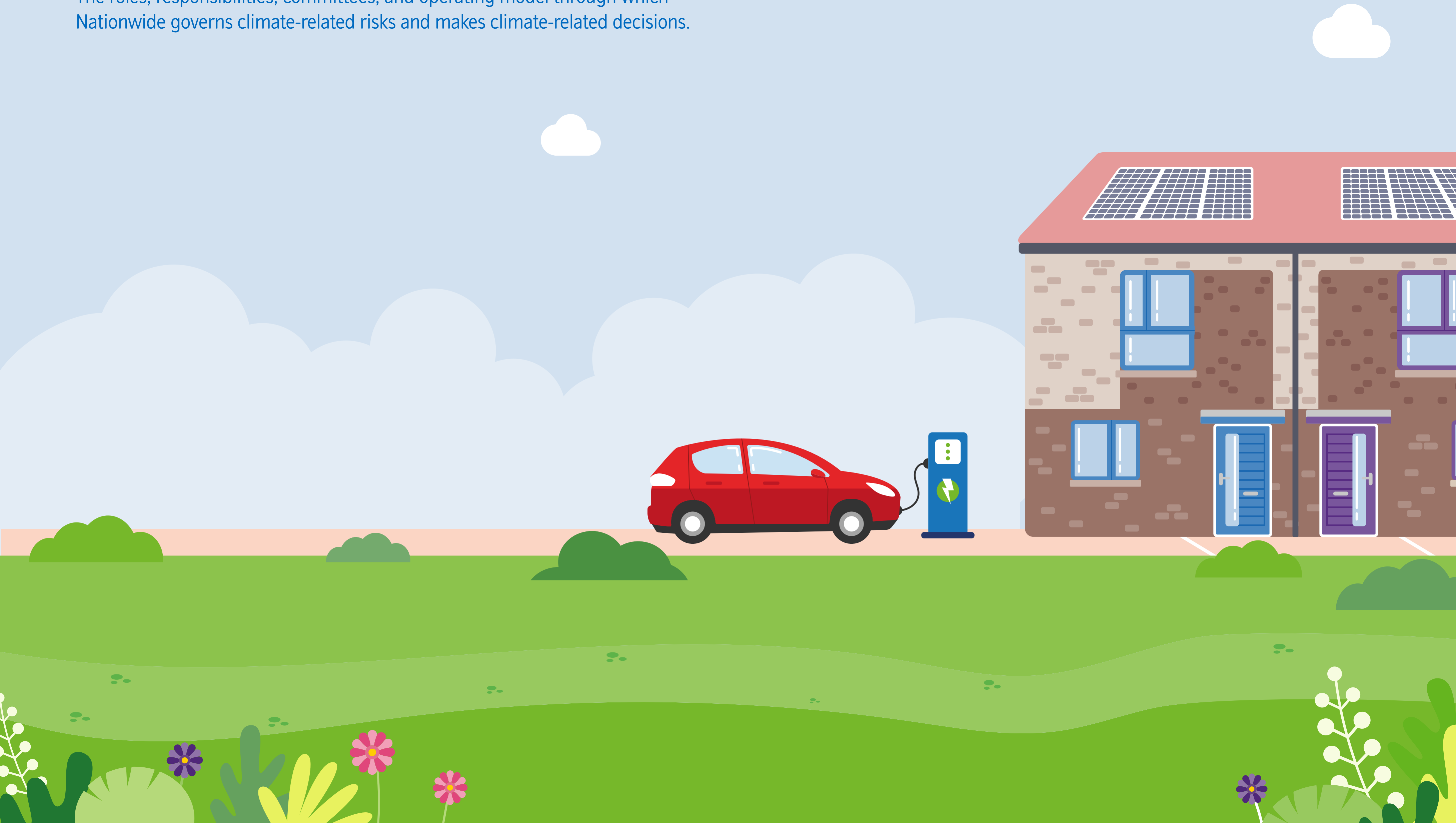
As a result of our scenario analysis activity, we identified a number of actions which aim to address the impacts of climate change across the three scenarios. These actions are helping us shape our approach to future climate change scenario analysis and risk management as follows:

- We will continue to run-off our closed, legacy mortgage portfolios and our closed CRE and PFI portfolios, to help reduce our exposure to transition risk
- When designing future internal climate scenarios, we will use a dynamic balance sheet to enable us to consider the evolutionary changes in our portfolio, for example, older mortgages backed by less energy-efficient properties maturing, and being replaced by those supported by newer built more energy-efficient housing
- Learnings from our assessment of transition risk will inform lending policy and proposition development as Nationwide seeks to help members balance the need to transition to net-zero with the costs of doing so.

Nationwide will continue to adopt learnings from current and further scenario analysis activities.

Governance

The roles, responsibilities, committees, and operating model through which Nationwide governs climate-related risks and makes climate-related decisions.



Ambition and overview
Strategy
Governance
Risk management
Metrics and targets

Governance

Our governance structure provides clear ownership and oversight over our strategy for a greener and more sustainable Society, and the management of climate-related risks.

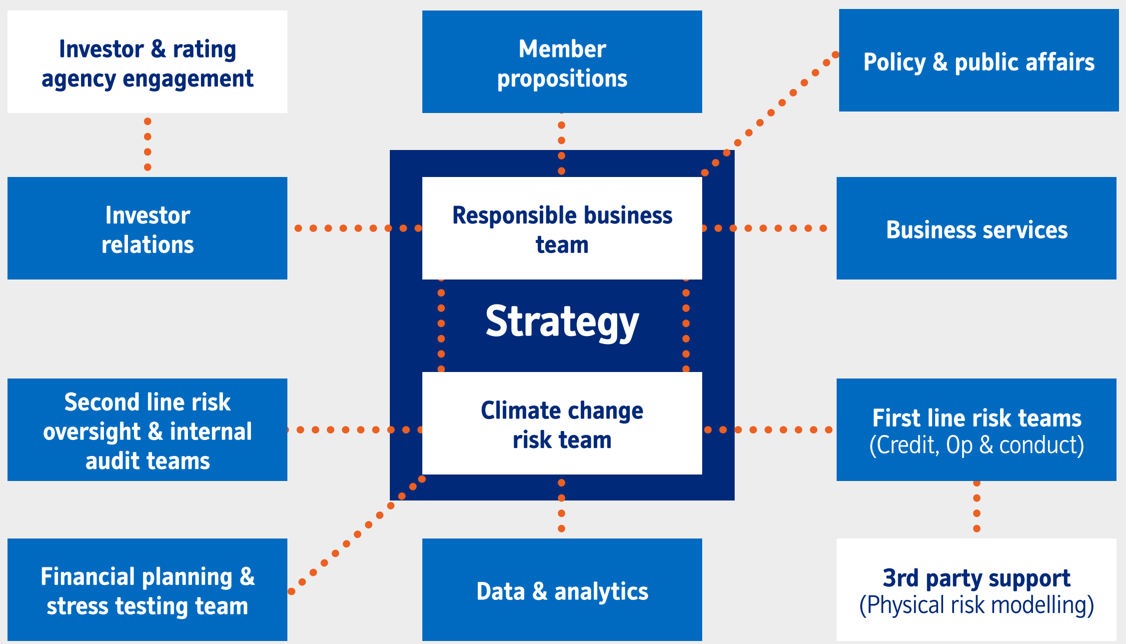
A strategically led approach

Ownership for responding to climate change sits within the Strategy team, led by the Chief Strategy and Sustainability Officer (CSSO), whilst Senior Managers Regime (SMR) accountabilities sit with the Chief Executive Officer (CEO).

The Climate Change Risk team own, and drive forward, the plan for embedding climate change risk across the Society. This plan was shared with the PRA in 2019 and has enabled the Society to successfully implement the requirements of SS3/19. The plan also enabled the Society to develop and enhance its internal modelling capabilities required to successfully deliver the CBES exercise in 2021.

A strategically led climate change risk team enables a consistent focus on climate change across the Society, co-ordinating other specialist teams including first line Credit and Operational & Conduct Risk teams and those from Financial Planning & Stress Testing, Business Services, Data & Analytics, Member Propositions and Treasury functions.

Our climate change operating model



A well-established climate change governance model

The Board has ultimate accountability for all climate change risk related matters at Nationwide. The Board approved Nationwide signing up to the Net-Zero Banking Alliance (NZBA) and the Glasgow Financial Alliance for Net Zero (GFANZ), and our ambition to achieve net-zero by 2050. The Board Risk Committee (BRC) and Executive Risk Committee (ERC) are responsible for oversight of climate-related risks. Climate change risk is discussed at the ERC quarterly, and the BRC every six months.

ERC is chaired by the Chief Risk Officer (CRO), with membership formed from the leadership team. The ERC has delegated authority from BRC to monitor and review the risk exposures of the Society in accordance with the ERMF, Board risk appetite, and the Society's strategy and plan.

A dedicated Climate Change Risk Committee (CCRC) was established in 2019 to support the maturing approach to climate change risk management.

The committee meets monthly and escalates any key climate-related risks and relevant climate change subject matters to ERC and BRC for formal discussion. The CCRC comprises members from our first line risk teams, Financial planning & stress testing, Business services, Strategy and Treasury teams. This broad membership ensures appropriate consideration, monitoring, and management of climate-related risks by senior management.

In addition, regular updates on climate change scenario analysis and key discussion items around the development of scenario analysis capabilities are provided to the Stress Testing Committee (STC) which is a sub-committee of ERC.

The CCRC provides input to the Responsible Business Committee (RBC), which meets every other month and is chaired by the CSSO. This Committee is charged with establishing Nationwide's responsible business agenda, including the strategic approach to address climate change and environmental ambitions.

Nationwide's Audit Committee also considers non-financial disclosures related to our expansive ESG agenda and approves our climate-related financial disclosures on an annual basis.

Board Risk Committee

This year, BRC has:

- Reviewed the key outputs and approved the results of our participation in the CBES exercise, with some members receiving one-to-one engagement sessions on the key assumptions and methodology of the exercise
- Received climate change briefing notes and discussed the scope of our scenario analysis activity, including timeframes and expectations of the Board, key assumptions for physical and transition risk, and explored strategic management actions in response to extreme climate scenarios
- Discussed the next steps required to further enhance and demonstrate the embeddedness of climate risk management
- Discussed Nationwide signing up to the NZBA and membership of GFANZ
- Received updates on the progress made in maturing Nationwide's climate change risk management capabilities resulting from participation in the CBES
- Discussed the importance of climate change to Nationwide's investors, and the noticeable increase in ESG focused conversations
- Received confirmation of our first and second line self-assessments against the requirements of SS3/19.

Executive Risk Committee

This year, ERC has:

- Discussed the requirements of Nationwide's scenario analysis activity, and its participation in the CBES exercise, and management of its preparedness plan
- Overseen the progress of the climate change risk management plan, including the monitoring of the climate change management information dashboard
- Discussed Nationwide's aspiration to achieve net-zero and the development of science-based targets, to reduce Nationwide's scope 1, 2 and 3 emissions
- Discussed and challenged the requirements of SS3/19 and a self-assessment undertaken confirming compliance against the requirements.

Climate Change Risk Committee

This year, CCRC has:

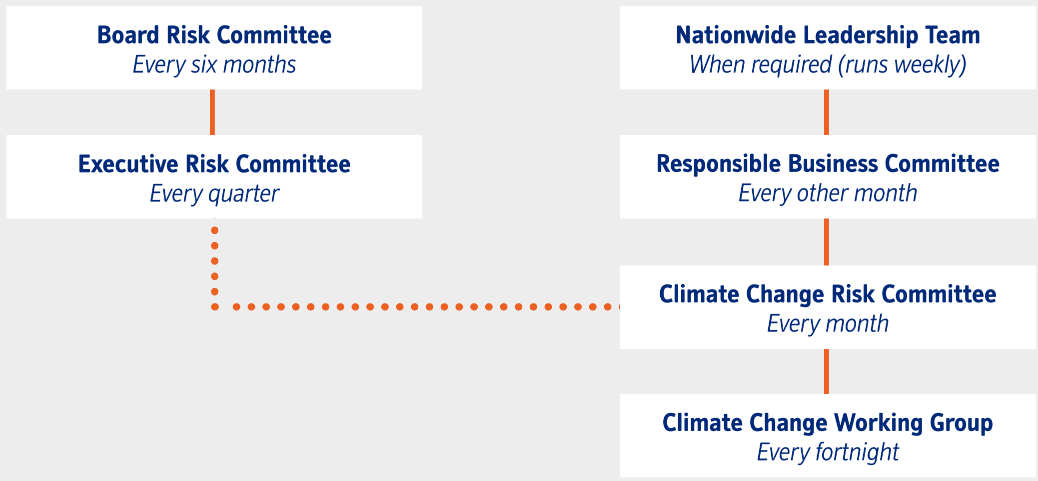
- Actively engaged in, and overseen, preparedness for Nationwide's scenario analysis activity, including its participation in the CBES exercise, and monitored progress towards key delivery milestones, challenged the assumptions and methodologies, and discussed the modelling outputs and management actions
- Managed progress against the climate change risk plan to meet the requirements of SS3/19 and validated Nationwide's compliance towards the supervisory statement
- Responsibility for overseeing the Climate Change Risk Working Group, which had the day-to-day responsibility for implementing the plan for embedding climate change risk in line with SS3/19 and preparing for scenario analysis and the successful delivery of the CBES exercise
- Monitored Nationwide's climate change risk management information.

Responsible Business Committee

This year, RBC has:

- Discussed the progress of the climate change and responsible business strategies
- Engaged in the development of green propositions, including the Society's solar panel pilot
- Reviewed the green engagement plans, with respect to public policy engagement and the Future of Home action groups (including the Green Homes Action Group)
- Discussed the broader ESG implications, including inclusion and diversity, human rights, social investment, biodiversity, as well as climate change risk updates on scenario analysis which included the CBES approach and results
- Reported on progress made against Nationwide's Mutual Good Commitments
- Built awareness of our assessment to understand, through our partnership with EcoVadis, the ESG performance of Nationwide's supply chain across environment, labour and human rights, ethics, and sustainable procurement
- Discussed the enhancement of the Society's ESG disclosures, through the Responsible Business webpages
- Discussed signing up to the NZBA, and the setting of science-based net-zero aligned targets.

Our climate change governance model



Our climate change governance model shows the committees and groups where climate change is discussed and the frequency of climate change risk on their respective agendas.

Additional Board engagement on climate change risk

This year the Board sought to enhance its understanding of climate change and the impact on the Society and its members. The Board has been engaged on the following key topics this year:

- Nationwide signing up to the NZBA and aspiring to be net-zero by 2050 at the latest
- Progress on the development of our green propositions in preparation for our 2021 Strategy Conference
- The current climate landscape and key challenges arising.

Climate-related remuneration and our Board's credentials

As part of the remuneration of Nationwide's most senior leaders, an individual's contribution is considered, including their impact on climate-related activities where relevant. The Nationwide Leadership Team's performance scorecard captures climate-related metrics, which in turn feeds into remuneration outcomes.

Over the last few years we have added several Board Advisor roles to the Society as a way of seeking to support our Board and our Executives in executing their roles, by providing current and specialist expertise in areas of particular emphasis and importance. This ensures our Board has the collective knowledge and understanding to be able to provide an appropriate level of challenge. One of these areas of focus is climate change, where the Board has concentrated on increasing its understanding of climate change risk.

The Board has appointed a Board Advisor on Climate Change and the Built Environment, to provide an external perspective and support its strategy in transitioning to a net-zero economy. Chris Brown, a UK Built Environment Climate Ambassador, was appointed in February 2022. Chris brings a wealth of experience across environmental sustainability and the residential property market to the Board, and has already supported Nationwide in its Oakfield development, in his capacity as Executive Chair and Founder of Igloo.

Information on the Board's composition and credentials is included within the Annual Report and Accounts.

Risk management

How Nationwide considers climate change risk, the Society's climate risk appetite, and how climate risk management is embedded within the Society.

Risk management

How climate change risk is embedded at Nationwide

Nationwide has developed a climate change risk standard to aid the embedding, management, and monitoring of climate change risk as a cause to the Society's most significant risks. This standard articulates how climate change risk may occur across the ERMF and links to the Society's principal risk policies.

Risk roles and responsibilities

The climate change risk standard articulates clear roles and responsibilities for managing and monitoring climate change risk across the Society, with a summary provided below.

Team	Roles and responsibilities
Climate change risk	• Coordinate progress against the climate risk implementation plan (SS3/19 and beyond) • Coordinate delivery of Nationwide's climate change scenario analysis activities, including its participation in the CBES exercise • Ownership of the climate change risk standard • Ownership of the centralised climate change risk governance and reporting • Ownership of climate-related financial disclosures • Ownership of establishing science-based targets and developing a transition plan, aligned to net-zero
First line risk (such as Credit risk and Operational & conduct risk)	• The identification, assessment, management, and monitoring of climate change risks across all impacted risk categories • Reporting of climate change risk against existing risk management information and enhancing decision making to embed climate change risk management • Developing and enhancing climate change scenario analysis modelling capabilities • Ownership of the modelling of climate-related financial risks across all impacted risk categories
Financial planning & stress testing	• Consolidating the submission of Nationwide's regulatory scenario analysis activities, including its participation in the CBES exercise • Helping to shape future internal climate change stress testing scenarios • Embedding the consideration of climate change into financial planning processes • Creation and reporting of scenario metrics
Second line risk oversight	• Providing ongoing oversight, with advisory input and challenge, to ensure Nationwide meets external and internal climate change risk management and stress testing requirements
Internal audit	• Providing independent assurance on climate change risk management embedding activity
Third parties	• Scenario expansion support for climate change scenario analysis, including during Nationwide's participation in the CBES and other stress testing exercises • Providing expertise and quantitative modelling support for physical risks • Support with understanding qualitative assumptions

Climate change risk appetite statement

In line with SS3/19, and to support the embedding of climate change risk, Nationwide continued to adopt the following climate change risk appetite statement:

"We are committed to working towards alignment to a net-zero emissions pathway to 2050. We will seek to minimise the impact of physical and transition climate risk on Nationwide and our members."

In support of this appetite, complementary quantitative risk appetite metrics have been developed. These control the flow of new lending both to, properties more susceptible to flooding, and less energy efficient properties in the buy to let market. These metrics track:

1) The percentage of owner-occupier and buy to let lending in a high flood risk area

2) The percentage of buy to let new lending below EPC C.

These metrics have been set as management risk appetite, to be managed with annually reviewed triggers and limits and have been approved by the Society's Credit Committee.

These physical and transition risk metrics will use data from our Property Risk Hub and internal EPC model, to track the proportion of lending more exposed to climate risk. Both metrics are designed to ensure that the Society continues to lend in a responsible, sustainable way and safeguards our members.

Ambition and overview
Strategy
Governance
Risk management
Metrics and targets

How Nationwide manages climate change risk

Nationwide manages the risks arising from climate change through its established ERMF. The ERMF focuses on Nationwide's principal risks and critical controls. By emphasising risks and controls at this level, our approach ensures Nationwide prioritises risk management activities appropriately, applies its resources to the right things, and produces high quality reporting for the Board and senior management which enables better and more informed decision making for the benefit of our members. The ERMF applies to all colleagues, contractors and outsourced entities, across all business lines, communities, member missions and subsidiaries within Nationwide.

Nationwide's ERMF comprises five core components (strategy, risk appetite, risk policy, risk management, and enablers and governance) which align to the practices of our industry peers and connect its strategy with day-to-day risk management activities. In combination, these components ensure the ERMF is appropriate and proportionate, and risk management activities (including those related to climate change) are performed consistently and reliably.

The ERMF was assessed through a climate change lens to identify how climate change could manifest in each of Nationwide's principal risks. Processes are in place to manage the top three risks impacted by climate change, and to help track against the Society's risk appetite statement, as outlined below:

- **Credit risk**
  Nationwide's Property Risk Hub assesses all mortgage applications for several physical risks at the decision in principle stage. Nationwide no longer lends where the physical risks are significant enough that they could render a property uninsurable. We also assess transition risk for our TMW buy to let customers, with over 75% LTV lending only available for properties with an EPC of C or above at application
- **Operational and conduct risk**
  Climate change is recognised as part of Nationwide's existing Risk Control Self-Assessment, as a cause for operational and conduct risks. All near misses and loss events are recorded and monitored in Nationwide's operational risk system, enabling the identification of climate change as a root cause. To help understand the risks associated with climate change when designing a new product, service, or green proposition, Nationwide has uplifted its Initiative Design Framework to include climate change considerations, alongside potential liability and conduct risks
- **Liquidity and funding fisk**
  The potential impacts of climate change risk are assessed annually as part of the ILAAP.

Internal assurance

At the end of 2021, our second line risk oversight team completed an independent assessment of Nationwide's compliance against SS3/19, concluding that the Society was in compliance with all requirements of SS3/19.

Nationwide's Internal Audit team provides focused independent assurance on the approach to managing and embedding climate change risk. A review on the Society's progress in embedding the requirements of SS3/19 was completed in March 2021.

Ambition and overview
Strategy
Governance
Risk management
Metrics and targets

Impact of climate change on Nationwide's principal risks

TOP 3 RISK CATEGORIES BY IMPACT OF CLIMATE CHANGE RISK: Credit risk; Operational & conduct risk; Liquidity & funding risk

Risk category		Risk examples	Horizon (note i)	Potential risk indicator (note ii)
Credit risk	Transition	• Reduced member and customer creditworthiness due to the transition to a greener economy (for example, due to loss of jobs or increased energy costs) leading to default • Declining house values due to aggressive housing policy (for example, introducing minimum EPC ratings) • Registered social landlord challenges in meeting policy requirements	Short – Medium	Low
	Physical	• Houses damaged by physical impacts, such as floods, causing a decline in property value • Higher insurance prices leading to uninsured properties • Exposure to other financial services firms who are exposed to physical climate risk	Long	Low
Operational & conduct risk	Transition	• Increased supply chain costs • Reconsideration of third-party relationships due to their carbon footprint • Reputational impact of carbon footprint of products and services leading to lower member and employee attraction and retention • Potential liability and conduct risk from green propositions and assumed advice	Medium	Very low
	Physical	• Branches or offices damaged, or loss of systems or key data due to physical impacts, such as floods, affecting key processes • Increased incidence of environmental perils affecting the delivery of third-party goods and services • Increased member activity (for example, increased call volumes) resulting from physical risk impacting Nationwide's service capacity • Internal capability affected by physical events preventing employees from accessing the office or working from home	Long	Very low
Liquidity & funding risk	Transition & Physical	• Falling deposit balances due to economic distress of members • Lower deposit balances due to members' loss of confidence in Nationwide relating to negative perceptions of climate credentials • Reduced wholesale funding access following lower investor appetite due to negative perception of Nationwide in relation to climate change	Medium – Long	Very low
Business risk	Transition	• Changes in member expectations relating to prioritisation of green strategic objectives • Increased costs associated with policy change	Short – Medium	Very low
	Physical	• Income impacted as a result of physical impacts, such as loss of operations	Long	Very low
Pension risk	Transition & Physical	• Impact of physical or transition risk on the Nationwide Pension Fund asset valuations, leading to an increased deficit (or reduced surplus)	Medium – Long	Very low
Capital risk	Physical	• Deterioration of balance sheet assets, such as offices or branches, due to physical impacts	Long	Very low
Market risk	Transition & Physical	• Changes in member behaviour in relation to their mortgages or deposits as a result of interest rate changes, arising from physical or transition events • Macroeconomic market impacts arising from physical or transition events, impacting value (or net income from) assets and liabilities, as a result of interest rate movement	Long	Very low
	Transition	• Tightening of climate-related policy leading to market repricing	Long	Very low
	Physical	• Impact on exchange rates due to physical events, affecting currencies in which investment securities are held	Long	Very low

Notes:
i. Horizons: Short 0-5 year, Medium 5-15 years, Long 15+ years. Horizons have been updated following outcomes of Nationwide's scenario analysis.
ii. Potential risk indicator provides an indicative view on climate change impact across each risk category, with high being a large-scale impact. Scores have been updated following outcomes of Nationwide's scenario analysis.

Scenario analysis and stress testing

Over the past two years, and aligned to the the requirements of SS3/19, Nationwide has been enhancing and embedding its approach to climate change scenario analysis.

Nationwide's 2021 scenario analysis activities, including its participation in the CBES, has proven beneficial in helping to develop and enhance our internal modelling capabilities. Learnings from scenario analysis have been used to update our climate change risk implementation plan. Nationwide is enhancing its plan further, to continue to embed its approach to climate change risk management and scenario analysis, recognising the recommendations of the Basel Committee on Banking Supervision (BCBS) principles for the effective management and supervision of climate-related financial risks.

Property risk hub

In 2016, Nationwide developed the Property Risk Hub, in conjunction with key partners such as Airbus Defence and Space, JBA and Ordnance Survey. The Property Risk Hub aims to assess whether a property is at risk of flooding as part of the mortgage underwriting process. It enables Nationwide to assess the impacts of climate change and environmental factors that might impact a property over a typical mortgage term of 25 to 40 years.

This was also the first step in changing Nationwide's valuation methodology, moving away from a pure present-day comparable basis, to incorporate new longer-term climate change impacts. This work has helped us understand and mitigate potential physical impacts from climate risk, and as a result means our potential physical risk exposure from climate change is low.

Property-level data is collected on every property from various specialist providers using a Unique Property Reference Number (UPRN) to ensure consistency. Relevant data sources include:

- Energy Performance Certificate (EPC) rating
- Flood data (run-off, river and coastal)
- Coastal erosion data
- Ground stability data (subsidence, soil, sand, and silt)
- Natural ground hazards (such as mining and sink holes)
- Insurability (consideration given to the Government and Insurer backed Flood Re scheme, that supports the insurability of high flood risk properties).

This data is used to assess individual property-related risks when originating new residential mortgages and determine whether a property is outside of our risk appetite. If within appetite, this data is used to inform the methods of valuation (Automated Valuation Model, desktop assessment, or full physical inspection) to be mandated, to assess the value of each property and whether it is fit for mortgage purposes.

Using EPC ratings to inform lending decisions

Nationwide's Property Risk Hub considers the implications of government policy in our lending decisions. Our current lending policy reflects the Domestic Minimum Energy Efficiency Standard regulations, which require domestic privately rented properties to have an EPC rating of E or better. As a result, Nationwide no longer lends to buy to let properties with an EPC worse than E (unless the property qualifies for an exemption). This data is likely to become increasingly important in assessing transition risk as future regulation and government policy aim to decarbonise the UK housing stock.

As policy expectations change and evolve over time, including the expected changes as part of the BEIS consultation recommendations for privately rented properties to be EPC C or above by 2025 (new tenancies) and 2028 (existing tenancies), lending policy will be adapted accordingly.

Operational risk enhancements

Climate change has the potential to cause significant disruption to our member services, through physical damage to our branch network and administration centres and disruption to our operational supply chain. We have begun to embed consideration of climate change within our approach to assessing operational and conduct risk.

In 2021, Nationwide undertook a review of all Risk and Control Self Assessments (RCSA) to identify those impacted by the physical and transition risks of climate change. Nationwide also considers the impacts of climate change within our operational and conduct loss event process. Therefore, when a loss event occurs, the root cause analysis will include attribution to climate change, where appropriate.

As part of scenario analysis, we undertook an in-depth review of the Society's entire UK physical estate (branch network and administration centres), alongside our critical third-party service providers. We used the flood risk score data from JBA to examine future flood risk and the impact on all our branch and administration centre locations. This enabled us to identify which sites could potentially become exposed to flooding under an extreme climate scenario.

Climate change training

Providing climate-related training to all our employees has become a priority. Nationwide has designed and launched an all-employee computer-based climate change training module, offering a foundation in, and understanding of, the key risks associated with climate change and the potential impact on the Society's day to day activities.

Nationwide has produced a climate change training factsheet for all first line risk practitioners within operational risk, who play a vital role in helping identify, assess, monitor, and manage the risks to the Society caused by climate change.

For our branch colleagues, an informative ESG guide has been produced to support conversations with our members about the progress we are making on the environment, our green propositions, and our campaigns and government engagement.

Metrics and targets

Information on the metrics and targets used by the Society to monitor and manage its climate risk exposures, including scope 1, 2 and 3 emissions data.

Metrics and targets

Nationwide has the ambition to achieve net-zero by 2050 at the latest, and to lead the greening of UK homes. This is supported by our Mutual Good Commitments, that by 2030:

- At least 50% of homes in our mortgage portfolio (owner-occupier and buy to let) will be rated EPC C or better
- Our business operations, suppliers and commuting will be carbon neutral.

The achievement of these ambitions is partly within Nationwide's control but is also heavily dependent on government policy. Progress will be supported by the enhanced suite of metrics developed. These metrics aid discussions and inform strategic decisions made by management and the Board. The metrics are shared in various committees, through the climate change governance model, to support committee responsibilities.

Recognising that there is more to do to fully understand the impact of climate change across our business, and the Society's impact on climate change, we are working on developing further sub-metrics and forward-looking indicators to track its progress on tackling climate change.

Nationwide's scope 1 and 2 carbon emissions

We are pleased to have remained carbon neutral for scope 1 and 2 emissions since 2020. These emissions are tracked against a set of strategic ambitions that aim to improve the Society's sustainability. We continue to disclose in line with the Government's Streamlined Energy and Carbon Reporting regulation requirements.

Our scope 1 emissions have decreased in comparison to previous years. This is due to our continued efforts to reduce our operational emissions. Nationwide offsets its scope 1 emissions through verified carbon offset projects, such as community reforestation, through a pre-purchase agreement. Purchasing offsets in advance enables us to continue to neutralise our operational emissions in line with our Mutual Good Commitment that by 2030, our business operations, suppliers and commuting will be carbon neutral.

It also enables Nationwide to manage its offset spend and reduce its exposure to potential cost inflation over time. The current price Nationwide uses to offset one tonne of carbon is £21.45.

Our gross scope 2 emissions continue to reduce as the use of our buildings remains limited as we continue to embrace a new way of working. 100% of our scope 2 energy is powered by renewable sources (through a solar power purchase agreement, which produces emissions-free energy, and use of green tariff electricity). This approach, coupled with purchasing carbon offsets for scope 1 emissions, ensures Nationwide remains carbon neutral for its business operations. Our scope 1 and 2 emissions are detailed in the table below.

In 2021, Nationwide launched its Future of Work approach to its employees which recognised the shift in ways of working caused by Covid-19. Nationwide has embraced this by adopting a hybrid working model where colleagues have the flexibility to choose how and where they work – be it at home, in the office, or a mixture of the two. The majority of the Society's employees continue to work from home most of the time. Whilst this caused a greater reduction in energy consumption and carbon emissions across Nationwide's buildings in 2020, the reduction in usage has slowed over the past year as we settle into this new way of working. We remain aware that the pace of emissions reduction may vary over the coming years as working behaviours adapt, but we are committed to reducing our emissions in line with net-zero.

Homeworking emissions have been excluded from our emissions data tables due to a number of challenges with their calculation, such as:

- Lack of real-time home energy usage data
- Lack of clarity on appliance usage
- Potential for double-counting emissions attributable to homeworking for colleagues who are Nationwide mortgage holders.

A data score has been calculated for Nationwide's carbon emissions using PCAF's Global Greenhouse Gas (GHG) Accounting and Reporting Standard (which received the "Built on GHG Protocol Mark" from the GHG Protocol) to provide insight into the quality of the data. The scope 1 and 2 emissions achieve a weighted data score of 1.20, on a scale of 1 to 5, where 1 represents the highest data quality and 5 represents the lowest data quality. This is based on a weighted average of:

- Primary data used for the consumption of energy for our buildings and business travel, using 90% actual data, achieving a data score of 1, weighted at 90%
- Estimated building energy consumption data based on known entities for our buildings, using 10% estimated data, achieving a data score of 3, weighted at 10%.

Scope 1 and 2 carbon emissions data

Scope 1 and 2 emissions in tonnes carbon dioxide per year (tCO_2e/y) (notes i and ii)	Year to 4 April 2022*	Year to 4 April 2021	Year to 4 April 2020	Baseline year to 4 April 2011
Scope 1 – Energy	**2,920**	3,411	3,966	4,890
Scope 1 – Travel	**82**	63	823	2,448
Scope 2 – Electricity	**14,972**	18,069	20,907	50,802
Total gross Scope 1 and 2 emissions (note iii)	**17,974**	21,543	25,696	58,140
Less PPA carbon reduction for scope 2 (note iv)	**(9,822)**	(11,227)	(21,367)	Not reported
Less green tariff electricity for scope 2 (note v)	**(5,150)**	(6,842)	Not reported	
Absolute carbon outturn	**3,002**	3,474	4,837	58,140
Total carbon dioxide in tonnes per full time employee (FTE)	**0.19**	0.21	0.30	3.46
Less total carbon offsets used for scope 1 in tonnes (note vi)	**(3,002)**	(3,474)	Not reported	
Net carbon outturn	**0**	0	Not reported	
Data score (note vii)	**1.20**	1.50	Not reported	
Energy usage data in megawatt hours (MWh) (note viii)	**Year to 4 April 2022**	**Year to 4 April 2021**	**Year to 4 April 2020**	**Baseline year to 4 April 2011**
Electricity	**70,514**	77,500	Not reported	
Gas	**15,903**	18,553	Not reported	

Notes:

i. CO_2e/y is an abbreviation of 'carbon dioxide equivalent per year' and is the internationally recognised measure of greenhouse gas emissions.

ii. When calculating our carbon emissions, DEFRA 2021 conversion factors have been used. For travel, emissions are solely based on vehicle business mileage. Mileage is calculated based on the annual fleet return submissions by Nationwide employees and is therefore dependent on manual processes and individual record-keeping; furthermore, DEFRA emission factors used assume that all vehicles are medium sized passenger vehicles.

iii. Scope 1 covers direct combustion of fuels and company-owned vehicles and scope 2 covers emissions from purchased electricity. All data is based on actual monthly consumption, apart from gas and electricity. For gas and electricity March consumption data is based on estimates.

iv. Purchase Power Agreement (PPA) represents the contribution of a solar power purchase agreement, producing emissions-free energy backed by renewable obligations certificates. The PPA offset amount is dependent on external factors such as equipment uptime and atmospheric conditions. The PPA is supplied to Nationwide through a licenced intermediary.

v. Nationwide's 'Green Tariff electricity' comes from 100% zero carbon wind sources that have a renewable energy guarantee of origin (REGO). Nationwide pays a renewable energy premium which obligates our energy supplier to cover all remaining tCO_2e. Any remaining tCO_2e not covered by the PPA is offset using our 'Green Tariff electricity'.

vi. Nationwide uses a hybrid approach for the purchase of its offsets. The purchased offsets are through a number of offset projects, such as community reforestation. The projects are verified and have approval under both the Verified Carbon Standard (VCS) and the Climate, Community and Biodiversity Standard (CCB).

vii. Data scores are based on the quality of data inputs used to calculate carbon dioxide emissions. Data scoring aligns with PCAFs Global GHG Accounting and Reporting Standard, with 1 representing high data quality and 5 representing low data quality.

viii. Energy usage data amounts presented for the year to 4 April 2022 reflect 90% actual data and 10% estimated data. 4 April 2021 data has been included this year as it is in line with that disclosed in Nationwide's 2021 CDP response. Energy usage data for the year to 4 April 2021 reflects actuals to January 2021 and estimates at March 2021.

* Within the scope of EY assurance.

Ambition and overview
Strategy
Governance
Risk management
Metrics and targets

Nationwide's scope 3 carbon emissions – mortgages, CRE and RSL

Nationwide continues to disclose the emissions associated with its mortgages using its EPC mortgage model. Aligned to the PCAF standard[12], publicly available EPC data[13] is interpolated across the book to estimate carbon emissions, where valid EPC certificates are not available. Last year, in readiness for scenario analysis (including the CBES exercise), our mortgage model went through internal model assurance led by our oversight team to validate our approach.

Our absolute scope 3 mortgage emissions have reduced in comparision to last year, due to a reduction in the total number of properties on the book. Financed emissions have increased slightly compared to last year due to an increase in average LTV.

To understand better Nationwide's scope 3 emissions for our other lending activities we have developed an approach for disclosing the scope 3 carbon emissions for our commercial real estate (CRE) and registered social landlord (RSL) portfolios.

The scope 3 emissions for mortgages, CRE and RSL have been weighted by loan to value (LTV) in order to calculate the proportion of emissions financed by Nationwide. This is in line with PCAF methodology.

We continue to use modelled property valuations to calculate the emissions of our mortgage portfolio. This year, as per PCAF guidance, we have kept these static as at 31 December 2020, with new additions to the book in 2021 using valuations as at 31 December 2021. For CRE and RSL our baseline emissions were calculated using property valuations as at 31 December 2020. Valuations used to calculate our 2021 emissions have remained static at this date. For any new properties added to the book within the last year, we have used the latest valuations which will be held static going forward. This is only applicable to the RSL portfolio as the CRE portfolio is closed and in run-off.

These property valuations are compared to the outstanding loan amount to calculate an attribution factor. For mortgages the attribution factor is calculated at the individual property level, while for CRE and RSL the attribution factor is calculated at borrower level due to lending being provided at a facility level across multiple properties. This approach is in line with PCAF methodology. This attribution factor is then applied to the absolute emissions in order to calculate the emissions attributable to the finance provided by Nationwide. More detail on how we calculate financed emissions can be found on page 35.

Weighted data scores have been calculated for Nationwide's scope 3 emissions for mortgages, CRE and RSL. For mortgages, the data score is calculated using publicly accessible EPC data for all properties where this is available (a third party is used to match the EPC against the property) and interpolated/proxy data to estimate a property's EPC where it is unavailable. For CRE and RSL, the data score is calculated using 100% EPC proxy data. Our data scores for mortgages, CRE and RSL are 3.45[14], 4.00[15] and 4.00[16] respectively.

Scope 3 mortgages carbon emissions data

Scope 3 emissions data – mortgages	**Year to 31 Dec 2021***	**Year to 31 Dec 2020**
Number of properties – total book	**1,578,000**	1,590,000
Number of properties – with a valid EPC	**873,000**	850,000
Total property floor area in square metres (note i)	**146,900,000**	150,940,000
Absolute carbon emissions – carbon dioxide in tonnes per year (tCO_2e/y) on whole book using interpolated EPC data (note ii)	**6,187,000**	6,250,000
Absolute carbon intensity – carbon dioxide per square metre of floor area in kilograms per year ($kgCO_2e/m^2/y$) using interpolated EPC data	**42.12**	41.40
LTV weighted carbon emissions – tCO_2e/y using LTV weighted interpolated EPC data (note iii)	**2,795,000**	2,750,000
LTV weighted carbon intensity – $kgCO_2e/m^2/y$ LTV weighted interpolated EPC data	**19.03**	18.20
Data score (note iv)	**3.45**	3.47

Notes:

i. Total property floor area for mortgages is calculated using machine learning techniques based on around 400 property features.

ii. Emissions are estimated using data from the EPC Open Data Communities for residential properties where an EPC exists (for 55% of the mortgage portfolio) and estimating EPC data across the remainder of the portfolio (45%) 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. Nationwide believes this approach best aligns with those emissions associated with its lending.

iii. LTV adjustments have been applied to the total CO_2 emissions predicted for the book to calculate the attribution factor. The attribution factor is calculated at property level and is based on (i) outstanding amount calculated as total outstanding loan value as at 31 December 2021 and; (ii) property value using a modelled property valuation, static as at 31 December 2020 (or 31 December 2021 for new business during the year if applicable). Nationwide believes this best reflects the emissions it finances.

iv. Nationwide's mortgage data score has been calculated using EPC data available for approximately 53% of its owner-occupier, and 64% of its buy to let properties, giving a data score of 3, weighted at 55%, and interpolated EPC data across the remainder of the portfolio, estimated using most similar property features and location specific attributes, giving a data score of 4, weighted at 45%. As such, this could indicate a level of variability in the outcome when compared to that calculated using more granular data sources.

[12] The Global GHG Accounting and Reporting Standard for the Financial Industry (carbonaccountingfinancials.com).
[13] Energy Performance of Buildings Data England and Wales (opendatacommunities.org).
[14] Nationwide's mortgage data score has been calculated using EPC data available for approximately 53% of its owner-occupier, and 64% of its buy to let properties, giving a data score of 3, weighted at 55%, and interpolated EPC data across the remainder of the portfolio, estimated using most similar property features and location specific attributes, giving a data score of 4, weighted at 45%.
[15] Nationwide's CRE data score of 4 reflects 100% use of proxy EPC data.
[16] Nationwide's RSL data score of 4 reflects 100% use of proxy EPC data.
* Within the scope of EY assurance.

Scope 3 commercial real estate carbon emissions data

Scope 3 emissions data – commercial real estate	Year to 31 Dec 2021*	Year to 31 Dec 2020
Total property floor area in square metres (note i)	**2,062,000**	Not reported
Absolute carbon emissions – tCO_2e/y on whole book using proxy EPC data (note ii)	**259,000**	
Absolute carbon intensity – $kgCO_2e/m^2/y$ using proxy EPC data	**125.40**	
LTV weighted carbon emissions – tCO_2e/y using LTV weighted proxy EPC data (note iii)	**96,000**	
LTV weighted carbon intensity – $kgCO_2e/m^2/y$ using LTV weighted proxy EPC data	**46.39**	
Data score (note iv)	**4.00**	

Notes:

i. Total property floor area for CRE is calculated using proxies based on publicly available EPC data. Data from the EPC Open Data Communities for non-domestic (England, Wales and Scotland) and residential (England and Wales) properties was averaged at postcode area level, this was then used to obtain the floor area for each property. For Scottish residential properties, data from inspected properties (from the Scottish EPC Register) on Nationwide's mortgage book was averaged at postcode area level to obtain an average floor area.

ii. Data from the EPC Open Data Communities for non-domestic properties was averaged at postcode area level to estimate the absolute CO_2 emissions at CRE property level. For the residential properties in the CRE portfolio, data from the EPC Open Data Communities for residential properties in England and Wales was averaged at postcode area level to estimate the absolute CO_2 emissions at CRE property level. For Scottish residential properties, data from inspected properties (from the Scottish EPC Register) on Nationwide's mortgage book was averaged at postcode area level to estimate the absolute CO_2 emissions.

iii. LTVs have been used to calculate attribution factors, which are then applied to the total CO_2 emissions predicted at borrower level. Borrower level attribution factors are calculated based on (i) total outstanding loan values as at 31 December 2021 and; (ii) total property values using a property valuation, static as at 31 December 2020 (or, for new business, the latest valuation in 2021 which will be held static going forwards). The approach to calculating attribution factor at borrower, rather than loan, level is aligned with the nature of the lending, and has been confirmed as an appropriate approach by PCAF.

iv. Data scores are based on the quality of data inputs used to calculate carbon dioxide emissions. Data scoring aligns with PCAFs Global GHG Accounting and Reporting Standard, with 1 representing high data quality and 5 representing low data quality. We have assessed the data score for our CRE scope 3 financed emissions as being 4. As such, this could indicate a level of variability in the outcome when compared to that calculated using more granular data sources.

Scope 3 registered social landlord carbon emissions

Scope 3 emissions data – registered social landlords	Year to 31 Dec 2021*	Year to 31 Dec 2020
Total property floor area in square metres (note i)	**15,490,000**	Not reported
Absolute carbon emissions – tCO_2e/y on whole book using proxy EPC data (note ii)	**747,000**	
Absolute carbon intensity – $kgCO_2e/m^2/y$ using proxy EPC data	**48.24**	
LTV weighted carbon emissions – tCO_2e/y using LTV weighted proxy EPC data (note iii)	**346,000**	
LTV weighted carbon intensity – $kgCO_2e/m^2/y$ using LTV weighted proxy EPC data	**22.36**	
Data score (note iv)	**4.00**	

Notes:

i. Total property floor area for RSL is calculated using proxies based on publicly available EPC data. Data from the EPC Open Data Communities for all residential properties in England and Wales was averaged at postcode area level, this was then used to obtain the floor area for each property. For Scottish residential properties, data from inspected properties (from the Scottish EPC Register) on Nationwide's mortgage book was averaged at postcode area level to obtain an average floor area.

ii. Data from the EPC Open Data Communities for residential properties in England and Wales was averaged at a postcode area level to estimate the absolute CO_2 emissions at RSL property level. For Scottish residential properties, data from inspected properties (from the Scottish EPC Register) on Nationwide's mortgage book was averaged at postcode area level to estimate the absolute CO_2 emissions.

iii. LTVs have been used to calculate attribution factors, which are then applied to the total CO_2 emissions predicted at borrower level. Borrower level attribution factors are calculated based on (i) total outstanding loan values as at 31 December 2021 and; (ii) total property values using a property valuation, static as at 31 December 2020 (or, for new business, the latest valuation in 2021 which will be held static going forwards). The approach to calculating attribution factor at borrower, rather than loan, level is aligned with the nature of the lending, and has been confirmed as an appropriate approach by PCAF.

iv. Data scores are based on the quality of data inputs used to calculate carbon dioxide emissions. Data scoring aligns with PCAFs Global GHG Accounting and Reporting Standard, with 1 representing high data quality and 5 representing low data quality. We have assessed the data score for our RSL scope 3 financed emissions as being 4. As such, this could indicate a level of variability in the outcome when compared to that calculated using more granular data sources.

* Within the scope of EY assurance.

Nationwide's scope 3 carbon emissions – upstream

Through our partnership with Carbon Intelligence, Nationwide has also calculated its scope 3 emissions for its upstream activities across its supply chain. Purchased goods and services, capital goods and transportation and distribution account for 92% of our total emissions.

Our upstream emissions have been calculated using publicly disclosed supplier emissions data (covering scopes 1-3) from CDP responses, and revenue from the most recent publicly available annual reports, where available. Data gaps were supplemented using industry average emissions contained within the GHG Protocol and Quantis's Scope 3 Evaluator tool.

Data is publicly available for around 70% of our spend. Total scope 1-3 reported emissions of each supplier are divided by total turnover (in US dollars) to create supplier-specific emissions factors (in tonnes of CO_2 per US dollar of revenue). This is then multiplied by the amount that Nationwide spends, which is converted to US dollars using year to date average exchange rate, with each supplier to determine its financed emissions. For the remainder (around 30%), industry average emissions factors from Quantis are used and applied to Nationwide's spend.

A weighted data score of 2.9[17] for the upstream scope 3 portfolio emissions has also been calculated. Whilst PCAF has not defined an approach for the calcualtion of a data score for supply chain emissions, we have interpreted their approach for business loans and unlisted equity as the basis for the calculation.

It is expected that data quality scores will improve over time as internal models, EPC, and other datasets, mature and become available.

Scope 3 upstream carbon emissions data

Upstream scope 3 carbon dioxide emissions (CO_2e) in tonnes (t) per year (y)	Year to 31 Dec 2021*	Year to 31 Mar 2020 (note iii)
Purchased goods and services	**169,000**	237,000
Capital Goods	**43,500**	17,000
Upstream transportation and distribution	**17,500**	11,000
Total upstream scope 3 carbon dioxide emissions (tCO_2e/y) (note i)	**230,000**	265,000
Data score (note ii)	**2.9**	Not reported

Notes:

i. Upstream emissions have been calculated for the 12 months to 31 December 2021, using publicly disclosed supplier emissions data for around 70% of our spend, with the remainder using average emissions factors from the Quantis data source.

ii. Data scores are based on the quality of data inputs used to calculate carbon dioxide emissions. Data scoring aligns with PCAFs Global GHG Accounting and Reporting Standard, with 1 representing high data quality and 5 representing low data quality.

iii. Data for upstream scope 3 emissions has been included for 2020. Whilst not reported in our TCFD disclosure last year, the emissions were included within our 2021 CDP response. Spend data on energy usage fees was excluded from the 2020 emissions calculations, but has been included in the 2021 emissions calculations.

Scope 1, 2 and 3 emissions assurance

Nationwide appointed Ernst and Young LLP (EY) to provide limited independent assurance over our scope 1, 2 and 3 carbon emission disclosures for the year ended 4 April 2022. This includes scope 1 and 2 emissions for the year ended 4 April 2022 and scope 3 financed (investment and upstream) emissions for the 12-month period ended 31 December 2021. Assurance has not been provided over any prior year carbon emission disclosures. Assured metrics and KPIs are indicated throughout. The assurance engagement was planned and performed in accordance with the International Standard for Assurance Engagements (ISAE) (UK) 3000 (July 2020), Assurance Engagements Other than Audits or Reviews of Historical Financial Information. A limited assurance report was issued and is available on the Nationwide website[18]. This report includes details of the scope, respective responsibilities, work performed, limitations and conclusion.

[17] Spend data is available for all suppliers. The data score has been calculated based on emissions data available for approximately 70% of suppliers, giving a data score of 2, weighted at 70%. Estimated emissions data from Quantis has been sourced for approximately 30% of suppliers, giving a data score of 5, weighted at 30%.

[18] EY emissions assurance report 2022.

* Within the scope of EY assurance.

Ambition and overview
Strategy
Governance
Risk management
Metrics and targets

Physical risk metrics

On a combined basis, across both owner-occupier and buy to let mortgage portfolios, there has been a decrease in the number of properties in red flood risk zones compared to last year, as Nationwide does not lend to properties at high risk of flooding. This year, there has been a small increase in properties in amber flood risk zones in our buy to let and legacy mortgage portfolios due to the inclusion of an additional legacy mortgage book within our flood risk assessment processes.

Updates to UKCP18 and flood defence datasets are included within model outputs. UKCP18 is Met Office data which uses climate science to provide updated climate change projections out to 2100 for the UK and globally.

Our scenario analysis results showed Nationwide has a low financial exposure to physical risk. Further details are provided in the 'Strategy' section on page 5.

We will continue to work with JBA to understand the physical risk impacts on our mortgage portfolio and how we can reflect the consideration of these risks in lending policy.

Physical risk data

Owner-occupier mortgages	Year to 31 Dec 21			Year to 31 Dec 20		
	Number	Exposure £bn	% of Book	Number	Exposure £bn	% of Book
Properties in red flood risk zone (note i)	**385**	**0.04**	**0**	457	0.05	0
Properties in amber flood risk zone (note i)	**24,217**	**3.29**	**2**	27,610	3.36	2
Buy to let and legacy mortgages	**Year to 31 Dec 21**			**Year to 31 Dec 20**		
	Number	Exposure £bn	% of Book	Number	Exposure £bn	% of Book
Properties in red flood risk zone (note i)	**210**	**0.02**	**0**	203	0.02	0
Properties in amber flood risk zone (note i)	**10,355**	**1.40**	**3**	9,160	1.08	3

Notes:
i. Flood risk scores are weighted by risk level and type (such as coastal flooding) and any flood defences in place.

Transition risk metrics

The use of EPC data continues to be critical to Nationwide's understanding of the impact of transition risk. EPC ratings of the mortgage portfolio are monitored to provide a view on the energy efficiency of the Society's housing stock. This, coupled with internal modelling, to interpolate core EPC data across both the owner-occupier and buy to let mortgage portfolios, provides an understanding of the EPC composition of these portfolios. Further details are contained in the table opposite. This data is also used to track progress against our EPC Mutual Good Commitment.

Approximately 37% of Nationwide's mortgage book (owner-occupier and buy to let) is currently rated EPC C or better. This is a modest improvement on last year's EPC composition where 36% was EPC C or better.

For owner-occupier mortgages, the number of properties which have a valid EPC has increased and at the same time the energy efficiency of the book has improved. There has also been an increase in EPC A/B/C rated buy to let properties which is supported by Nationwide offering 80% LTV lending on higher energy efficient properties. Additionally, there has been a decreased in EPC F/G rated buy to let properties, compared to last year, due to these being out of policy for new lending.

Using physical and transition risk metrics in our governance

Climate change risk data is monitored quarterly by the Climate Change Risk Committee. Physical and transition risk data is reported alongside other metrics such as:

- The number of UK extreme weather events
- The annual Climate Change Committee's assessment of the UK's progress against carbon budgets
- The frequency with which climate change is raised in investor meetings
- The number of physical risk related incidents that have impacted our operations
- The green profile of our operations (tracking waste and emissions figures).

Transition risk data

Owner-occupier mortgages						
Current EPC data (note i)	**Year to 31 Dec 21**			**Year to 31 Dec 20**		
	Number	**Exposure £bn**	**% of Book**	**Number**	**Exposure £bn**	**% of Book**
EPC Rated A/B/C	**270,401**	**39.26**	**22**	255,752	37.79	20
EPC Rated D/E	**362,139**	**51.29**	**29**	363,774	52.10	29
EPC Rated F/G	**19,944**	**2.88**	**2**	20,581	3.06	2
No EPC / unmatched	**580,278**	**55.07**	**47**	619,048	57.18	49
Interpolated EPC data (note ii)	**Year to 31 Dec 21**			**Year to 31 Dec 20**		
	Number	**Exposure £bn**	**% of Book**	**Number**	**Exposure £bn**	**% of Book**
EPC Rated A/B/C	**473,999**	**59.27**	**38**	465,915	59.27	37
EPC Rated D/E/F/G	**758,763**	**88.73**	**62**	793,240	90.86	63

Buy to let and legacy mortgages						
Current EPC data (note i)	**Year to 31 Dec 21**			**Year to 31 Dec 20**		
	Number	**Exposure £bn**	**% of Book**	**Number**	**Exposure £bn**	**% of Book**
EPC Rated A/B/C	**76,803**	**10.83**	**22**	67,599	9.04	20
EPC Rated D/E	**141,113**	**18.62**	**41**	134,055	16.11	41
EPC Rated F/G	**2,928**	**0.30**	**1**	4,032	0.40	1
No EPC / unmatched	**124,492**	**17.44**	**36**	124,106	20.46	38
Interpolated EPC data (note ii)	**Year to 31 Dec 21**			**Year to 31 Dec 20**		
	Number	**Exposure £bn**	**% of Book**	**Number**	**Exposure £bn**	**% of Book**
EPC Rated A/B/C	**112,097**	**15.79**	**32**	106,910	16.43	32
EPC Rated D/E/F/G	**233,239**	**31.91**	**68**	222,882	29.58	68

Notes:
i. EPC data used as at 30 September 2021.
ii. Interpolated EPC data calculated using machine learning techniques matching most similar properties where data gaps exist. EPC data as at 30 September 2021 and mortgage portfolio data as at 31 December 2021.

Climate change complaint and loss data

In addition to the above metrics, both complaint and loss event[18] data related to climate risk are tracked. This data informs the Society's understanding of any material impacts on its operations and members.

There were no climate-related complaints in this financial year (2021: 0) and there were 3 operational and conduct risk loss events and near misses recorded with a climate change route cause (2021: 5). The loss events were caused by the February 2022 storms and the high winds experienced across the UK. Whilst the numbers are minimal, we will continue to monitor this activity, particularly as more extreme weather events are happening annually.

Managing our waste and water consumption

In addition to tracking the scope 1 and 2 carbon emissions for its buildings, Nationwide measures its water and waste consumption across its sites. More details can be found in the table opposite. Nationwide continues to divert 100% of its waste from landfill. Nationwide has seen a reduction in waste and water consumption this year in comparison to the previous year. The evolution of this trend will be dependent on future working patterns.

Nationwide's waste and water data

Water usage	Year to 4 April 2022	Year to 4 April 2021	Baseline year to 4 April 2011
Water use (cubic metres)	**182,162**	247,000[19]	259,718
Water use (cubic metres) per FTE	**11.29**	14.66[19]	15.44
Water consumption reduction (percentage)	**26%**	Not measured[19]	Not reported
Waste usage	**Year to 4 April 2022**	**Year to 4 April 2021**	**Baseline year to 4 April 2011**
Waste generated in tonnes	**1,454**	1,501	4,554
Waste reduction (tonnes)	**1,331**	967	Not reported
Percentage of waste recycled / target	**61% / 61%**	62% / 60%	43%

[18] An event which creates a Minor or above impact to the Society arising from: inadequate or failed internal processes, conduct & compliance management, people and systems, or from external events.
[19] Comparative amounts have been restated to previous years due to supplier issues with water data.

Tracking our green propositions

In 2020, Nationwide launched its Green Additional Borrowing mortgage with the support of its £1 billion green fund. Our Green Additional Borrowing mortgage supports members in making energy efficient home improvements and is offered at a lower rate in comparison to our other mortgage products with a fixed rate, for either two or five years. The number of applications and completions for the Green Additional Borrowing mortgage continues to be low.

In 2021, Nationwide launched its Green Further Advance for TMW customers. Aimed at landlords, the product aims to support those who want to increase the energy efficiency of their tenanted homes with affordable finance. Applications for the Green Further Advance mortgage have also been low.

The take-up for the Green Additional Borrowing mortgage and Green Further Advance mortgage is summarised opposite.

Last year, Nationwide also launched its Green Reward mortgage. Numbers for the Green Reward mortgage have been encouraging, with customers benefitting from cashback when they choose to purchase a higher energy-efficient property (high EPC B or EPC A home). The take-up for the Green Reward mortgage is summarised below.

Green Reward mortgage	Year to 4 April 2022
Number of completed applications	**2,234**
Total value of cashback released (£m)	**0.6**
Total value of completed applications (£m)	**529.9**

	Green Further Advance mortgage – year to 4 April 2022	Green Additional Borrowing mortgage - year to 4 April 2022	Green Additional Borrowing mortgage - year to 4 April 2021
Number of applications	**27**	**765**	419
Number of completed applications	**15**	**665**	345
Total value of applications (£m)	**0.2**	**12.8**	6.6
Total value of completed applications (£m)	**0.1**	**11.1**	5.3

The pace of take-up of our green lending products intended to support energy-efficiency improvements illustrates that it is not the absence of affordable funding that is constraining retrofitting – other barriers exist including a lack of: awareness or knowledge of the need for, and how to go about retrofitting; economic rationale; convenience; and trusted suppliers to undertake the work.

For many, the cost of retrofitting is not sufficiently offset by the financial benefits. Whilst retrofitting can deliver other benefits, such as more comfortable living conditions, more needs to be done to enable cost-effective retrofitting. The Government's Heat and Buildings Strategy goes part-way to supporting the case for low carbon heating with grant funding for heat pumps, but more needs to be done to decarbonise the UK's homes and meet net-zero targets. Nationwide will continue to work with government, policymakers and industry, to innovate its propositions, to support further activity to address the industry-wide retrofitting challenges.

Nationwide also partners with Switchd to offer members a 6-month free trial of their auto-energy switching service, which includes green tariff options. Sign-ups to the service have increased with 93% of those who switch, switching to green tariffs, equating to an estimated annualised carbon saving of 658 tCO_2/y. The decrease this year in comparison to the previous year (2021: 63% switched to green tariffs with an estimated annual carbon saving of 3,411 tCO_2/y) is a result of a decline in energy price deals from September 2021, and pausing the offer since December 2021, due to the challenges faced in the energy markets.

Nationwide will continue to monitor the progress of existing green propositions over the next year and innovate new green propositions to help support the decarbonisation of UK homes.

Ambition and overview
Strategy
Governance
Risk management
Metrics and targets

Addressing climate data limitations

Nationwide recognises certain limitations in climate data affecting climate metrics and targets, and their usefulness in strategic decision making. Due to the limited availability of publicly available, accurate, climate data (especially emissions data on UK homes), Nationwide has applied a number of assumptions and judgements in order to model its carbon emissions and risk exposures. The most important are as follows.

EPC limitations

An EPC is a document which sets out the energy efficiency of a property. Produced by an accredited domestic energy assessor, an EPC provides an indication of how much it will cost to heat (both water and space) and light a property. EPCs also include recommendations for energy-efficiency improvements, the cost of carrying them out, and the potential savings that each one could generate.

Energy efficiency is indicated using a traffic light system rating from A to G, based on Standard Assessment Procedure (SAP) points, with A being the most efficient.

The SAP calculates a property's expected annual energy cost and potential carbon emissions based on:

- The structure of the property
- The heating and hot water system
- The internal lighting
- Any renewable technologies used in the home.

The higher the SAP score, the lower the running cost, with a score of 100 (EPC A) representing zero energy cost.

EPCs are currently the best source of publicly available data on the energy efficiency of a property and whilst useful, they have their limitations, such as:

- Energy price dependencies – the current methodology is sensitive to fuel prices and so a property on a grade boundary can improve its EPC rating purely by having its assessment undertaken when energy prices are low
- Lack of carbon neutral incentives – the methodology rates efficient gas boilers above carbon neutral sources like air or ground source heat pumps
- Out of date data – an EPC is valid for 10 years and hence any changes to the energy efficiency of a property (for example, due to improved insulation) may not be captured unless the homeowner chooses to have the EPC updated
- Are not real-world – the data within an EPC does not reflect the actual energy usage of a home. Emissions data is estimated and only represent emissions for space and water heating, and lighting. Potential energy efficiency measures are also estimated.

Incomplete data

Nationwide aligns its emissions calculations for its scope 3 investment emissions (mortgages, CRE and RSL) to the PCAF GHG Reporting Standard. The methodology of PCAF is seen as best practice across the industry when calculating carbon emissions.

Nationwide's lending emissions are calculated using EPC data which contains property floor space and carbon emissions per square metre. Only around half of Nationwide mortgage properties have a current EPC. Where a valid EPC in unavailable, a model is used to estimate the floor area and building emissions. Nationwide's EPC model continues to develop and evolve through both artificial intelligence and machine learning enhancements.

Whilst the process for calculating emissions in line with PCAF guidance is clear, data quality issues limit the overall accuracy of the results.

PCAFs methodology for calculating financed emissions is as follows:

Building Emissions x Attribution Factor
Where: ***Building Emissions = CO_2 Emissions per m^2 x Floor space (m^2)***
And where: ***Attribution Factor = Outstanding Balance / Property Value at Origination***

PCAF have also developed a methodology for disclosing a data score alongside emissions to help indicate the quality of the data which supplies the emissions. Nationwide disclose a data score for its scope 1, 2 and 3 emissions aligned to PCAF's guidance, to ensure transparency of data quality. Data scores also support clear articulation of any estimations used in our emissions calculations. Further detail can be found in the 'Metrics and targets' section on page 25.

Despite their limitations, EPCs, and the data within, are useful in informing the scope 3 emissions, transition risk associated with the Society's mortgaged properties.

Risks relating to climate scenario analysis

In 2021, Nationwide enhanced its climate scenario analysis capabilities and leveraged these during its participation in the CBES. Three scenarios were used (Early, Late and No additional action) which aim to project possible physical and transition risk impacts over the next 30 years. These do not represent all possible future pathways. In addition, the further out the modelling projection, the greater the uncertainty in the results.

Nationwide believes that climate scenarios, whilst assumptive, have their uses to help inform strategic and risk management decision making, however, we also recognise the need to be cautious in the use of this data.

Nationwide will continue to monitor climate data developments and will adjust its modelling approach as appropriate.

Glossary

Glossary & Abbreviations	
Item	**Description**
Basel Committee on Banking Supervision (BCBS)	The primary global standard setter for the prudential regulation of banks, the BCBS provides a forum for regular cooperation on banking supervisory matters.
CDP	CDP is a not-for-profit charity that runs the global disclosure system for investors, companies, cities, states and regions to manage their environmental impacts. Nationwide participates in the CDP questionnaire annually.
Climate Biennial Exploratory Scenario (CBES)	The Bank of England's 2021 Biennial Exploratory Scenario: Financial risks from climate change (CBES) exercise aims to explore the resilience of the UK financial system to the physical and transition risks associated with different climate pathways. The exercise was carried out by the largest banks and insurers in the financial system.
Climate-related opportunities	The potential opportunities for Nationwide as we support society's transition to a low carbon economy. Opportunities include launching new green propositions, or cost savings through use of low carbon technologies and sustainable practices, and through increased education across all stakeholder groups, including our members.
Climate-related risks	The potential impacts of climate change on Nationwide through both physical (risks arising from the increasing severity and frequency of climate and weather-related events such as flooding) and/or transitional (risks which could result from the process of adjustment towards a lower carbon economy such as through developments in policy and regulation, emergence of disruptive technology or business models, shifting societal preferences, or evolving legal interpretations) impacts.
Department for Business, Energy & Industrial Strategy (BEIS)	BEIS is a government department which replaced the Department for Business, Innovation and Skills (BIS) and the Department of Energy and Climate Change (DECC) in July 2016. Their ambition is to 'build a stronger, greener future by fighting coronavirus, tackling climate change, unleashing innovation, and making the UK a great place to work and do business'.
Energy Performance Certificate (EPC)	An EPC is a document which sets out the energy efficiency of a property. Produced by an accredited domestic energy assessor, an EPC provides an indication of how much it will cost to heat (both water and space) and light a property. EPCs also include recommendations for energy-efficiency improvements, the cost of carrying them out, and the potential savings that each one could generate. Energy efficiency is indicated using a traffic light system rating from A to G, based on Standard Assessment Procedure (SAP) points, with A being the most efficient.
Enterprise Risk Management Framework (ERMF)	The ERMF provides a consistent approach to managing risk across Nationwide, ensuring we remain safe and secure and do the right thing for our members. Nationwide's risk and control culture is part of our broader Society culture.
Environmental, Social and Governance (ESG)	Environment, Social and Governance factors are core to Nationwide's sustainability approach as a responsible business. We report on the three pillars annually within our Strategic Report in our Annual Report and Accounts, and in our TCFD-aligned Climate-related Financial Disclosures.
Financed Emissions	GHG emissions occurred as a result of financing. Nationwide considers its financed emissions through its investment and lending activities and calculates and reports on these emissions in order to estimate Nationwide's impact on the wider economy.

Glossary & Abbreviations

Item	Description
Future Homes Standard	A government-led proposal around options to increase the energy efficiency requirements for new homes in the 2020s, with the aim to be introduced by 2025.
Glasgow Financial Alliance for Net Zero (GFANZ)	Formed in 2021, GFANZ is a global coalition of leading financial institutions committed to accelerating the decarbonisation of the economy. Nationwide participates in the Policy Call to Action and Implementation workstreams, since their inception in 2021.
Greenhouse Gas (GHG) Emissions	GHG's are atmospheric gases that trap heat or longwave radiation in the atmosphere, increasing the temperature of the Earth's surface. There are seven gases considered as part of the GHG Corporate Protocol Standard: carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulphur hexafluoride (SF_6), and nitrogen trifluoride (NF_3). CO_2 makes up the vast majority of these emissions.
Heat and Buildings Strategy	A government-led strategy which sets out the government's plan to significantly cut carbon emissions from the UK's homes and workplaces in a simple, low-cost, and green way whilst ensuring it remains affordable and fair for households across the country.
Low Carbon Heating	Carbon-friendly heating solutions which offer an alternative to traditional gas boilers. Typically, air and ground source heat pumps which take in heat at a low temperature and upgrade it to a higher temperature that can be used to heat homes.
Net-Zero Banking Alliance (NZBA)	This industry-led, UN-convened alliance recognises the vital role of banks in supporting the global transition of the real economy to net-zero emissions. All banks who are members of the NZBA have committed to net-zero and the setting of intermediate science-based targets at 2030 or sooner.
Net-Zero Ambition	A UK-wide ambition to achieve an overall balance between GHG emissions produced and taken out of the atmosphere, keeping global temperature increases to below 1.5-degrees. Nationwide signed up to net-zero in 2021, committed to playing our part in supporting the transition to a net-zero economy.
Partnership for Carbon Accounting Financials (PCAF)	PCAF is a global partnership of financial institutions to measure and disclose the greenhouse gas (GHG) emissions associated with loans and investments. Nationwide follows PCAF's Global Greenhouse Gas Accounting and Reporting Standard to calculate its scope 3 carbon emissions.
Prudential Regulation Authority (PRA)	The PRA is responsible for the prudential regulation and supervision of banks, building societies, credit unions, insurers, and major investment firms in the UK.
PRA's Supervisory Statement 3/19	SS3/19 'Enhancing banks' and insurers' approaches to managing the financial risks from climate change' was published in April 2019 requiring firms embed climate change risk management capabilities into their organisations. In July 2020, the PRA sent a subsequent letter to firms' CEOs on the thematic feedback from the PRA's review of firm's SS3/19 plans, which provided clarity on their expectations for implementation by 31 December 2021.
Retrofitting	Home retrofitting is the addition of new, more energy efficient, technologies and solutions to help make homes warmer, cheaper to heat, less polluting and less damaging to the climate.
Risk and Controls Self-Assessment (RCSA)	A Nationwide framework developed to help with the identification and assessment of the type and amount of risk Nationwide is exposed to and how effective it is at managing it.
Science-based targets	Emissions reduction targets set in line with the latest climate science. Nationwide uses the tools and methodologies of the SBTi.

Glossary & Abbreviations

Item	Description
Science-based Target Initiative (SBTi)	A partnership between CDP, the United Nations Global Compact, World Resources Institute (WRI) and the Worldwide Fund for Nature (WWF). The SBTi aims to drives ambitious climate action in the private sector by enabling companies to set science-based emissions reduction targets.
SBTi's 1.5-degree Business Ambition	An urgent call to action by the SBTi to encourage companies, across all sectors, to set science-based net-zero aligned emissions reduction targets, in line with a 1.5-degree and net-zero future. Nationwide signed up to the 1.5-degreen business ambition in 2021.
Scope 1 Emissions	Scope 1 emissions are direct emissions from owned sources, such as the fuel Nationwide burns to heat its buildings.
Scope 2 Emissions	Scope 2 are indirect emissions from the generation and consumption of purchased electricity and heating.
Scope 3 Upstream Emissions (categories 1-14)	Scope 3 emission cover all other indirect emissions that occur in an organisation's value chain. Upstream emissions (categories 1-14) cover emissions which result from a firm's supply chain, such as through purchasing goods and services, capital goods, and transportation and distribution.
Scope 3 Investment Emissions (category 15)	Investment emissions are categorised as a downstream emissions category (category 15) by the GHG Protocol covering emissions resulting from capital investment or financing, such as mortgage lending.
Streamlined Energy and Carbon Reporting (SECR)	Government policy requiring firms captured by the regulation to disclose their energy and carbon emissions as part of their annual financial reporting cycle.
Task Force on Climate-related Financial Disclosures (TCFD)	Formed by the Financial Stability Board in 2017, the TCFD recommendations framework is designed to enable financial firms to produce clear, comprehensive, high-quality disclosures on the impacts of climate change.
UK Green Taxonomy	An imminent government-led initiative which sets out the criteria that specific economic activities must meet to be considered environmentally sustainable.
United Nations Environment Programme Finance Initiative (UNEP FI)	The United Nations Environment Programme Finance Initiative (UNEP FI) is a partnership between UNEP and the global financial sector to mobilise private sector finance for sustainable development. UNEP FI works with more than 400 members, including banks, insurers, and investors, and over 100 supporting institutions.