

2022



# TCFD Report

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A photograph of a modern office reception area. In the foreground, a wooden reception desk is visible, with the 'OakNorth' logo embossed on its side. The background shows a blurred office environment with desks and chairs.

# About OakNorth

OakNorth was launched in September 2015 with one fundamental purpose: to serve the 'Missing Middle': established small-to-medium businesses (SMEs) seeking to scale but routinely underserved or overlooked by larger banks. Its founders, Rishi Khosla and Joel Perlman, were inspired by their own experience of receiving 'computer says no' responses from commercial banks when trying to scale their own prior enterprise, driving them to establish OakNorth to serve ambitious entrepreneurs.

These ambitious entrepreneurs – the strivers who seek to grow their businesses all the way – are the true drivers of the economy, of productivity, of job creation and of innovation. Rishi and Joel's mission to empower these entrepreneurs and their businesses drove them to secure the third new UK banking licence in 150 years. Today, that mission is unchanged.

## Who we are

From day zero, OakNorth has been a bank built for entrepreneurs, by entrepreneurs. It saw the gap that had been created by commercial banks' one-size-fits-all approach to lending for the Missing Middle, and their sweeping assumptions about sector and market conditions. These banks did not – still do not – understand the needs of the Missing Middle, so Rishi and Joel built OakNorth to be a bank with a granular understanding of an SME's sector and market, the challenges they face, and most importantly their potential. That understanding, and their own entrepreneurial DNA, will always define OakNorth and how it operates.

## What we do

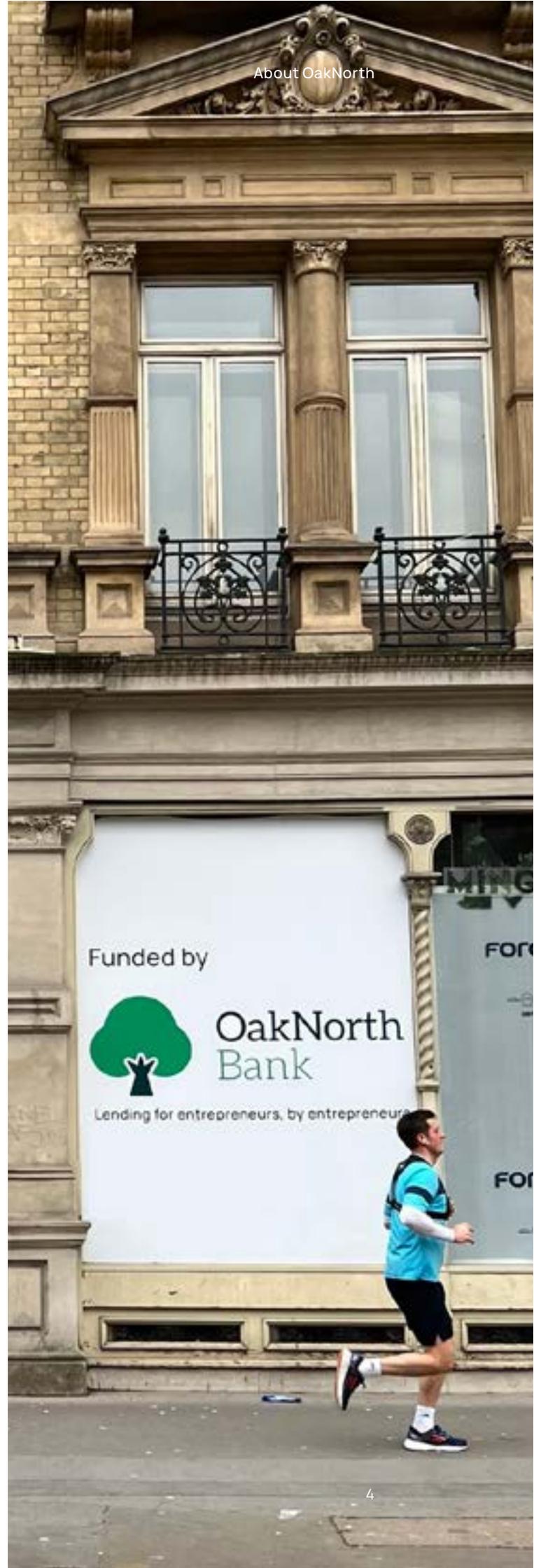
OakNorth provides the UK's fastest growing and most ambitious businesses with the fast, flexible debt finance (loans of £250k up to tens of millions) they need to scale, while also helping savers make their money go further, via a range of award-winning and competitive saving accounts.

To date, OakNorth has lent almost £10bn to businesses across the UK and over a wide range of sectors, achieving performance metrics that place it amongst the top 1% of commercial banks globally in terms of ROE and efficiency. Its loans have helped support IFA acquisition programmes, fund management buy-outs of family-run, textile businesses, finance growth ambitions for fitness and health club providers, as well as directly help the creation of 40,000 new jobs and 29,000 new homes across the UK – the majority of which are affordable and social housing. And with flexible repayments across fixed terms or revolving credit facilities, it's able to put business leaders in control of driving better returns on their equity.

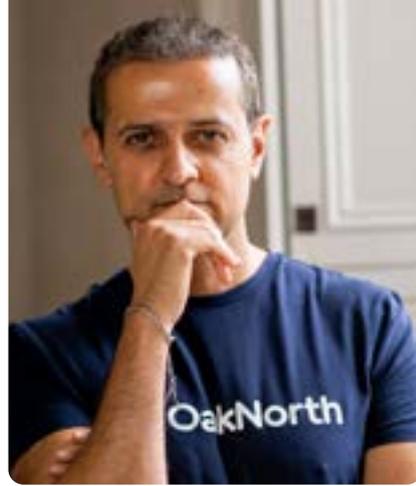
For its deposit customers, OakNorth has built an award-winning savings platform using tech to offer customer-friendly, flexible saving products designed to meet the varied needs of UK consumers. It offers digital-only, non-complex and FSCS protected deposit products.

As a bank devoted to SMEs, OakNorth takes a data-driven, forward-looking view of the performance and risk of an SME within an analytical framework covering over 270 industries. This enables it to make more informed lending decisions that serve SMEs in the specific ways they need, enabling promising businesses to adapt and thrive regardless of the economic circumstances. The 'secret sauce' behind this approach is the ON Credit Intelligence Suite, our productised analytical framework powered by an industry-leading \$500bn+ in commercial loan data. The product suite delivers three core products – ON Scenario Analysis, ON Monitoring, and ON Climate, all of which help commercial banks lend smarter, lend faster, and lend more.

Its support of the Missing Middle in scaling to their full potential amplifies the impact they have in our communities through innovation, jobs, sustainable impact and economic growth, in-turn powering the future success of the UK.



# CEO's remarks



**Rishi Khosla**

CEO and Co-founder

OakNorth continues to be defined by one simple goal: to create better outcomes for its customers. Our laser-focus on this underpins everything we do, including helping our customers to navigate challenges of all sizes and thrive in spite of them – even the greatest challenge of our time, the climate crisis.

Our mission aims to help entrepreneurs scale, driving growth and enriching the communities of the businesses we support. In 2022, our commitment to this mission helped us to deliver over £1.5bn of new lending. However, we know we will only have been successful in our mission if we have taken accountability for our world and future and helped our customers to do so as well.

In this, our inaugural TCFD report, we take the opportunity to reaffirm this commitment, which is why we are publishing ahead of regulatory requirements. We also demonstrate it through actions we have taken to support our customers on their journey to net zero and to shape a culture of environmental responsibility within our bank. OakNorth is showing that sustainability and growth can go hand in hand.

We are a young bank equipped with technology and data analytics capabilities, uniquely placed to help those innovative businesses with environmentally friendly propositions and to guide our customers on the transition to a low-carbon economy. We are proud to support the growth plans of SME housebuilders such as Hayfield, for example, which include sustainability initiatives such as installation of

Air Source Heat Pumps; or Verto, the UK's first housebuilder to specialise in zero-emission smart homes. We have also supported the growth of TriConnex and eSmart Networks, who are funding the decarbonisation of UK energy networks including EV charging infrastructure across Britain.

We have also set ambitious targets for ourselves on our net zero journey, for which we will leverage our unique capabilities. We aim to achieve net zero for all emissions across scopes 1, 2 and 3 by 2035. As early as 2019 we offset and reduced our Scope 1 and 2 emissions to net zero, and in this report we set out some interim targets to make the same happen for our Scope 3 emissions from our supply chain and lending activity. As proof of our accountability, we have made ourselves members of industry-wide commitments including Tech Zero, the Partnership for Carbon Accounting Financials (PCAF) and through the Net Zero Banking Alliance, the Glasgow Financial Alliance for Net Zero, all of which are helping to advance the global transition to a net zero economy across sectors.

We are simultaneously shaping best practice within OakNorth and across the industry, with the help of our Director of ESG Strategy Matt Bullivant who brings a wealth of experience within the sector to his role. The ON Climate Consortium regularly convenes innovative institutions who share our sustainability ambitions, providing a platform to shape commercial lending's approach to climate risk and opportunity.

We are also achieving this through our own innovations, including the 'secret sauce' of our business, OakNorth Credit Intelligence ("ONci"). Our purpose-made SaaS solution within the ONci suite, ON Climate, enables commercial banks to embed climate risk and financed emissions considerations into their lending, so they can support their borrowers through the net zero transition. Furthermore, it allows us to apply the granular, subsector-specific and forward-looking approach we use when lending to understand climate risk in the evolving environmental policy landscape and assess for credit risk across our loan book, which is just one way in which we are embedding climate considerations throughout our risk management frameworks, processes and governance.

We are determined to achieve our target of net zero earlier than the UK target and will continue to build on the actions we've taken to date to minimise carbon emissions in our business activities. We will also continue to work with our borrowers to transform their emissions reporting and work on projects to accelerate green retrofits and decarbonisation.

We founded OakNorth with a strong purpose and a vision to shape a better world, and to help our customers do the same. We will realise that ambition working together. This report is only the start of what we hope to accomplish.



# Our strategic highlights



**Matt Bullivant**

Director of ESG Strategy

OakNorth was built from the outset to support those entrepreneurs and growing SMEs in the Missing Middle, helping them through their challenges and maximising their potential. With climate change now a defining force shaping the threats and opportunities in our economy in the years to come, our ambition to tackle the issue head-on leads us to directly support those entrepreneurs and fast-growth businesses in responding to one of society's most pressing concerns.

Climate change can impact the performance of even the most profitable businesses, but it can also present us with an opportunity to support our customers in reducing their carbon emissions and transitioning to a low-carbon economy. As the world adapts to the challenge of climate change, banks will need to take new approaches, conduct forward-looking scenario analysis, evolve their risk and credit processes, and build climate confident teams equipped to have conversations with borrowers, identifying both climate risks and opportunities. This inaugural TCFD report sets out some of the strides OakNorth has already made towards accomplishing this.

OakNorth is a business built by entrepreneurs, for entrepreneurs, and it is this entrepreneurial spirit that leads us to want to do better. That ambition is reflected in our 2035 net zero target, well ahead of many national and industry targets commonly aiming for 2050, and I'm pleased that this TCFD report reinforces that commitment with interim targets for our supply chain and financed emissions.

I'm delighted with the progress we've made in measuring our Scope 3 emissions during the last year, and the conversations we're already starting to have with our customers and suppliers, while providing education, tools and advocacy on how to reduce climate impact and where we can support and help finance the transition. This may only be the beginning of what we hope to achieve, but our climate-related disclosures now form an important milestone in that journey.





## Reducing our emissions

Targeting net zero by 2035 for all our Scope 1, 2 and 3 emissions, including our operations and those we finance, with ambitious interim targets and ongoing enhancements and refinements to measuring and calculating our emissions.



## Supporting the transition to a low-carbon economy

Maximising our impact by engaging with our customers and suppliers on climate and decarbonisation, advocating the merits of achieving net zero and supporting them with education, tools, and resources to assist them in their transition.



## Integrating climate into our strategy and business model

Ensuring the prosperity and resilience of our business while maximising our effectiveness through climate conscious lending decisions, embedding climate considerations across our risk management, and fostering climate engagement with advocacy and training.

## Targeting net zero by 2035

As a young, digitally led lender unconstrained by the age and complexity of many other commercial banks' business models and having never lent to businesses directly engaged in fossil fuel production, we feel it is our duty to be ambitious in targeting net zero. That's why we've set ourselves a target of 2035 to achieve this, encompassing all our Scope 1, 2 and 3 emissions including those that we finance.

Our aim is to prioritise the reduction of all our emissions as much as possible, only then utilising carbon removal credits to eliminate residual emissions and arrive at net zero. The milestones and interim steps we set out in this document on our journey to net zero include:



### Maintaining carbon neutrality for Scope 1 and 2 emissions

We were one of the first banks to achieve this by reducing emissions and the use of carbon offset credits back in 2019; a status we have maintained ever since.



### Targeting net zero supply chain by 2028

Aiming to reach net zero for all Scope 1, 2 and 3 emissions of our UK supply chain, including purchased goods and services, by 2028.



### Targeting a 60% reduction in financed emissions by 2030

Our target is to have reduced 60% of the Scope 3 financed emissions from our loan book by 2030, down from a 2022 baseline.



29

leading banks participating in the latest ON Climate Consortium

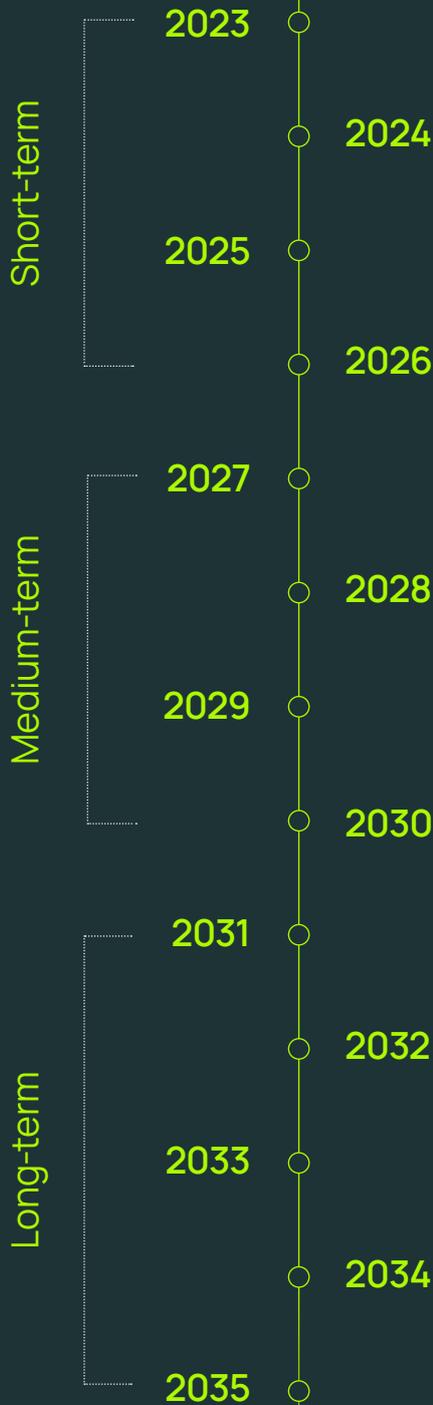


83%

OakNorth funded property investments rated EPC C or above

The physical and transitional risks of climate change are fully integrated into our risk management, frameworks and processes.

# Short, medium and long-term actions



## Phase-1 (Short-term: 2023-2026)

- Consolidating and building on our strong progress to date with measurement, reduction, and disclosure of climate impact.
- Refine and enhance our Scope 3 emissions calculations via customer and industry engagement.
- Submit our net zero targets for verification by the Science Based Targets Initiative.
- Continue ongoing climate and net zero employee education and engagement.
- Establish our supplier sustainability engagement plan.
- Refine and track our credit risk appetite climate metrics and KPIs.
- Develop strategic approach to selective use of robust, verified carbon offsets.

## Phase-2 (Medium-term: 2027-2030)

- Ensure all new property financing deals have a path to at least an EPC B rating by 2030.
- Support at least 75% of our business trading customers in adopting a net zero target of their own.
- Reduce our financed Scope 3 emissions by 60% vs a 2022 baseline.
- Supplier relationships and engagement to transition our UK Scope 3 supply chain emissions to net zero by 2028.

## Phase-3 (Long-term: 2031-2035)

- Reduce our remaining emissions as far as possible, deploying robust carbon removals to offset any residual amount and achieve net zero by 2035.

# Progress against TCFD recommendations

## Governance

Reference: Pages 13-16

### Framework element:

Disclose the organization's governance around climate-related risks and opportunities.

### Recommendation:

- a. Describe the board's oversight of climate-related risks and opportunities.
- b. Describe management's role in assessing and managing climate-related risks and opportunities.

### Highlights:

- Accountability of the group's climate strategy and risk management rests at both Board and Executive level, with a clear governance structure for the oversight and responsibilities for each.
- OakNorth Bank's Chief Risk Officer has been nominated as the Senior Management Function responsible for climate risk.
- A dedicated ESG steering committee has representation from across multiple business functions and oversees climate-related initiatives, implementation and decisions, and reports directly to the Executive Committee.
- The Board is regularly and actively engaged on ESG matters including climate strategy and risk management, with oversight of key decisions such as the development and setting of our net zero targets.
- OakNorth also draws upon the expertise of a number of specialist climate advisers from across academia, government and regulatory bodies, whose input helps guide our strategy and approach.

## Strategy

Reference: Pages 17-29

### Framework element:

Disclose the actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning where such information is material.

### Recommendation:

- a. Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term.
- b. Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning.
- c. Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.

### Highlights:

- Our strategic ambition is to be ahead of Paris Agreement targets by achieving net zero by 2035 for all our Scope 1, 2 and 3 emissions.
- Our strategy encompasses three core areas of reducing our emissions, supporting the transition to a low-carbon economy, and integrating climate into our strategy and business model.
- ON Climate is a proprietary climate risk offering as part of ON Credit Intelligence, which generates dynamic, forward-looking scenarios at a granular, subsector level to categorize businesses as high, medium, or low climate risk, leveraged by OakNorth Bank and licensed to other leading commercial banks.
- Climate transitional risk scenario analysis has been performed for our entire loan book utilising granular UK sector-specific scenarios from ON Climate and pathways described by the Network for Greening the Financial System.
- Insights from the ON Climate scenario analysis have supported our Internal Capital Adequacy Assessment Process (ICAAP), with no material exposures identified.
- Our approach to lending to property sectors includes partnerships, education, tools and resources to assist borrowers decarbonising the built environment.
- Our advocacy and thought leadership on climate and decarbonisation for SMEs and growth businesses is enhanced via our memberships of industry bodies such as the Net Zero Banking Alliance, Tech Zero and the Partnership for Carbon Accounting Financials (PCAF).

## Risk Management

Reference: Pages 30-35

### Framework element:

Disclose how the organization identifies, assesses, and manages climate-related risks.

### Recommendation:

- a. Describe the organization's processes for identifying and assessing climate-related risks.
- b. Describe the organization's processes for managing climate-related risks.
- c. Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.

### Highlights:

- Climate Risk is integrated into the Bank's overall Board approved Risk Appetite Statement. It is also integrated into key bank-wide processes and policies, for example loan origination and supplier management.
- Our climate risk appetite statement prevents any direct lending to exploration, extraction or refinement of coal, oil, gas or mining sectors.
- We assess each loan, at both origination and review, including those with negligible or residual climate exposure by leveraging granular, sector specific forecasts from ON Climate.
- We also require all customers to complete a climate questionnaire, ensuring climate risk is considered as part of all loan origination decisions.
- The above is supplemented with the use of climate data including flood risk and property EPC ratings.

## Metrics and Targets

Reference: Pages 36-46

### Framework element:

Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.

### Recommendation:

- a. Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.
- b. Disclose Scope 1, Scope 2 and, if appropriate, Scope 3 greenhouse gas (GHG) emissions and the related risks.
- c. Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.

### Highlights:

- We have measured and disclosed our Scope 1, 2 and 3 emissions for both our operations and financed emissions, while continuing to seek ways to refine and enhance our data quality and methodologies.
- We are one of the first banks to have estimated the majority of our Scope 3 financed emissions utilising PCAF methodologies, while broadening our thinking to begin considering our impact beyond the current scope of PCAF for emissions such as embodied carbon.
- Our property-related lending now includes granular unit level EPC checks to compare against current and upcoming Minimum Energy Efficiency Standards.
- All our lending includes climate transition risk ratings generated using our proprietary ON Climate forecasts.
- Key risk indicators around borrower climate strategy, governance and transition are under development alongside our risk assessment frameworks and customer engagement on climate.
- Our headline target is to achieve net zero by 2035 for all our operational and financed emissions.
- Our transition planning on achieving net zero includes milestone targets of becoming net zero for our UK supply chain by 2028, and a 60% reduction in financed emissions by 2030, against a 2022 baseline.

# Governance

# Governance

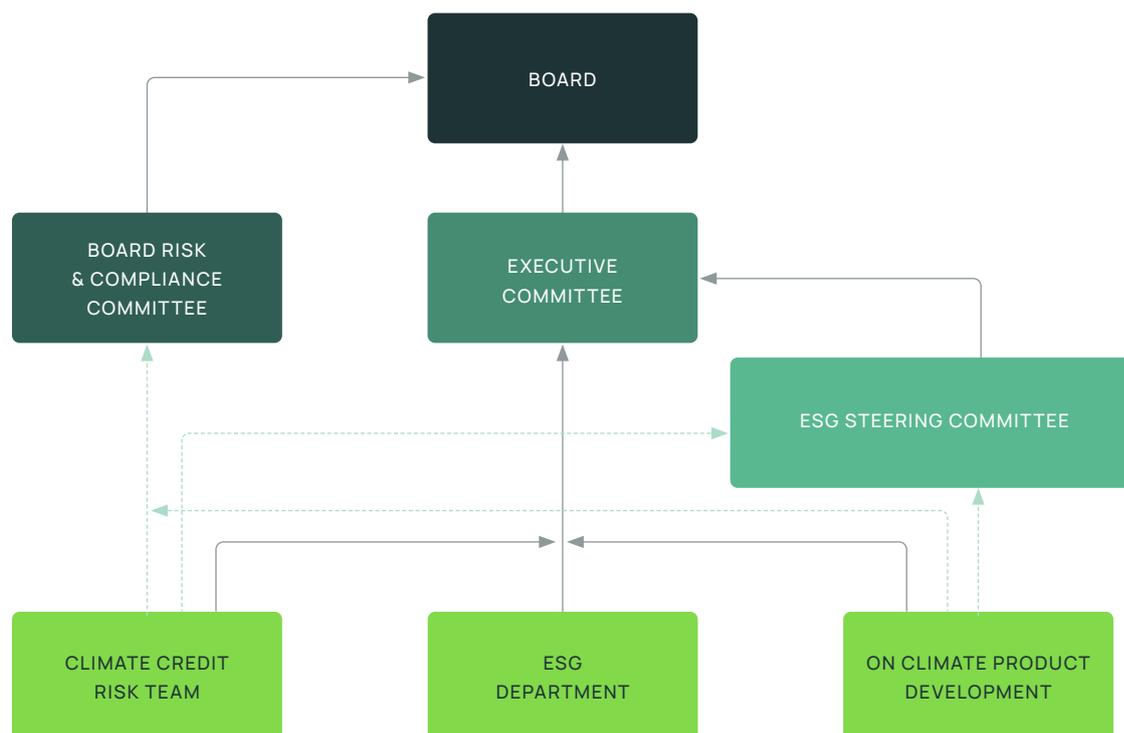
The Board is responsible for the oversight of ESG matters, including climate, and climate-related risks. OakNorth's approach to climate-related risks and opportunities forms a key component of the group's strategy, for which the Board retains responsibility and maintains oversight of. Climate appears as a focus area reviewed in depth at the annual Board strategy day and climate strategy and risk is a topic regularly covered at Board meetings, both through regular updates and formal agenda items.

The Board Risk and Compliance Committee (BRCC) also plays an important role in overseeing ESG and climate matters, since the Board delegates to it the responsibility for climate risk. BRCC is therefore responsible for considering the group's climate risk appetite and monitoring against it. In addition, through its consideration of the group's wider risk appetite, in areas such as credit risk, and capital and liquidity management through the annual ICAAP and ILAAP processes, BRCC ensures that the group wide risk appetite supports the overall strategy, of which ESG and climate are

key strands. The Group Chief Risk Officer (CRO) is responsible for climate risk and has been allocated the relevant Senior Management Function. The CRO reports to BRCC quarterly on a range of risk items including those in relation to climate risk.

An ESG steering committee, which reports to both the Executive Committee and BRCC, considers and takes decisions on a broad range of sustainability matters, including those in relation to climate and climate-risk. It is chaired by OakNorth's Director of ESG Strategy and meets on a monthly basis, with representation from senior stakeholders across the business, including the Chief Financial Officer, Chief Risk Officer, Head of Credit Risk, Chief Operating Officer, Head of Debt Finance, Head of Regulatory and Government Affairs, and Director of Growth and Communications. Its output is regularly discussed at the Executive Committee, and is presented to the Board bi-annually, to update on ESG and climate strategy, progress, risks and decisions for consideration.

## OakNorth's ESG governance structure



## Management roles

### CEO

OakNorth's CEO and Co-founder drives the vision for OakNorth's approach to climate, its strategic direction, and the way it implements climate-focused initiatives and impact.

### CRO

OakNorth's Chief Risk Officer is the Senior Management Function with designated responsibility for the identification and management of climate risks under the PRA's Senior Managers and Certification Regime.

### CFO

OakNorth's Chief Financial Officer has responsibility for incorporating climate considerations into strategic financial planning, and ensuring appropriate representation of climate-matters in regulated financial and statutory disclosures.

### Head of Credit Risk

OakNorth's Head of Credit Risk is responsible for credit risk policy, management, and reporting, including with respect to climate, and reports to the Credit Risk Management Committee and the Board Credit Committee.

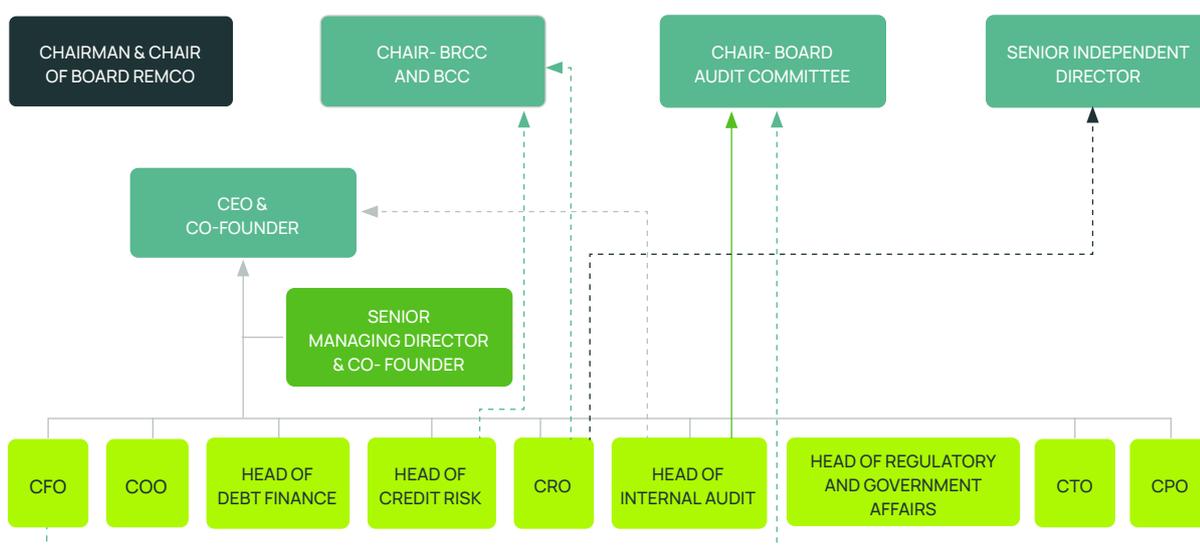
### Executive Committee (EXCO)

The ExCo takes delegated authority from the Board for matters such as developing climate strategy and ensuring its execution across all dimensions. The ExCo has delegated review and approval of climate-related policies, and responsibility for management of climate-related risks.

### Director of ESG Strategy

The Director of ESG Strategy chairs the ESG Steering Committee and has oversight of the strategic direction, planning and implementation of climate-related matters and initiatives, working in partnership with key functional stakeholders across the business.

## Reporting structure



The Board has approved a number of key decisions on climate strategy and management of climate-related risks and opportunities. Notably, our strategic target of achieving Net Zero by 2035 for all our emissions, including all Scope 3 from both our supply chain and lending activity. A number of recent decisions have been made to support this strategy, including our membership of both the Net Zero Banking Alliance and Bankers for Net Zero, actions to support our identification and measurement of Scope 3 carbon emissions, a climate focus to origination of new business, incorporation of a climate risk assessment model and climate risk appetite metrics into the Bank's credit process, targeted support for decarbonising the built environment, employee engagement initiatives on climate, commitment to TCFD reporting ahead of regulatory requirements, and establishment of our core ESG principles and strategy.

The group also has an Advisory Board on climate matters. This has proven a powerful source of guidance and expertise and has helped shape our strategy. Members of the advisory board are considered leading experts in their respective fields, and we are fortunate to have a number of them bringing specific climate-related expertise, most notably: Lord Adair Turner, Chair of the Energy Transitions Commission; Jing Zhang, Climate Advisor and Managing Principal at Apricus Climate Ventures; Lance Uggla, Global Head of Climate & Sustainability investing and co-founder of BeyondNetZero, General Atlantic's climate growth fund, and former Chairman and CEO of IHS Markit; and former US regulators Jeremiah Norton, Bruce Richards and Mark Levonian. Together their guidance and feedback helps sharpen our focus on climate strategy, products, risk management and regulatory alignment on climate for both OakNorth and our clients.



# Strategy

## Strategy

At OakNorth, we recognise that combating climate change is one of the most critical issues of our time, and have the ambition, responsibility, and opportunity to take a lead on addressing the challenge. Our strong data and analytics capabilities, coupled with the best practice and learnings we share with other banks via OakNorth Credit Intelligence, leaves us well placed to make a material impact in the fight against climate change. We started our own journey in this regard back in 2019, reducing and fully offsetting our residual Scope 1 and 2 emissions while we continue to seek ways to reduce our operational emissions without reliance on offsets.

As a young, digitally led lender we are unconstrained by the age and complexity of many other commercial banks' business models and have never lent to businesses directly engaged in fossil fuel production. A growing number of banks have now begun making commitments that align their lending and investment portfolios on pathways to net zero by 2050, but we feel it is our duty to be more ambitious. Our target of achieving net zero by 2035 for all our emissions, including all Scope 3 from our supply chain and lending activity, demonstrates that ambition. While this is just a commitment, and we continue to work on plans for how we will get there, the entire organisation from junior to Board level are invested in us reaching our goal.

To set us on the right path in the nearer term, we have now set ourselves interim targets to become net zero through our UK supply chain by 2028 and reduce our financed emissions by 60% by 2030.

We know that it is important for our targets to remain credible, which is why we have made substantial strides this year in measuring and reporting our Scope 3 emissions and planning for our transition towards net zero, while in the coming months we will explore the requirements for verifying the science-based nature of our commitments.

The high-growth businesses we support are ideally placed to implement the necessary changes, investments and innovations across their products, business models and operations to reduce their carbon footprints, putting them in the driving seat for decarbonising the economy. As a trusted partner to our borrowers, we have a crucial role to play in assisting their transition to a low carbon economy, and helping them understand how their climate sensitivities and vulnerabilities may impact their future creditworthiness.

We are conscious that our most significant impact can be attributable to our Scope 3 financed emissions, as discussed in later sections. We also continue to follow with interest the implementation of the UK regulator's recent Sustainability Disclosure Requirements, Anti-greenwashing and Green Labelling rules, and its attempts to enforce more credibility, reliability, and trust in the growing number of green finance products.

It is important that specific uses of proceeds from any green product contribute a material impact and complement a broader company sustainability strategy, rather than the use of such products being a strategy in itself, resulting in empty signalling of sustainable attributes. Where our capabilities come to the fore is in incorporating climate considerations into all our lending decisions and our granular assessment of climate risk for every piece of business we consider. By embedding the evaluation of climate impact into our credit papers and reviewing it alongside all other factors, we ensure that climate is much more integral to our core lending approach rather than a siloed product and is a consistent feature in all our lending decisions and the terms we may set accordingly.

A large proportion of our financed carbon footprint relates to the energy efficiency and operational emissions of our customer's sites and properties, many of whom are in sectors

such as hospitality, hotels and residential care, as well as our exposure to financing the development of and investment in property. It is therefore imperative for us to take action on supporting the decarbonising of the built environment to achieve our net zero aims, and to aid our borrowers in their own transition.

We recognise the value of engagement, education and advocacy of low-carbon solutions to our customers in raising awareness and understanding of potential approaches and actions, and have begun a regular programme of webinars, blogs and articles in partnership with industry and technology leaders on topics such as embodied carbon, environmental certification, energy efficiency standards and carbon offsetting. There are particular challenges in achieving decarbonisation of the built environment, and during the year we have begun working with some of our more advanced customers to identify those features, attributes and initiatives that can be implemented in more energy efficient and lower carbon buildings, and where we may be able to assist others in their uptake.

Our borrowers investing in pre-existing properties are already beginning to consider optimising the operational energy efficiency of their buildings, addressing both compliance with upcoming minimum energy efficiency standards on rental properties and considering the benefits to tenants. We continue to advocate the value of going above and beyond minimum EPC standards via retrofit and upgrades to borrower properties, bringing industry expert opinions and the latest research to the attention of customers, evidencing the positive uplift to rental yields and property values from doing so. Our shared thought leadership with environmental assessment and accreditation providers and conductors of building energy audits and low carbon solutions continues to raise awareness of how, where, and why property owners can and should explore upgrading the energy efficiency of their assets.

New build constructions are already built to more exacting energy standards, with none of the property construction OakNorth finance rated below an EPC rating of C, and many developments well above this. This is another area where we strive to help our customers do more than simply meet current minimum standards. By partnering with experts on embodied carbon and construction material supplier, we outline the key legislation and industry changes that may affect our borrowers, highlight those areas of greatest importance and relevance to their projects, and suggest ideas and approaches for how to get ahead and future proof their developments.

Most of the growth businesses and SMEs we finance are not required to disclose their carbon emissions, and many of them have not yet been able to commit the necessary time and resources to quantifying their carbon impact. As a trusted partner to these businesses, we have a responsibility to support them through the transition and alert them to the opportunities that decarbonising presents to their business model, as well as the risks of inaction that may impact their future creditworthiness. We now provide our debt finance and portfolio management teams with training and updates that enable them to have transition-related conversations as part of their client relationships, and those customers with more detailed questions are able to discuss them with our internal ESG team.

A better appreciation of the climate-sensitivities of their businesses is the first step on the net zero journey for SMEs, but awareness of how and where they can source solutions and alternatives to decarbonise is crucial to give them the confidence to commit to a net zero target. Encouraging our customers to sign up to net zero is a critical element of our own transition plan to lower our financed emissions. In support of this, we have begun guiding our customers to reference tools and resources to aid them in their thinking, and exploring partnerships with various providers and suppliers of assessment tools and energy-saving technologies.

We now integrate conversations on climate strategy and regular questions within our engagement and onboarding processes for both new and existing customers to aid better understanding of what steps they have made to date on decarbonisation. By advocating the merits of committing to net zero, and in many cases commercial returns for doing so, we are already beginning to see customers making such commitments or working on their targets and transition plans. We stand ready to support our customers investing in decarbonising their businesses and properties, ensuring they remain compliant with environmental standards and expectations, and preserve their future creditworthiness in the face of climate change.

We are increasingly financing customers with leading climate and decarbonisation strategies, and in many cases integral parts of their business models. Over 20% of our current loan facilities support businesses that are socially sustainable, those who place climate and the environment central to their products and business models, or low-carbon or net zero property owners and developers. By sharing best practice and examples of what is achievable across the industries and subsectors that our customers operate in, we aim to inspire others to follow their lead. We are proud to be supporting numerous businesses that already have strong ESG credentials in their respective industries and are continuing to work with all our borrowers to develop credible plans to transition to net zero together.



## Example customers with strong environmental and low carbon credentials



UK's first housebuilder to specialise in the design, build and sale of smart homes which produce zero carbon emissions.



A certified B Corp and purpose-driven, values-based real estate investment firm that aims to drive social and environmental innovation in the built environment.



SME housebuilder committed to building greener and more sustainable homes.



A restaurant chain which carefully considers sustainability in the sourcing of its ingredients.



A family-run, plant-based food and beverage business.



Developers of a derelict brownfield site near Edinburgh into a multi-purpose country park and leisure facility, delivering sustainability and community benefits to help regenerate the local area.



Two of the UK's leading multi-utility and electrical infrastructure services, TriConnex providing electricity, water, and EV charging, and eSmart Networks' connections decarbonising UK transport and energy systems



Carbon-zero care home developer constructing BREEAM in-use 'Outstanding' homes with features such as geothermal heat pumps, battery storage and solar technology.

## The ON Climate Impact Framework

(Part of the OakNorth Credit Intelligence Suite)

Part of ONci, the ON Climate product provides powerful insights which enable us to understand climate risk with a forward-looking view of the evolving policy landscape and climate events at a granular, subsector-specific level. We're integrating the same credit processes into origination as those being used for ongoing monitoring and for stress-testing. Our climate scenarios have focused on transitional climate risk which looks at how low-carbon policies, technological disruption / evolution, changes in price elasticity, and evolving consumer sentiment, could impact specific sub-sectors and the resulting credit risk within a bank's loan portfolio. We continue to build on our physical climate risk scenarios.

### Transition Risks

ON Climate's transition risk methodology considers six climate scenarios aligned to the Network for Greening the Financial System (NGFS):

- Net Zero 2050 scenario (orderly 1.5°C rise in temperature by 2050).
- Below 2°C- scenario (orderly 1.7°C rise in temperature by 2050).
- Divergent Net Zero scenario (disorderly 1.5°C rise in temperature by 2050).
- Delayed transition scenario (disorderly 1.8°C rise in temperature by 2050).
- Nationally Determined Contributions scenario (Hot House World 2.5°C rise in temperature by 2050).
- Current policies scenario (Hot House World >3°C rise in temperature by 2050).

The scenarios are evaluated through the lens of an orderly transition (i.e. where policy action starts immediately / in the near term), disorderly

transition (i.e. where policy actions are delayed until either 2025 or 2030), and Hot House World (i.e. where there are no further policy actions).

In order to evaluate the impact of transition risk, ON Climate divides the universe of subsectors (ONci's own established repository of 273 unique subsector scenarios) by their degree of impact into three distinct categories: Direct Impact, Indirect Impact and Residual Impact, based on the carbon intensity of individual subsectors.

- **Direct Impact:** considers subsectors with high Scope 1 emissions (calculated as a percentage of sector revenue) in this category.
- **Indirect Impact:** considers subsectors with material Scope 2 emissions (calculated as a percentage of sector revenue) in this category. In addition, sectors with material indirect impact (incremental raw material cost pass through) are also classified under this category.
- **Residual Impact:** Sectors which are not classified under direct and indirect impact are included here. These will be assessed for any residual impacts based on the impact to macro-economic variables across the three climate pathways (early, late or no transition).



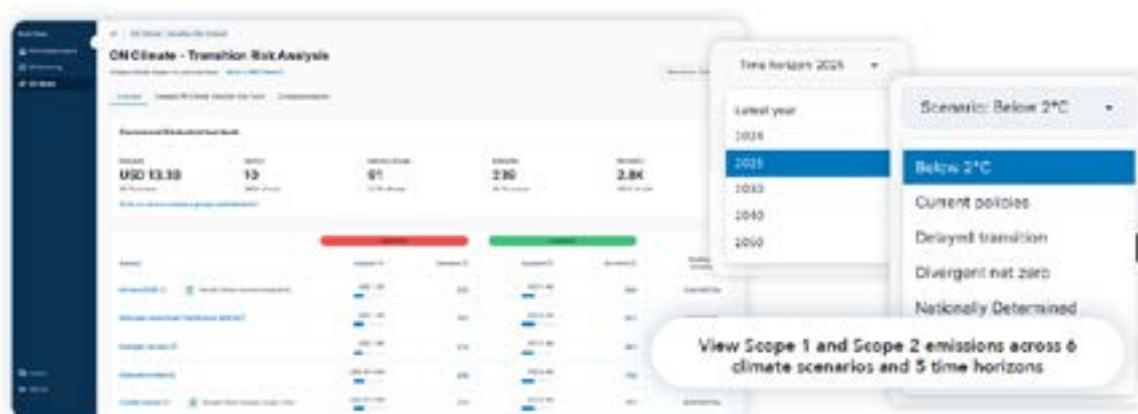
**ON Climate** provides lenders the ability to assess climate transition risk on their loan book. Climate and credit risk teams get access to immediate and actionable intelligence on C&I portfolios down to the individual borrower level, enabling them to:

- Calculate financed emissions across the entire commercial loan book without wasting time in collecting emission data from customers.
- Mitigate regulatory risk by identifying climate risk in portfolios early, allowing the creation of effective climate transition risk strategies.
- Incorporate climate risk measurement into regular portfolio management and underwriting processes.
- Increase customer retention and wallet share by giving front line teams the information they need to facilitate meaningful conversations with customers on climate risk.

### Value proposition:

#### 1 Identify and report on financed emissions in the loan book, without wasting time on data collection

- Calculate emissions at the portfolio, sector, industry and borrower level, while adhering to PCAF score 3 and 4 reporting.
- Analyze and report on Scope 1 and Scope 2 financed emissions across six NGFS climate scenarios and five-time horizons for strategic planning while keeping the cost of reporting low.



**2 Identify climate risk in portfolios early and mitigate regulatory risk**

- Plan ahead for market changes and formulate targeted risk mitigation strategies by identifying high risk sectors, industries and borrowers in the loan book.
- Analyze ON Transition Risk Score (highest to lowest) alongside existing credit risk ratings and stack rank the portfolio for priority deep dives and climate focused review.
- Use shorter NGFS timelines of 3-5 years to make climate decisions on the portfolio now.
- Understand the impact of climate risk on borrower financials and credit health and extract climate risk-based financial forecasts for risk quantification.



**3 Strengthen relationships with customers, improve retention, and increase wallet share by helping borrowers transition to a low carbon economy**

- Understand the levers (technology, regulatory) driving transition risk in borrowers' business models to inform meaningful conversations with borrowers around decarbonising their business.
- Lend into more decarbonising ventures and lower overall emissions to improve NPS and brand value.

**Scope 3**

**FINANCED EMISSIONS**

Report on Scope 1 and Scope 2 financed emissions quickly without costly and time-consuming data collection exercise.

**6**

**CLIMATE SCENARIOS**

Use climate models aligned with recognized industry and accounting standards such as NGFS, and PCAF to avoid future risk and create effective climate transition risk strategies.



We are partnering with OakNorth Credit Intelligence to help develop our climate scenario analysis capability, quantify our climate risk in commercial lending, guide future conversations with our commercial borrowers, and enable us to continue our climate leadership through disclosure.

**MIKE FAILLO**  
Fifth Third Bank

## Sub-sector classification as per OakNorth framework on climate-related risks

Direct impact	Indirect impact	Residual impact
<ul style="list-style-type: none"> <li>Subsectors with high <b>Scope 1 emissions</b> (calculated as a % of sector revenue)</li> <li>Around 15% of the sub-sectors will be classified in this category</li> <li>They are <b>under regulatory radar</b></li> <li><b>Point of incidence</b> for penalties / taxation</li> </ul>	<ul style="list-style-type: none"> <li>Subsectors with <b>Scope 2 emissions</b>, and/or impacted by <b>incremental raw material cost pass through from primary emitters</b></li> <li>Around 40% of the sub-sectors will be classified in this category</li> </ul>	<ul style="list-style-type: none"> <li>Subsectors <b>not classified under direct and indirect impact</b></li> <li>They have minimal Scope 1 and Scope 2 emissions</li> <li>We assess any material impact through impact to the macro-economic variables impacting the sector fundamentals</li> <li>Remaining 45% of the sub-sectors will be classified in this category</li> </ul>
<b>Examples (general):</b> <ul style="list-style-type: none"> <li>Power Plants</li> <li>Oil and Gas</li> <li>Metals and Mining</li> <li>Iron &amp; steel, Aluminium smelting, Cement etc.</li> <li>Transportation</li> </ul>	<b>Examples (general):</b> <ul style="list-style-type: none"> <li>Construction</li> <li>Automotive parts and accessories stores</li> <li>Manufacturing (excluding basic industry)</li> <li>Data Centers</li> </ul>	<b>Examples (general):</b> <ul style="list-style-type: none"> <li>Retail Trade</li> <li>Wholesale Trade</li> <li>Services</li> <li>Information</li> <li>Software development</li> </ul>
OakNorth loan book: ~0.6% of total	OakNorth loan book: ~82% of total	OakNorth loan book: ~15% of total

**Scope 1 emissions:**

These are direct greenhouse (GHG) emissions that occur from sources that are controlled or owned by an organisation (e.g., emissions associated with fuel combustion in boilers, furnaces, vehicles). These are most significantly impacted from policy, regulation change.

**Scope 2 emissions:**

These are indirect GHG emissions associated with the purchase of electricity, steam, heat, or cooling. Scope-2 emissions are driven by source of energy, hence would largely impact from change to energy price and/or source.

Using ON Climate, the scenarios are overlaid on borrower's current performance / base case forecasts. This provides the forecast performance of the borrower as well as impact metrics over the short term (2025) to target policy year (2050). For OakNorth Bank, this provides the estimated key credit metrics such as gross leverage, Interest Coverage Ratio (ICR), Debt Service Coverage Ratio (DSCR), LTV (for collateralized portfolio) and other

relevant metrics, over the time horizon. The credit metrics are further assessed to see if the borrower is within our credit risk appetite, outside risk appetite, or in losses.

We continue to assess impact from transition risk scenarios derived from ON Climate across all our borrowers, including those with minimal / residual impact. Our latest analysis concluded that while climate risk will have an impact on a

number of customers, the impact is well within the collateral and financial coverage already in place in nearly all instances. Only 0.6% of our total book – which equates to a few borrowers – would be directly impacted under the transitional risk assessment, and these can survive across all three scenarios with minimal impact compared to base case. As summarised in the following table, there are no expected losses across OakNorth Bank’s loan book under all the three transition scenarios applied up to 2050.

### Summary of climate change impact on the overall OakNorth loan book under each scenario.

Climate risk scenario	Short term (2025)	Medium term (2030)	Long term (2050)
1. Early action from 2021 (1.8°C risk in temperature by 2050)	2 loans where DSCR <1x; No loans with LTV >100%	2 loans where DSCR < 1.0x; No loans with LTV >100%	No loans where DSCR < 1.0x; No loans with LTV >100%
2. Late action from 2031 (1.8°C risk in temperature by 2050)	No loans where DSCR <1x, or LTV>100%	No loans where DSCR <1x, or LTV>100%	No loans where DSCR <1x, or LTV>100%
3. No additional action (3.3°C risk in temperature by 2050)	No loans where DSCR < 1.0x, or LTV >100%	No loans where DSCR < 1.0x, or LTV >100%	No loans where DSCR < 1.0x, or LTV >100%

## Participation with the industry on net zero

As regular participants in industry-led forums, events, trade bodies, and working groups focused on a wide array of themes in sustainable finance, we actively contribute to collaborative efforts ranging from guidance on regulatory reform to solutions for enabling commercial growth and opportunities.

In June 2021, we became one of the first fintechs to join Tech Zero, the climate action group for tech companies, and as part of this initiative, we made a number of commitments including to continue to measure and publish our Scope 1, 2 and 3 emissions, ensure that a member of our executive team is responsible and accountable for our net zero target, and report progress on targets to our Board at least annually, and on our website.

In early 2022, we joined the Glasgow Financial Alliance for Net Zero (GFANZ) via the Net

Zero Banking Alliance (NZBA) vertical. GFANZ assembles existing and new net zero finance initiatives in one sector-wide coalition, providing a forum for leading financial institutions to accelerate the transition to a net zero global economy, while the NZBA brings together banks which are committed to aligning their lending and investment portfolios with net zero emissions by 2050.

We are also members of Bankers for Net Zero, an initiative being led by the All-Party Parliamentary Group for Fair Business Banking. The initiative brings together banks, businesses, policymakers and regulators to enable cross-sector collaboration, clear potential roadblocks on the path to net zero for UK banks, and bridge high-level net zero commitments with implementation on the ground.

We are also members of Bankers for Net Zero, an initiative being led by the All-Party Parliamentary Group for Fair Business Banking. The initiative brings together banks, businesses,

policymakers and regulators to enable cross-sector collaboration, clear potential roadblocks on the path to net zero for UK banks, and bridge high-level net zero commitments with implementation on the ground.

We have contributed to a range of Bankers for Net Zero workstreams to date, including those that focus on financing net zero for SMEs, property retrofitting, and achieving net zero through finance and policy. We continue to engage on work focused on transforming SME emissions reporting to help accelerate the transition to net zero for UK SMEs, and projects aimed to accelerate green retrofits and decarbonisation of the built environment.

In 2023, we became signatories to the Partnership for Carbon Accounting Financials (PCAF), the industry-led global standard on carbon accounting and disclosure for financial institutions. Our membership of PCAF allows us direct input on shaping best practice on accounting for carbon emissions from financing activities, and on the methodologies, data sources and calculation bases used, with a particular focus on resolving the challenges specific to identification and reporting of emissions from SMEs and growth-businesses. In addition, we are also members of the core PCAF project team on Financing Towards Net-zero Buildings, amplifying our influence on how banks can measure and incentivise decarbonisation of the built environment and tackle both operational and embodied carbon across the building life cycle.

We welcomed the publication of the inaugural global sustainability disclosure standards, IFRS S1 and IFRS S2, by the International Sustainability Standards Board (“ISSB”) in June 2023. We will be closely following the UK adoption of these, with our intention to apply the ISSB standards in due course. This initial TCFD report is our first step on the path to compliance with IFRS S2, which we will continue to work towards in future disclosures.

## Sharing best practice with other banks

Through OakNorth Credit Intelligence (ONci), we are able to share best practices and learnings with some of the leading banks it is working with, including: PNC, Fifth Third, Old National and M&T Bank. In September 2021, the business launched the ON Climate Consortium – an ONci-founded group of innovative, climate-forward institutions which meets regularly to share sustainability ambitions, providing a platform to shape commercial lending’s approach to climate risk and opportunity. At the most recent Consortium, participants included 77 industry leaders from 29 commercial banks with assets ranging from \$22B to over \$3.3T, while in May 2023 ONci hosted a private, climate-focused Customer Advisory Board meeting with 9 commercial banks with a combined \$2T in assets on the topic of “Understanding the Fed’s climate scenario analysis pilot and its implication for banks”.

# Timeline of climate action

## April 2020

Assembled a product team focussed on the ON Climate Impact Framework to help inform our approach to climate change risk management

## April 2021

Launched an initiative to plant a tree on each team members' work anniversary

## September 2021

Participated in the inaugural ON Climate Consortium

## February 2022

Joined the Glasgow Financial Alliance for Net Zero (GFANZ) through the Net Zero Banking Alliance (NZBA) vertical

## December 2019

OakNorth became one of the first banks globally to fully offset our estimated direct GHG emissions

## March 2021

Switched our primary corporate energy supplier to a renewable gas and electricity provider

## June 2021

Became one of the first fintechs to join Tech Zero

## December 2021

Committed to become net zero for all our emissions by 2035

## February 2022

Second ON Climate Consortium, and held our inaugural 'Green Week' to increase engagement around and awareness of environmental sustainability throughout the organisation

## Timeline of climate action (cont.)

### April 2022

OakNorth Credit Intelligence published the Ultimate Guide to Commercial Lending & Climate Impact

### July 2022

Third ON Climate Consortium

### November 2022

ON Climate solution wins bronze at the 2022 Qorus-Accenture Banking Innovation Awards

### March 2023

Published our full Scope 3 emissions including those from our supply chain and the financed emissions from our loan book

### March 2022

Joined Bankers for Net Zero, the UK chapter of the NZBA that brings together banks, businesses, policymakers and regulators to accelerate the UK economy's transition to net zero

### June 2022

Marked World Environment Day with employee events, activities and external speaker

### November 2022

Fourth ON Climate Consortium

### February 2023

Joined the Partnership for Carbon Accounting Financials ("PCAF"), the industry-led global standard on carbon accounting and disclosure for financial institutions

### June 2023

Held our second annual 'Green Week' with added engagement and awareness on biodiversity

# Risk management

## Risk Management

Climate risk is the risk that climate change may affect our business and operating model through financial or reputational risks generated by the transition to a low carbon economy, or directly through assets exposed to the physical effects of climate change.

We also consider the risk of failing to seize those market opportunities presented by the transition to a decarbonising economy. This could include a failure to adapt product offerings to changes in the environment, technology, risk profiles and demand, which could materialise through acting too soon or too late, or via a failure to take the right actions.

### Physical risk

Physical risks from climate change can arise from several factors and relate to specific weather events (such as heatwaves, floods, wildfires, and storms) and longer-term shifts in the climate (such as changes in precipitation, extreme weather variability, sea level rise, and rising mean temperatures).

**Acute** physical risks are those that are event-driven, which can include the increased severity of extreme weather events such as hurricanes, floods or wildfires. **Chronic** physical risks are the result of longer-term shifts in climate patterns such as sustained higher temperatures, which could include sea level rise or recurring heat waves.

### Transition risk

Transition risks can arise from the process of adjustment towards a low-carbon economy. A range of factors influence this adjustment, including climate-related developments in policy and regulation, the emergence of disruptive technology or business models, shifting sentiment and societal preferences, or evolving evidence, frameworks, and legal interpretations.

## Litigation and reputational risk

The risk of people or businesses seeking compensation for losses they may have suffered from the transition or physical risks from climate change, where ONB may be deemed responsible for not anticipating or mitigating such exposures.

Growing expectations of stakeholders on climate matters, including customers and employees, could lead to increased pressure on how perceptions of business activities and performance are measured in future. Broader stakeholder and public opinion now expects banks to take an active role in the transition to a low carbon economy, which could present risks around misinterpretation of climate strategy, performance and objectives, or a failure of our suppliers, partners or customers to uphold standards and considerations of climate matters to a level that our stakeholders might expect.

### Risk Management Framework (RMF)

The Bank's enterprise-wide Risk Management Framework as agreed by the Board is set in compliance with relevant legislation and is designed to ensure that the key risks facing the Bank are identified, measured, monitored and managed, and that appropriate policies, procedures and controls are established such that each risk is mitigated to an acceptable degree. This framework is subject to constant re-evaluation to ensure that it meets the challenges of the markets in which the Bank operate. The group's approach to climate risk has been enhanced over time and is now fully embedded within this overall framework.

### Three lines of defence model

In line with standard industry practice, the Bank uses a Three Lines of Defence ('3LOD') operating model which sets out roles and responsibilities for risk management. In relation to climate risk:

**Ownership and Accountability** – the first line of defence (FLOD) is business line management. The Director of ESG Strategy plays a crucial role in agreeing and embedding the climate risk strategy across FLOD, with the support of EXCO and the Board.

**Independent Oversight and Challenge** – the second line of defence (SLOD), comprising the Risk and Credit Risk functions, is responsible for monitoring adherence to climate risk direction and limits, reporting any control breaches; ensuring that climate risk management practices and conditions are appropriate for the business environment; interpreting and reporting on risk exposures and outcomes; and interpreting and reporting on the climate Key Risk Indicators (KRIs) set in the Risk Appetite. The CRO is the Senior Management Function accountable for climate risk and leads the related SLOD oversight with support from the Risk team.

**Independent Assurance** – the third line of defence is responsible for understanding the key current and emerging climate risks affecting the Bank, leads the audit process, and owns the development and completion of the annual Internal Audit Plan, which includes assurance work in relation to ESG and climate risk.

### Risk Appetite framework

The Bank's Climate Risk Strategy is set within a detailed Risk Appetite Statement which sets out the type and quantum of risk the Bank is prepared to accept to achieve its strategic business objectives.

We consider climate change as an industry-wide emerging risk, with several mitigation approaches as part of an evolving programme to embed consideration of climate risks into our risk management frameworks, governance and processes. We have evaluated the potential impact of physical and transition risks on our loan book in extensive stress-test scenarios, and the impact is very low. We do not lend to coal, oil and gas sectors, and we assess that

our lending exposure to real estate which may be subject to climate change risk via flood risk or energy efficiency is low.

Climate risk is a key area of focus, and we continue to develop and enhance our approach in this area. Specific climate Key Risk Indicators have been introduced for testing, supported by climate risk assessment at both credit underwriting and in-life monitoring. Key elements being considered are physical and transition risks due to climate impact to our counterparties. We also continue to evolve our approach to measure our financed emissions to support OakNorth in meeting its net zero commitments.

Forward looking forecasts are used to assess how a low-carbon policy and technological transition towards mitigating climate change could impact the loan book. The assessment for 2022 concluded that there are no expected losses under any of the three Climate Biennial Exploratory Scenario (CBES) transition scenarios that include - Early action from 2021 (1.8°C risk in temperature by 2050), Late action from 2031 (1.8°C risk in temperature by 2050), and no additional action (3.3°C risk in temperature by 2050).

### Embedding climate change risk management in our approach to credit risk

Our approach to climate risk now also extends to credit risk management, with defined risk appetite metrics and statements in relation to climate, for example by limiting or restricting our exposure to carbon intensive sectors and higher climate risk businesses. We have never lent to businesses directly involved in fossil fuel extraction or refinement, and our lending policies explicitly exclude financing of such activities.

We have developed a specific climate risk questionnaire and scorecard that is completed by all borrowers to aid our understanding of their awareness, governance processes and

strategy towards the risks and opportunities of climate change. Questionnaires are tailored for particular types of borrower or transaction, with the outputs and responses included in credit papers for prospective loans and regular existing customer reviews for consideration.

### Forward looking assessment of credit risk resulting from climate risk

In 2022, we broadened the scope of our granular, sector specific scenario analysis of the possible impact of climate risk on our borrowers and therefore our capital requirements. By leveraging the scenarios and time horizons from the Bank of England's Biennial Exploratory Scenario, and the ON Climate Impact Framework (part of the ON Credit Intelligence suite), we have assessed each of our loans including those with only negligible or residual impact from climate change and evaluated the possible impact this would have on credit risk across our loan book.

In addition, during 2022 we embedded our climate risk modelling capabilities into our origination analysis of new loans, evaluating the impact of transition risk on all new business. In respect of physical climate risks, we have applied the five key perils of flood, cyclones, heatwaves, wildfire, and drought highlighted by the Bank of England and evaluated their impact on our loan book. Even though this assessment presented no expected losses under any scenario, OakNorth also ensures that borrowers are sufficiently covered with insurance against physical climate risks wherever relevant as part of our origination analysis of new lending.

### The Bank of England's Climate Biennial Exploratory Scenario (CBES)

As we detailed last year, we continue to apply the Bank of England's CBES scenarios to our loan book, which has desired outcomes to:

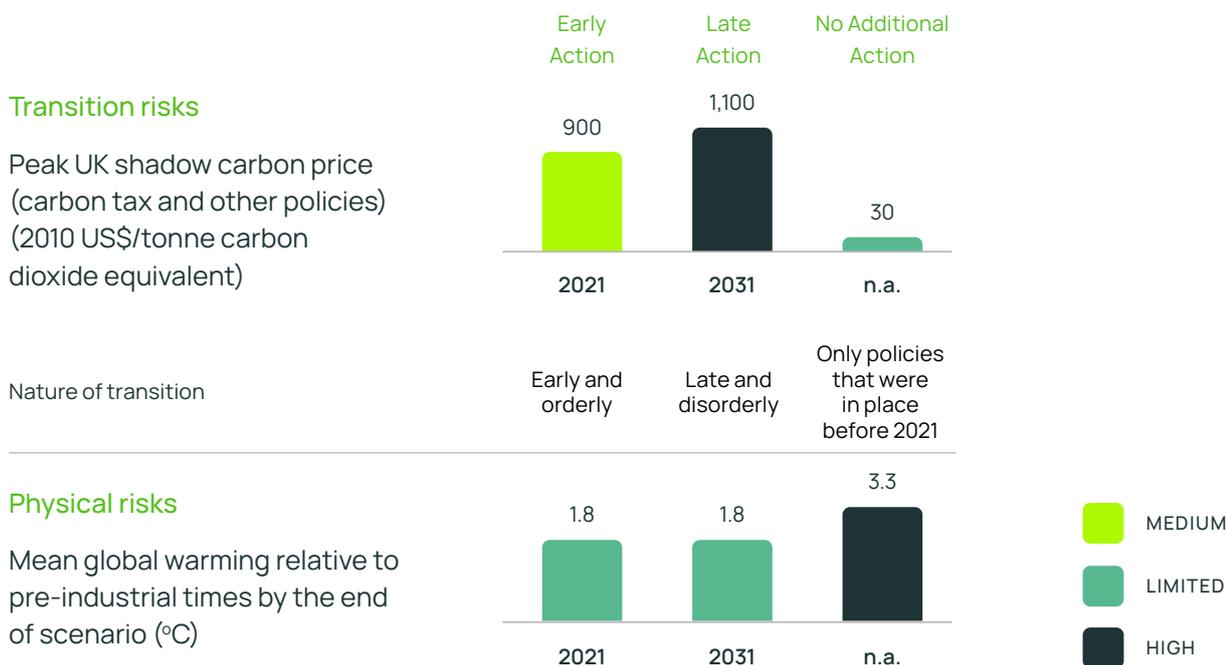
- Size the financial exposures of participants and the financial system more broadly to climate-related risks.
- Understand the challenges to participants' business models from these risks; and gauge their likely responses and the implications for the provision of financial services.
- Assist participants in enhancing their management of climate-related financial risks. This includes engaging counterparties to understand their vulnerability to climate change.

The exercise considers two routes to net zero greenhouse gas emissions and a scenario for growing emission:

- **Early Action:** the transition to a net-zero economy starts in 2021 so carbon taxes and other policies intensify relatively gradually over the scenario horizon. Global carbon dioxide emissions are reduced to net-zero by around 2050. Global warming is limited to 1.8°C by the end of the scenario (2050) relative to pre-industrial levels.
- **Late Action:** The implementation of policy to drive the transition is delayed until 2031 and is then more sudden and disorderly. Global warming is limited to 1.8°C by the end of the scenario (2050) relative to pre-industrial levels.
- **The No Additional Action:** Scenario primarily explores physical risks from climate change. Here, there are no new climate policies introduced beyond those already implemented. The absence of transition policies leads to a growing concentration of greenhouse gas emissions in the atmosphere and, as a result, global temperature levels continue to increase, reaching 3.3°C relative to pre-industrial levels by the end of the scenario (2050).

As a bank, we have not only sized the financial exposures as per the guidelines but have also quantified the business impact and expected losses emanating from the climate risk under the three scenarios.

## Summary of impacts in the CBES scenarios from the Bank of England



The years in the above charts refer to the year in which transition begins

Across our assessments for both transition and physical risk, our analysis concluded that while climate risk will have an impact on a number of borrowers, the impact is well within the collateral and financial coverage already in place in nearly all instances. Only 0.15% of our total book - which equates to a few borrowers - would be directly impacted under the transitional risk assessment, and they can survive across the three scenarios with minimal impact compare to base case. As summarised in following table, there are no expected losses across the loan book under all the three transition scenarios applied up to 2050.

Climate risk scenario	Climate risk impact
Early action from 2021 (1.8°C risk in temperature by 2050)	No expected losses; No loan with LTV >100%
Late action from 2031 (1.8°C risk in temperature by 2050)	No expected losses; No loan with LTV >100%
No additional action (3.3°C risk in temperature by 2050)	No loans where DSCR < 1.0x, or LTV >100%

Summary of climate change impact on the overall OakNorth portfolio under each scenario.

## ICAAP

The ICAAP stress tests the climate risk exposure by considering 3 scenarios:

- Early action / transition from 2021 (1.8°C risk in temperature by 2050).
- Late action / transition from 2031 (1.8°C risk in temperature by 2050).
- No additional action / transition (3.3°C risk in temperature by 2050).

Transition risk is assessed for all loans, including those with negligible / residual impact, leveraging granular, sector specific forecasts from OakNorth Credit Intelligence that estimate how a low-carbon policy and technological transition towards mitigating climate change could impact the book across the three scenarios mentioned above. The OakNorth framework divides the universe of subsectors (OakNorth's existing repository of unique sub-sector scenarios) based on the degree of impact into three distinct categories i.e. Direct Impact, Indirect Impact and Residual Impact based on the carbon intensity of individual subsectors. These are assessed for any residual impacts from carbon taxation through supply chain analysis.

Physical risk is also evaluated for all loans, against the five key perils: Flood, Cyclones, Heatwaves, Wildfire, and Draught highlighted by BoE.

No expected losses are modelled under any of the scenarios.

## Physical Risk

Our consideration of physical climate risks includes the capture and assessment of flood risk, built area and energy efficiency rating (EPC) for all collateral within our property development and investment portfolios.

Physical risk is defined as potential loss caused by climate-related events. The primary physical risk perils highlighted by the Bank of England

are: Floods, Cyclones and Heatwaves. We have evaluated the impact of physical risk against these perils and have no expected losses under our current scenarios. We ensure that our borrowers have sufficient coverage with insurances against physical risks wherever relevant as part of our credit analysis at origination. Our plan for the future is to evaluate granular Value at Risk (VaR) assessment for physical risk consistent with the ON Climate Impact Framework. This would imply assessment of business disruption, property damage for each borrower emanating due to (i) Acute risk – extreme weather events, and (ii) Chronic risk – gradual incremental climate change.

# Metrics and Targets

## Metrics and Targets

In the last year we significantly enhanced our data collection process, particularly in relation to estimating our Scope 3 footprint across all emissions types. Given the challenges and complexities around data and calculation of Scope 3 emissions, many organisations have only partially estimated their impact for more material or straightforward emissions categories. However, we believe that full transparency over our emissions impact is critical, and the only way to set a meaningful and understandable transition plan towards net zero.

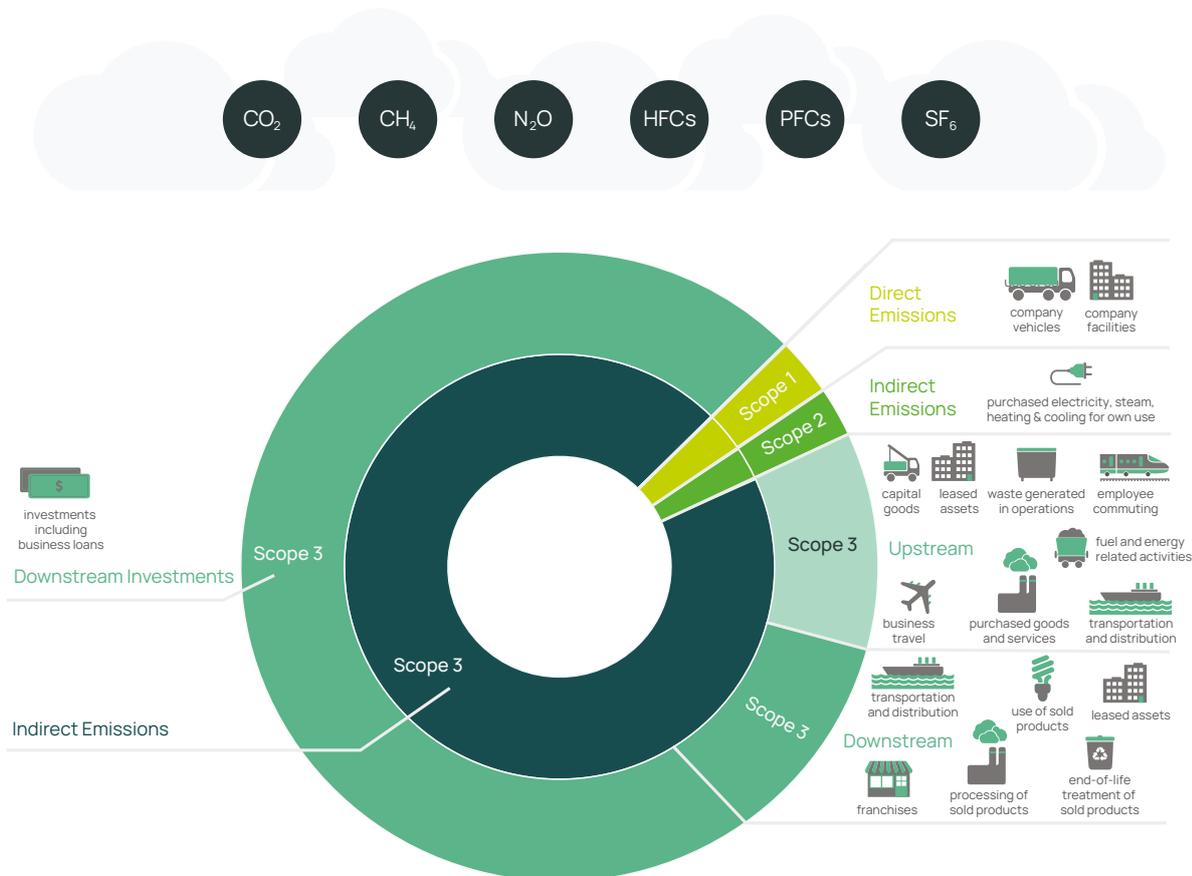
We have therefore worked hard to estimate our Scope 3 footprint across all emissions types, the totals of which are shown below. As 2022 information is materially new in relation

to Scope 3 reporting versus the prior year's information, comparatives for 2021 have not been included.

## Quantification and reporting methodology

Our energy use and greenhouse gas emissions are calculated with reference to the GHG protocol framework, which has guided our approach.

To further aid our thinking and the development of our financed emissions methodologies, in February 2023 we became signatories to PCAF (the Partnership for Carbon Accounting Financials), the leading recognised industry body for developing approaches to assessing and disclosing greenhouse gas emissions associated with loans and investments.



As adapted from: [https://ghgprotocol.org/sites/default/files/standards/Corporate-Value-Chain-Accounting-Reporting-Standard\\_041613\\_2.pdf](https://ghgprotocol.org/sites/default/files/standards/Corporate-Value-Chain-Accounting-Reporting-Standard_041613_2.pdf)

## Scope 1 and 2 emissions

We have calculated location-based emissions utilising energy consumption information provided by the energy suppliers for our buildings. In some cases, we have used monthly averages to arrive at full year numbers for the final quarter of the year, when data was unavailable. To convert our energy consumption to our carbon footprint, we have used the latest country specific electricity grid greenhouse emissions factors from carbonfootprint.com to translate /kWh into kgCO<sub>2</sub>e.

## Scope 3 emissions – Categories 1 – 13

For the majority of supply chain categories, we have estimated supplier emissions using a spend-based environmentally-extended input-output (“EEIO”) model. Wherever possible we have replaced estimated supplier emissions with actual figures obtained directly from material suppliers. In some instances, emissions associated with newer supplier relationships have been estimated using pro-rated 2021 expenditure.

Information on business travel undertaken by staff, including mileage, using their own cars or train and flights has been consolidated based on internal data systems. For employee commuting and home working, estimates have been extrapolated based on a representative sample of data obtained from a direct survey of employees.

Calculations of emissions from ONGPL also include emissions from purchased electricity and business travel. In calculating emissions estimates for Scope 3 categories 1 – 8, we have utilised emissions factors published by the Department for Business, Energy & Industrial Strategy, the World Resources Institute, and the World Input-Output Database.



GHG Emissions and Energy Use Summary	OakNorth Bank	OakNorth Group
	2022	2022
	(Tonnes CO <sub>2</sub> e)	(Tonnes CO <sub>2</sub> e)
Emissions from activities for which the company own or control including combustion of fuel & operation of facilities	-	846
<b>Total Scope 1 emissions</b>	-	<b>846</b>
Emissions from purchase of electricity, heat, steam, and cooling purchased for own use	28	230
<b>Total Scope 2 emissions</b>	<b>28</b>	<b>230</b>
Category 1: Purchased goods and services	4,437	4,841
Category 2: Capital goods	134	280
Category 3: Fuel and energy activity	16	35
Category 4: Upstream transportation and distribution	9	9
Category 5: Waste generated in operations	1	1
Category 6: Business travel	351	1,622
Category 7: Employee commuting	1,409	1,876
Category 8: Upstream leased assets	168	230
Category 13: Downstream leased assets	-	1,892
<b>Total reported Scope 3 supply chain emissions<sup>1</sup></b>	<b>6,525</b>	<b>10,786</b>
Category 15: Investments, including financed emissions <sup>2</sup>	94,499	94,499
<b>Total reported Scope 3 emissions</b>	<b>101,023</b>	<b>105,285</b>
<b>Total location-based emissions</b>	<b>101,051</b>	<b>106,361</b>
<b>Operational Scope 1 and 2 tonnes CO<sub>2</sub>e per employee<sup>3</sup></b>	<b>0.06</b>	<b>0.28</b>
<b>Operational Scope 1, 2 and 3 tonnes CO<sub>2</sub>e per employee<sup>3</sup></b>	<b>14.59</b>	<b>13.42</b>
<b>Financed emissions tonnes CO<sub>2</sub>e per £m</b>	<b>35.3</b>	<b>35.3</b>
<b>Energy consumption used in calculated emissions (kWh)<sup>4</sup></b>	<b>272,615</b>	<b>669,353</b>

1. Calculated using the Greenhouse Gas Protocol Corporate Standard and covers all greenhouse gases converted to tCO<sub>2</sub>e. Scope 3 categories 9 to 12 and 14 are not applicable for OakNorth's business activities with nil CO<sub>2</sub>e emissions.

2. OakNorth's reported Category 15 Scope 3 emissions for 2022 have been revised since publication in ONB's 2022 annual report in March 2023 to reflect updated and enhanced methodology, in order to better represent the full carbon impact of OakNorth's financing activity during the year.

3. The employee intensity ratio is computed based on average number of employees. This includes 131 average employees at OakNorth Bank and 318 average employees at ONGPL, and 296 average employees at ONci.

4. Energy use reported includes kWh from Scope 2 purchased electricity and Scope 3 employee vehicles only (as required by SECR standards).

We have undertaken a spend-based approach to calculating our supply chain emissions, but for our more material suppliers we have engaged with them directly to estimate the actual emissions associated with the activity or service provided. We intend to further broaden our engagement with suppliers on sustainable business practices and our decarbonisation strategy during 2023.

### Scope 3 emissions – Category 15: Investments, representing financed emissions

Category 15 represents our lending activity, and in all instances, emissions estimates have been based on economic activity conversion factors for each borrower's industry, or for property, known EPC ratings and floor areas, giving an overall PCAF data quality score of 3.8 for our loan book reported emissions. Our analysis currently excludes emissions associated with speciality finance and therefore covers 90% of our drawn loan book, and does not yet include embodied carbon associated with construction or refurbishment.

#### Business trading loans

**Financed emissions = attribution factor X sector emissions**

**Attribution factor = average drawn balance ÷ enterprise value (debt + equity)**

**Sector emissions = revenue X ONS sector emissions factor**

#### Property investment loans

**Financed emissions = attribution factor X building emissions**

**Attribution factor = average drawn balance ÷ property value at origination**

**Building emissions = floor area X PCAF EPC emissions factor per property type**

#### Property construction loans

**Financed emissions = attribution factor X construction sector emissions**

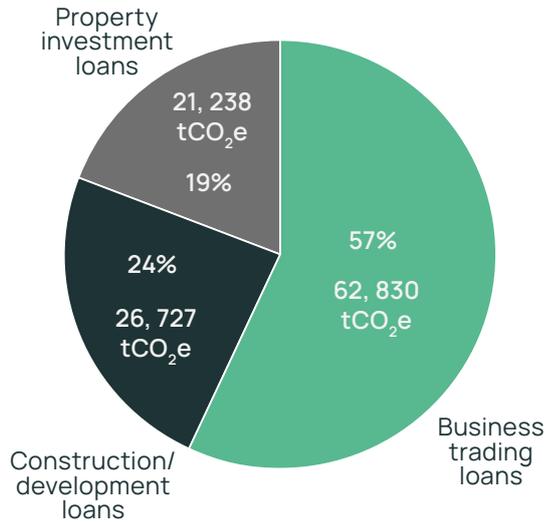
**Attribution factor = average drawn balance ÷ property value at origination**

**Construction sector emissions = revenue X ONS construction sector emissions factor**

As would be expected for a finance provider, the most material element of our Scope 3 emissions lies with our financed emissions, and we have followed the guidance and methodologies of the Partnership for Carbon Accounting Financials ("PCAF") for these. In calculating our financed emissions impact, the PCAF methodology requires reporting of financed emissions metrics related to outstanding funds. This approach recognises the funding used by borrowers at a point in time, but can fluctuate as a result of drawdown and repayment levels that are unrelated to a customer's emissions. For our purposes, we have therefore decided to use average drawn balance as a more accurate reflection of the amount we have financed during the year. In certain instances this is likely to result in a larger attribution of emissions than the year-end outstanding balance would suggest, but is a better representation of the emissions impact of our financing during the year and as a baseline for setting out our net zero transition planning.

For business trading loans, this has involved applying standardised emissions factors per unit of revenue to the sector, industry or activity of each borrower by way of estimating the carbon emissions of each (PCAF data quality score 4). Additionally, for our financing of property investments where there is no construction or development involved, we have estimated the operational carbon emissions of such properties based on EPC and floor area, and recognised our attributable share of these from our financing (PCAF data quality score 3).

For development and construction loans, we have initially taken the sector-based approach as for business trading loans in estimating the emissions of these customers based on standardised emissions factors per unit of revenue for the construction sector (PCAF data quality score 4).



Whilst these estimates of financed carbon emissions are not perfect, we believe it is our responsibility to arrive at a basis for estimating and recognising our attributable share of these emissions and include them in our scope 3 totals. We continue to work on refining and enhancing our estimates, which in turn will feed into our efforts to identify the means to reduce our impact and assist our borrowers in finding ways to reduce theirs.

In relation to 'embodied carbon' associated with construction, we are aware that this is likely to be a material contribution of our financing. We are therefore consulting with industry bodies, specialist experts and customers on arriving at a solution for estimating the embodied carbon associated with our lending. We intend to enhance our carbon emissions totals to include embodied carbon during the next year, as despite this being a measure of our borrowers' scope 3 rather than directly our own, it is a more appropriate and representative view of our overall carbon impact to include in our calculations.

### Transition planning

Building on our longer-term 2035 net zero target, we have now set out key interim targets on our journey towards net zero and aligned with our expectations as a member of the Net Zero Banking Alliance. We have separately considered milestone targets for our lending activity and our operations, as follows:

Targeting a



**60%**

reduction in financed emissions  
**by 2030**

Targeting becoming



**net zero**

across our UK supply chain  
**by 2028**

### Scenario and reference pathways

Our transition planning has made reference to climate scenario pathways for our regions, applicable to the borrower scope 1, scope 2, and in some instances the sector activity of particular portfolios, as calculated for our 2022 baseline scope 3 financed emissions totals.

1. The Network for Greening the Financial System ("NGFS") Orderly 2050 Net Zero Transition pathway, as applicable for the United Kingdom, for considering the scope 1 emissions trajectories of those business trading loan customers who have committed to net zero by 2050.
2. The UK Climate Change Committee's Balanced Net Zero pathway, from the UK's Sixth Carbon Budget, for considering the decarbonisation trajectory of the UK

electricity grid with regard to customer scope 2 emissions, and for sector-based pathways for UK businesses.

3. PCAF EPC emissions factors, as applicable for each nation of the United Kingdom for specific property types, derived from CRREM (“Carbon Risk Real Estate Monitor”) Global Pathways.

In many instances, the applicability of such pathways for the emissions of UK businesses relies to some degree upon those businesses committing to net zero, and legitimately moving onto these modelled pathways. A key part of our strategy is therefore to encourage our customers to commit to targeting net zero, articulating to them the merits of doing so, and assisting them with their transition to the best of our ability. We continue to build climate conversations into our customer engagement and relationship management, to better understand where they are on their net zero journey right now and if they have a strategy in place. This dialogue and the metrics and tracking we monitor on where our customers stand regarding climate and net zero, feed into multiple climate processes including our transition planning, credit risk management, identification of commercial opportunities and customer engagement plans.

### Methodology and data sources

The PCAF methodologies utilised in calculating our scope 3 financed emissions have continued to be applied in setting baseline emissions estimates for our financed emissions targets and developing the transitional pathways across future years. Where relevant, our target setting has also made reference to known customer and supplier targets or commitments in informing modelled expectations for transition pathways.

Our transition planning considers both momentum pathways shaped by external factors dependent on policy, sector and customer commitments, as well as convergence

pathways influenced by planned internal actions, levers and decisions that support achieving our targets.

### Base year

We are referencing our initial scope 3 emissions estimates for the year ended 31 December 2022 as the baseline for our net zero targets and transition pathways. We recognise that data quality, sources and methodologies can be improved over time, and will continue to review the appropriateness of our baseline calculations in light of ongoing enhancements and updates to our emissions calculations in future periods.

### Energy performance certificates (EPCs)

The UK property industry measures the energy efficiency of its buildings through EPCs, giving properties a rating from ‘A’ (most efficient) to ‘G’ (least efficient). Under current proposals within the UK’s Future Homes Standards, progressively higher EPC requirements have been set out from 2025 to 2030. Minimum Energy Efficiency Standards (“MEES”) compliance will require all non-domestic privately rented properties to have an EPC level of at least ‘C’ by 2027 and ‘B’ by 2030. As it stands, only a minority of commercial properties are compliant, which evidences a need for action to retrofit and upgrade their energy efficiency sooner rather than later.

Being representative of the energy efficiency of property, EPCs are a determinate factor in calculating the financed emissions of property investment loans based on their operational emissions. We are committed to helping our customers upgrade their properties to comply with upcoming standards, which also forms a key part of our climate strategy in transitioning our property investment portfolio to greater energy efficiency and a lower carbon impact.

Over 83% of our property investment portfolio is currently EPC rated C or above, and our transition plan focuses on achieving full compliance with future minimum EPC standards

across the entire portfolio, while encouraging increasing numbers of our borrowers to go above and beyond minimum requirements from 2025 onwards. Note that for our property development and construction loans, as new build properties these are all rated at least an EPC of C or above upon completion.

The impact of future EPC levels on our estimated financed emissions and planned transitional reductions reflect the target pathways above, but are based upon the latest PCAF EPC emissions factors per building type and region. Any future reduction in EPC emissions factors resulting from the decarbonisation of the UK's heat and power sources between now and 2035 would therefore result in additional reductions beyond those modelled in our current transition pathways for property investment loans.

### Basis and limitations for an EPC

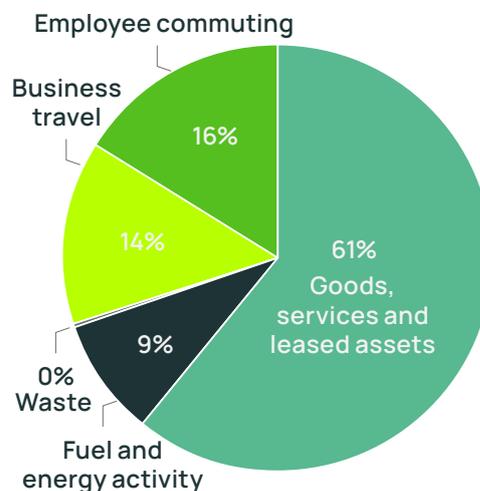
It is important to recognise that EPCs are only a measure of implied or potential energy efficiency, based upon the features of a particular property and the average energy and emissions profile that they represent. Actual energy use, and associated carbon emissions, could look quite different depending on the activity, occupancy, and energy providers of any individual property. We apply the average emissions factors for EPCs of particular property types in calculating the financed emissions of our property investment portfolios, but are mindful of this limitation and are developing our customer engagement plans to better understand their actual energy use, which is otherwise not publicly available.

EPC ratings are required whenever a property is sold or let and are valid for 10 years. Consequently, some older properties will either not have an EPC rating at all, or the rating might be considerably out of date, not reflecting any improvements such as insulation or double glazing installed since the EPC assessment was undertaken. From reviewing our own portfolios, only 4% of our properties do not have an EPC, and we are engaging directly with these borrowers to identify the best means to obtain one.

Progressing towards net zero is a collective effort that will necessitate actions from industry, government, and regulatory policy. To some degree, our own transition will depend upon such external actions and advancements, which we include in our modelling by reference to the pathways mentioned above, which reflect the impact of industry, national, and government targets and initiatives in their projections. Aside from the direct influence on EPCs from planned minimum standards for residential and commercial properties, the UK government's net zero strategy and targeted decarbonisation of the UK electricity grid will have positive implications for calculating customer Scope 2 emissions, and subsequently on OakNorth's Scope 3 financed emissions, which we have not estimated in our transition plan for property investment finance at this stage.

### Our Operations

While our lending activity makes the most material contribution to our overall emissions, we also recognise that it is imperative to get our own house in order by tackling the emissions produced by our operations. Maintaining focus on decarbonising the running of our business ensures we are embedding sustainable thought into our operational decision making, the way we engage with and partner with our suppliers to emphasise the transition to a low carbon economy, and our efforts to support our colleagues in their own climate-conscious decisions.



During the last year, we have continued to undertake measures to minimise our operational carbon emissions and improve sustainability, including adding further recycling points and sourcing sustainable supplies. A material proportion of our operational footprint is related to ad-hoc air travel, plus trains and motor vehicles used for commuting. We continue to explore options to eliminate and reduce our travel emissions, including promoting cycle to work schemes, encouraging uptake of electric vehicles, and the use of sustainable aviation fuel for air travel. In 2023, we are also pleased to be partnering with Octopus Electric Dreams to offer our UK-based staff the ability to lease a new electric car via salary sacrifice as part of our standard employee benefits.

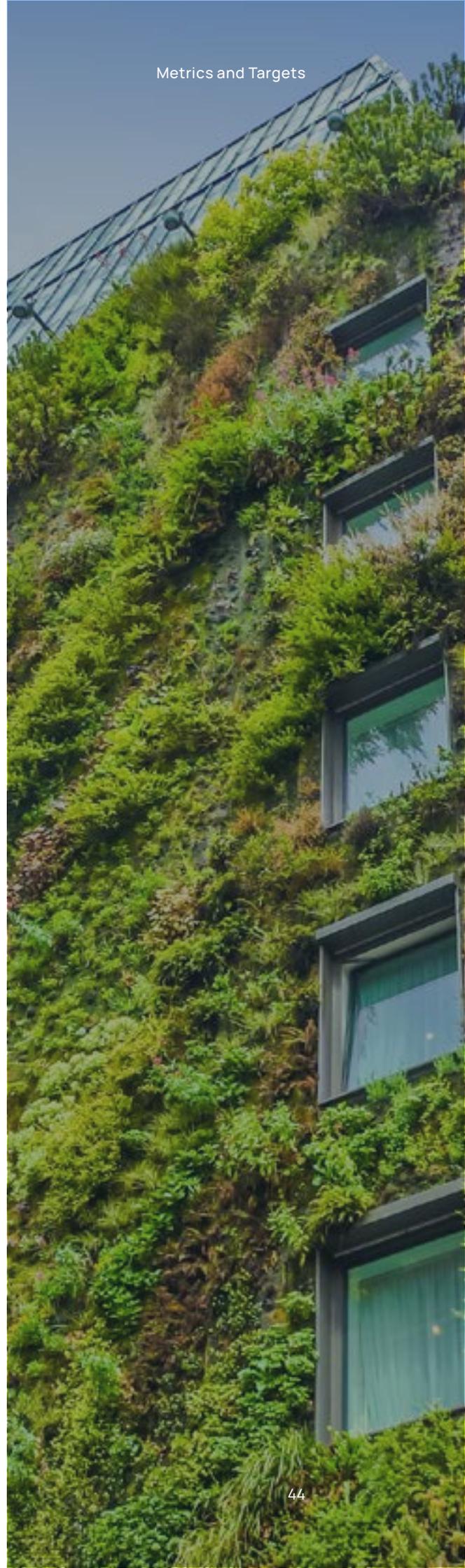
Our head office is rated BREEAM Excellent and makes use of energy efficient LED lighting and building controls, and is powered with renewable electricity sources with no use of gas in any of its heating or hot water systems. We also send zero waste to landfill from our leased offices across the UK, and continue to engage in dialogue with our property landlords on enhancing the environmental performance of the sites we operate from.

June 2023 saw the return of our annual employee “green week”, raising awareness of environmental considerations internally, engaging with our staff on sustainable ideas and improvements to help combat climate change, and setting out personal goals and pledges to track progress against throughout the year.

## Our suppliers

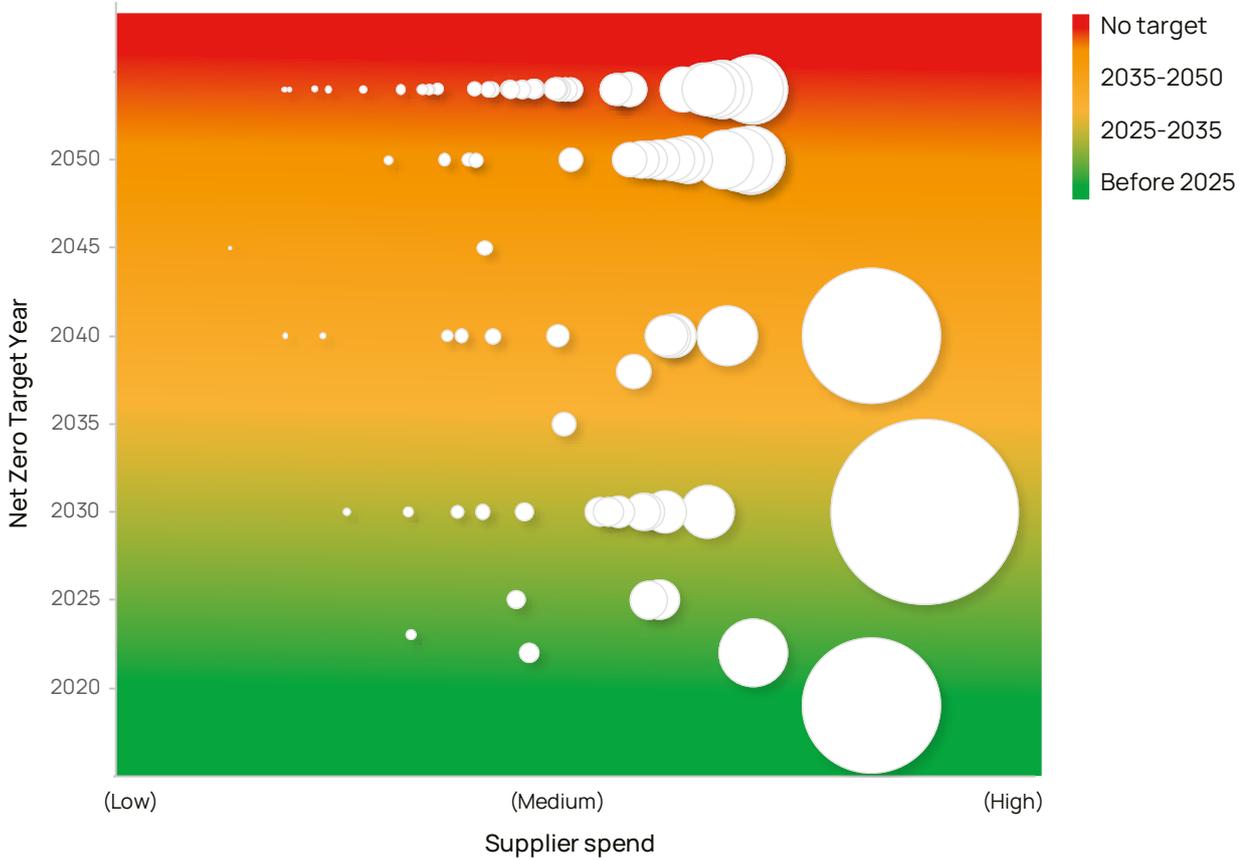
To profile where our suppliers are on their own transition journey, this year we have engaged with all of OakNorth Bank’s suppliers to better understand their position and any commitments they have made to date. Reassuringly, 42% of our suppliers have already set a net zero target, with a further 7% currently working on establishing one, while 9% of the most leading businesses have already achieved net zero or carbon neutrality.

In the year ahead, we are now setting out an engagement plan for how to assist those suppliers who have yet to make any climate-related commitments, as well as how best to encourage those with initial targets to commit to net zero goals that are at least as ambitious as our own. To do so, we have begun a prioritisation exercise that considers the materiality of each supplier in terms



of expenditure, estimated carbon footprint, and business-critical functionality, alongside our contractual periods and the ambitions of any current net zero pathways they may have. This “net zero heatmap” for our suppliers will guide our engagement strategy and efforts towards the fastest path to decarbonisation, as well as enabling us to track their progress.

### Scope 3 supplier spend vs supplier net zero target heat map



Heat map visualisation represents the distribution of OakNorth's UK suppliers between annual expenditure with each supplier and the target year of their respective net zero targets, if any. Includes responses from Tier 1 and 2 suppliers to date, covering 60% of supplier relationships.

We are also now partnering with an independent third-party risk management provider to formalise ongoing climate and sustainability data collection, analysis and engagement planning with our suppliers, while broadening the range and scope of enquiry. Increasing our understanding of where our suppliers are on their own decarbonisation roadmap will allow us to better prioritise our planning and engagement how we can work with our suppliers towards achieving our respective climate goals.

### Use of offsetting

Since 2019 we have been carbon neutral for our Scope 1 and 2 carbon emissions with the use of offsets. Our longer-term net zero strategy will prioritise reductions to our emissions, with only residual and unavoidable emissions eliminated with the use of offsets. However, we recognise the important role that offsets have to play in neutralising some of our impact while we progress with efforts to reduce our emissions, and in supporting the growth and establishment of those businesses directly involved in carbon reduction projects and technologies, and we intend to broaden this support of robust carbon removals over time.

# Glossary

# Glossary

Terminology	Definition
Carbon neutral	A state where carbon emissions emitted into the atmosphere are equally balanced with carbon removed from the atmosphere, often utilising offsets to neutralise existing emissions.
Carbon credits / offsets	A reduction or removal of CO <sub>2</sub> to offset or compensate for emissions generated elsewhere, in the form of a transferable financial instrument verified by an independent body, with each credit representing the reduction or removal of 1 tonne of CO <sub>2</sub> or GHG equivalent.
Climate Biennial Exploratory Scenario (CBES)	The Bank of England's exploratory scenario exercise on climate risk for banks and insurers, considering both transition and physical risks to varying degrees over 'early action', 'late action' and 'no additional action' scenarios.
Energy performance certificate (EPC)	Measure of a building's energy efficiency rated from 'A' (very efficient) to 'G' (inefficient).
GHG Protocol	The Greenhouse Gas Protocol provides recognised standards, guidance, tools and training to measure and manage climate-warming emissions.
Glasgow Financial Alliance for Net Zero (GFANZ)	A global coalition of leading financial institutions committed to accelerating the decarbonisation of the economy.
Greenhouse gas (GHG)	A gas that absorbs and traps heat in the earth's atmosphere contributing to the greenhouse effect and global warming.
ICAAP (Internal Capital Adequacy Assessment Process)	Assessment of whether sufficiently adequate capital is held to support risks beyond minimum regulatory capital requirements, with examination of appropriate risk management processes and frameworks, under stress test scenarios.
International Sustainability Standards Board (ISSB)	Operating under the oversight of the IFRS Foundation and tasked with developing standards that result in high-quality, comprehensive, global sustainability disclosures.
Net Zero	A state where GHG emissions have been cut or reduced to as close to zero as possible, with any remaining unavoidable emissions re-absorbed from the atmosphere through carbon removal initiatives or offsets.
Network for Greening the Financial System (NGFS)	A group of central banks and supervisors committed to sharing best practices, contributing to the development of climate related risk management and mobilising finance to support the transition.
ON Climate	Part of the OakNorth Credit Intelligence Suite, the ON Climate Impact Framework provides powerful insights which enables banks to understand climate risk with a forward-looking view of evolving policy landscape and climate events at a granular, subsector-specific level.

# Glossary (cont.)

Terminology	Definition
ON Credit Intelligence	ON Credit Intelligence Suite is a cloud software solution consisting of scenario analysis, monitoring, and climate products that help banks lend smarter, lend faster, and lend more.
Paris Agreement	Also referred to as the Paris Accords, is an international treaty on climate change adopted in 2015 with objectives to limit global warming to well-below 2C above pre-industrial levels and pursue efforts to limit it to only 1.5C.
Partnership for Carbon Accounting Financials (PCAF)	An industry-led initiative enabling financial institutions to measure and disclose GHG emissions of loans and investments.
PCAF data quality score	Ratings of the accuracy and reliability of data sources used to calculate financed emissions, ranging from 1 to 5, with 1 being data of highest quality.
Prudential Regulation Authority (PRA)	UK financial services regulatory body responsible for the prudential regulation and supervision of banks, building societies, credit unions, insurers and major investment firms.
Supervisory Statement 3/19	Sets out the PRA's expectations of how banks should embed climate considerations into their risk processes and frameworks
Scope 1	Direct emissions from controlled or owned sources
Scope 2	Indirect emissions from the purchase of electricity, steam, heating and cooling.
Scope 3	All other indirect emissions that occur in a company's value chain across all its upstream and downstream activities.
Streamlined Energy and Carbon Reporting (SECR)	Mandatory regulation to annually disclose energy use, carbon emissions, and any efficiency measures implemented to reduce them.
tCO <sub>2</sub> e	Tonnes of carbon dioxide equivalent.



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