



Barclays Transition Update: Clients, Capital and Innovation

Our Transition Update sets out how we plan to continue delivering on our net zero ambition, focusing on the high emitting sectors where we work closely with our clients and the commercial opportunity this presents for Barclays and our clients.

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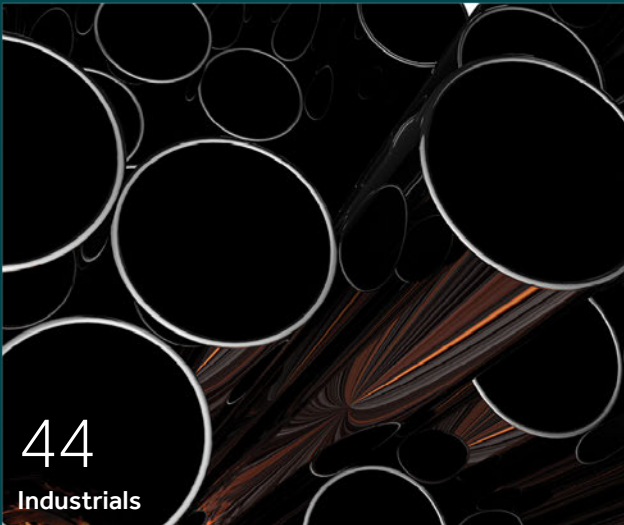
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Foreword

Daniel Hanna
Group Head of Sustainable
and Transition Finance



Since announcing in 2020 our ambition to be a net zero bank by 2050, the global landscape has shifted significantly. Investment in the energy transition has surged, climate technologies have matured, energy demand and the focus on energy security has increased while the physical impacts of climate change have become more visible. In addition, global policy approaches have continued to diverge.

Our ambition has not changed. Since 2020, we have facilitated over a quarter of a trillion dollars in Sustainable and Transition Financing, launched more than 20 new sustainable and transition finance products or propositions and rolled out business specific training to more than 19,000 colleagues.

We have set 2030 financed emissions targets for eight high-emitting sectors and continue to make progress towards them. We also source 100% renewable electricity for our global Real Estate portfolio¹ and have reduced our Scope 1 and Scope 2² emissions by 95% from our 2018 baseline.

Our understanding of the transition has deepened. Since 2020, the insights gained from extensive client engagement, the lessons learnt from financing and managing the risks of the transition, and our direct experience investing in emerging climate technologies mean we are now better informed on the scale, pace and unevenness of the transition.

We are also clearer on the opportunities the transition presents for our clients and, in turn, for Barclays. Since 2020, global investment in the energy transition has quadrupled, reaching \$2 trillion in 2024³. Most of the clients we have assessed now embed transition plans into their corporate strategies, which increasingly include nature and social considerations. The role for Barclays to support our clients has therefore expanded, reflected in the approximately half a billion pounds in revenue generated from sustainable and transition-related activity⁴ in 2024.

We have become even more confident in our early judgement that climate risk is financial risk. We have expanded our BlueTrack™ methodology, launched in 2020, and have developed a sophisticated set of scenario analysis and stress testing capabilities, including a nature stress test in 2024, with links to our capital adequacy and credit allocation assessments. These tools help us engage with clients and inform our decision-making and risk management.

Banks are part of the fabric of economies across the world that are seeking to balance transition, growth and energy security. When we first set our climate ambition, we anticipated that supporting these different objectives would not always be straightforward.

Many of the economies that we serve still depend on conventional energy for reliable and affordable power as they transition and, reflecting that, Barclays provides capital to both emerging and conventional energy sectors, believing that energy security and transition must progress together.

The rapid growth of energy demand, lingering geopolitical uncertainty, and the lack of policy consistency between, and within, jurisdictions have complicated the transition since 2020. Deployment of renewables has exceeded expectations but many other areas of climate tech, especially for industrial uses, remain sub-scale and lacking policy support to drive investor confidence. As a result, the pace of the transition is uneven across regions and sectors and the window to limit global warming to 1.5°C above pre-industrial levels is narrowing.

These uncertainties, not least the unknown future policy environment, mean the transition, and Barclays' transition, will not be linear. We engage with clients and shareholders to pinpoint where policy uncertainty or misalignment is holding back a commercially viable transition; particularly in the UK, this includes identifying practical levers that can unlock investment and accelerate low-carbon solutions. In the absence of consistent global policy signals and clearer long-term frameworks, financial institutions may need to choose between financing growth and maintaining the pace of reducing our financed

emissions as we support the clients, customers, and communities we serve.

We believe we can best balance our climate ambition, shareholder expectations, and deliver our strategy through: **working with clients on their transition, financing clients' transition and scaling climate technology.**

This Transition Update, structured around these three themes, outlines how we plan to continue to deliver on our net zero ambition in the current conditions. Our success depends on our customers and clients and this document is grounded in what we have learnt in partnership with them since 2020.

These efforts are matched by ambitious targets, including our mandate to invest up to £500 million in early-stage climate tech companies between 2020 and end of 2027 and to facilitate \$1 trillion in Sustainable and Transition Financing between 2023 and the end of 2030.

We are proud of the strides that we have taken, recognise there is more to do and are clear-eyed about the challenges ahead. We remain committed to supporting the transition in a way that is inclusive, resilient, and economically sound, guided by our net zero ambition and our Purpose: working together for a better financial future.

Notes:

1. For further detail see footnote 1 on page 13
2. Scope 2 market based emissions - for more information see page 73 of Barclays Annual Report
3. <https://about.bnef.com/insights/finance/energy-transition-investment-trends/>
4. Activity refers to transactions, products and counterparties. For further detail on sustainable finance revenue definitions see footnote 1 on page 11.

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Our approach

Our ambition to be a net zero bank by 2050, approved by shareholders in 2020, was driven by a recognition of the risks and opportunities associated with climate change. Since then, we have continued to deliver against our strategy whilst at the same time, evolving our approach in recognition of the realities of the transition.

Our Transition Update supports our corporate strategy



Simpler

A clear, sector-specific approach to deliver our net zero ambition



Better

Unlocking revenues from Sustainable and Transition Finance



More Balanced

Advancing our climate ambition alongside support for economic growth

Since 2020, we have engaged extensively with shareholders and other stakeholders on our approach. In 2022, we published an overview of our climate strategy, targets and progress based on what we knew at that point in time, which was endorsed by over 80% of shareholders at our AGM ("Say on Climate").

We have provided detailed reporting to shareholders on our progress and this Transition Update outlines in further detail how we continue to deliver against our strategy, how our initial assumptions have adjusted and how the external dynamics have shifted.

We have been clear, that whilst we recognise we have an important role to play in the transition, we cannot tackle this challenge on our own and that our ability to implement our climate strategy and deliver against our targets depends heavily on our clients progress and a wide range of external factors. Given those dependencies, we are delivering our strategy by focusing our attention on where we believe that our actions can have a meaningful impact; supporting our clients, financing clients' transition and scaling climate tech. Our continued development and expansion of the CTF will help us to further understand how our clients are being impacted by the risks and opportunities of the transition and adjust our response accordingly.

Notwithstanding the challenges around many of these external dependencies, as further outlined in this Transition Update, we have to date been able to continue delivering against the climate strategy we set out in 2022 and, in a number of respects we have gone further, for example:

Working with clients on their transition

- The Client Transition Framework (CTF) was introduced in 2022 to help us better understand clients' transition and how they are responding to and impacted by the associated challenges. We summarise our findings in our Annual Report.
- Reflecting the opportunity to support clients in transition, we realigned our client coverage, most notably forming the Energy Transition Group in our Investment Bank and have developed over 20 new products and propositions to support our clients across the UK Corporate Bank and Barclays UK.
- We have distilled perspectives from across our client base, into recommendations to the UK government on subjects ranging from improving farmer participation in nature markets, to accelerating transition finance and energy efficiency in SME premises.

Financing clients' transition

- We exceeded our target to facilitate £100 billion of green financing by 2030 in 2023 and announced a new \$1 trillion Sustainable and Transition Financing target.
- We have lent £4.7 billion in the UK through our Green Home Mortgage offering since 2018.
- Lending clients utilising sustainable and transition finance products exhibited higher average returns.¹

Net zero bank by 2050

\$1trn

Target to facilitate \$1trn of Sustainable and Transition Financing by the end of 2030

£500m

Mandate to invest up to £500m of own equity capital in climate tech companies between 2020 and the end of 2027

£4.7bn

Lent in the UK through our Green Home Mortgage offering between 2018 and 2024

Higher returns

Lending clients utilising sustainable and transition finance products exhibited higher average returns¹

>1,250

Completed CTF assessments covering over 1,250 counterparties in 2024

Eight targets

Set interim targets for high-emitting sectors

Note:

1. Data as at 31 December 2024. Represents 12-month return on RWA. Includes client revenues and RWA from all Investment Banking, Global Markets and UK Corporate Business client revenues (including M&A advisory fees) to corporate lending clients.

Our approach continued

Scaling climate technology

- We upsize our Barclays Climate Ventures¹ mandate from up to £175m by 2025 to up to £500m by end of 2027.
- We published a Barclays Climate Ventures Impact report in 2024 to highlight how the portfolio helps address a systemic growth-stage financing gap. We separately made four recommendations to the UK Government on how to unlock private capital to scale climate tech companies.

Integrating nature and social considerations

- We conducted Taskforce on Nature-related Financial Disclosures (TNFD) Locate, Evaluate, Assess and Prepare (LEAP) assessments of the Barclays Mining and Barclays Europe Power portfolios.

Managing climate-related risks to our business and portfolios

- Consistent with our focus on managing the climate-related risks to our business, we elevated Climate Risk to a Principal Risk in 2022.
- Our scenario planning and stress testing have become more sophisticated, allowing us to refine our approach to climate and the transition including taking into account new scientific evidence relating to climate change as it develops.

Reducing our financed emissions

- In pursuit of our strategy to reduce our financed emissions we have set financed emissions targets for eight high-emitting sectors which integrate 1.5°C aligned scenarios² and report on our progress annually.
- We report our estimate of full in-scope balance sheet financed emissions.

Achieving net zero operations

- We source 100% renewable electricity for our global Real Estate portfolio³.

We are planning to take a number of additional steps as we continue to evolve our approach as outlined in further detail in this Transition Update:

- extending the CTF to cover publicly listed clients in additional sectors
- enhancing nature-related CTF questions
- developing our thinking on the management of nature and social-related risks.

Insights from these steps will help shape our evolving strategy and inform our future actions.

In addition, we will seek to enhance how we manage the risks associated with the transition, financial and associated, and evolve how we appropriately mitigate these risks through our policies and processes, including our environmental statements, taking into account regional and jurisdictional considerations. We will continue to engage with our shareholders, and other critical stakeholders, as this work develops.

In this Transition Update we set out how we are continuing to deliver against our net zero ambition and our strategy, while supporting our customers, clients and communities and focus on the high-emitting sectors where we work closely with our clients. We will continue to consider and adapt our approach in this evolving landscape, building on our progress and what we have learnt since 2020.

Notes:

1. Previously known as Sustainable Impact Capital
2. <https://home.barclays/content/dam/home-barclays/documents/citizenship/ESG/2024/2024-Barclays-Financed-Emissions-Methodology.pdf>
3. For further detail see footnote 1 on page 13



Understanding client transition priorities

Working with clients on their transition

Barclays serves a wide range of retail customers, corporate and institutional clients worldwide. Understanding our clients' priorities is central to how Barclays supports the transition. Each client is at a different point in their transition and there is no single pathway that our clients may follow.

Barclays provides banking and financial services to UK retail customers, SMEs, major UK corporates, high-net-worth individuals, and US credit card customers. Our Investment Bank supports large corporates, financial institutions, governments, and institutional investors globally.

We listen to our clients and build a nuanced understanding of the commercial realities shaping their transition pathways. This is informed by regular client dialogue led by our coverage teams and dedicated sustainable finance specialists, supported by specialised analytical tools such as our Client Transition Framework (CTF). Other elements like Barclays' market-leading independent research, nature and social assessments, and practical experience gained from working with clients on climate technology adoption, for example, programmes such as Sustainability Bridge¹, further enhance our understanding.

Client Transition Framework

The Client Transition Framework (CTF) is a tool Barclays uses to evaluate progress towards business models aligned with a low-carbon economy. It is primarily focused on clients' public disclosures and is AI driven to improve data processing and scoring quality.

It provides a detailed understanding of clients' current and future transition activities. The insights feed directly into how we assess and manage transition-related risks and opportunities when engaging with clients.

This framework applies to certain clients and informs our engagement, origination decisions, and portfolio management, and helps ensure that our approach is both commercially disciplined and forward-looking, enabling us to support clients credibly whilst managing transition-related exposures across the bank.

CTF scores should be considered against the backdrop of evolving market dynamics and developments in the policy landscape. The CTF relies on clients' public transition plans and other related disclosures. Any changes in the breadth or depth of these, often voluntary, disclosures could materially impact the results of our CTF assessments.

Clients who are assessed receive a CTF score ranging from T1 (most developed) to T5 taking into account ambition and credibility criteria, as well as sector specific considerations. The CTF is currently applied to in-scope Investment Bank clients across our Automotive manufacturing, Aviation, Cement, Power, Steel and Upstream Energy portfolios. We have a similar framework for UK Agriculture clients.

We plan to extend CTF scoring to cover publicly listed clients in other in-scope sectors, including UK Commercial Real Estate and others where we have not yet set financed emissions targets such as Mining, and will leverage the insights this gives in our evaluation of risks and opportunities.

Furthermore, we plan to enhance nature-related CTF questions (piloted in 2024 for Power clients) and apply to in-scope Automotive Manufacturing, Mining, Food and Power clients in 2025. We are also evaluating the integration of social considerations into the CTF to better understand how our clients are managing these.

➔ [Further details on the CTF can be found at home.barclays/CTF](https://home.barclays/CTF)

Understanding clients' public policy priorities

We have analysed public disclosures of a sample of clients to provide insight into their public policy advocacy priorities regarding the transition (see Figure 1). Further details are included in the sector chapters, with the most frequently referenced topics across them including:

- support for development of climate tech
- supporting consumers' transition
- long-term policy uncertainty
- carbon pricing

➔ [See our sector chapters for more details on our Client Transition Public Policy Advocacy Analysis](#)

Our engagement

From homeowners to farmers through to global multinationals, we are supporting all levels and sectors of the UK's economy in navigating the transition. This breadth and depth of exposure places Barclays in a distinct position to convene a broad spectrum of clients to discuss potential ways to tackle the transition and support their engagement with policy makers, particularly in the UK. We have developed specific recommendations on topics ranging from Agritech for British farmers to how the UK should develop hydrogen as a potential tool for the transition.

➔ [Download the reports on Sustainability insights](#)

Notes:

1. <https://labs.uk.barclays/what-we-offer/our-programmes/industry-bridge/sustainability-bridge/sustainability-bridge-cohort-2024/>
2. Sample selection varied by sector, and aimed to represent our largest clients and capture a significant portion of financed emissions. The analysis was conducted in November 2024. (Energy, Power, Food), and May 2025 (Real Estate, Industrials)
3. Percentage based on sample size not entire portfolio.
4. UK Agriculture clients are not included in this analysis as we drew insights from our 2024 client survey. The findings can be found in the Food and Agriculture chapter.

Figure 1: Clients' public transition plans and transition priorities^{2,3}

Sector	Client jurisdiction				Public plans	
	United States	Europe	United Kingdom	Rest of world	Overall net zero target	Sustainability strategy
Energy and Power	51%	27%	18%	4%	91%	95%
Food ⁴	53%	22%	25%	0%	42%	78%
UK Real Estate	n/a	n/a	100%	n/a	55%	94%
Industrials	28%	23%	16%	33%	81%	96%

Understanding client transition priorities continued

Working with clients on their transition continued

Finally, we engage with a wider range of stakeholders including NGOs, academia, private sector peers and local communities, to deepen our understanding of the complex issues entailed by the transition relevant to our clients. An up-to-date register of Barclays' engagement with industry initiatives, working groups, and memberships can be found at:

→ <https://home.barclays/sustainability/esg-resource-hub/reporting-and-disclosures/>

Developing an understanding of our clients and their expectations enables us to meet them where they are on their transition journey. Targeted training on Sustainable and Transition Finance is further helping to embed these capabilities across the Investment Bank, and other parts of Barclays, helping to ensure that our teams can support clients in making well-informed transition-related decisions.

Our global expertise

In our Investment Bank, we build on the strength of our long-standing sector coverage teams who bring deep market understanding and decades of experience advising clients on capital structure, portfolio optimisation and strategic M&A.

We complement this with market-leading research on companies, sectors and emerging transition trends helping clients understand how evolving technologies, policies and market dynamics are reshaping risks and opportunities.

Barclays' Global Markets business intermediates capital requirements essential for the energy and low carbon transition.

This is achieved across a range of products and asset classes, matching institutional investor capital with corporate and scale-up business models.

↓ Further details on PBWM and USCB can be found in 2024 Barclays PLC Annual Report.

Case study: Carbon Capture

Net Zero Teesside Power

We supported Net Zero Teesside Power (NZT Power) in the UK, a new build, first of a kind fully integrated combined gas cycle gas turbine (CCGT) power plant with post-combustion amine-based carbon capture technology.

The captured CO₂ will be received by the Northern Endurance Partnership (NEP) project infrastructure which will compress, transport and store the captured CO₂ in the NEP geological store under the North Sea. Once operational, NZT Power could produce up to 742MW of flexible, low-carbon power, with up to two million tonnes of CO₂ per year expected to be captured at the plant. NZT Power is supported by the UK government's Dispatchable Power Agreement which enables natural gas power plants with carbon capture technology to play a mid-merit order role in meeting electricity demand, displacing unabated thermal generation plants. Barclays Bank PLC acted as Mandated Lead Arranger and IRS hedge bank to NZT Power.

In the fixed income space, offerings include specialised securitisation, structured financing, and public and private credit solutions to support clients' sustainability objectives. In the equity space, key offerings include bespoke quantitative investment strategies that integrate sustainability or sustainable finance metrics, as well as green and social notes with structured equity-linked coupons.

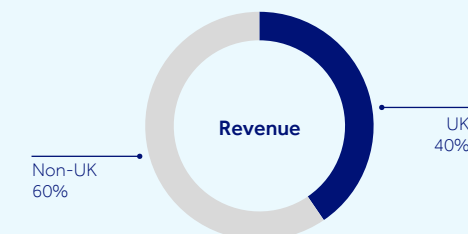
Within our Private Bank and Wealth Management (PBWM) business, an increasing number of Sustainable Discretionary Portfolio Management (DPM) clients in the UK, Europe, and the Middle East are viewing transition-related risks and opportunities as financially material to long-term investment portfolio performance. Many clients are adjusting their investment portfolio strategies to capture value from opportunities in sustainable development, including innovation in clean energy, resource efficiency, and low-carbon technologies, while seeking to mitigate potential downside in sectors exposed to regulatory change, evolving market expectations, or physical climate impacts. Barclays also provides clients with thought leadership and research to help them navigate the evolving investment landscape linked to transition trends and risks.

The US Consumer Bank (USCB) provides opportunities for individual consumers to choose sustainable product options, supporting their own environmental goals. We have introduced new credit cards utilising ocean-bound recycled plastics and are working toward the goal of adopting these recycled plastics across all USCB cards by 2028.

Our position in the UK

As a UK-centred leader in global finance, we have a particular opportunity to support the transition in our home market. The UK government's focus on low-carbon growth and jobs is one area where we are playing a direct and positive role, alongside supporting the UK in global capital markets by raising capital to finance new climate solutions, and supporting households and businesses to successfully transition.

Figure 2: Geographic share of FY24 Sustainable Revenues¹



Our Corporate Bank plays a central role in supporting mid-sized and major corporates as they respond to the commercial opportunities and risks and develop strategic resilience to navigate the transition.

Many of these clients sit at the heart of the UK's real economy acting as direct players in the transition or as a critical part of the supply chain. Clients ranging from manufacturers to world-class education institutions, property developers and housing associations are actively embedding sustainability into their business strategies.

Note:

- For further detail on Sustainable Finance revenue definitions see footnote 1 on page 11

Understanding client transition priorities continued

Working with clients on their transition continued

Case study: Social Housing

Delivering first ever loan to retrofit social housing under NWF scheme

In 2024, Barclays partnered with the National Wealth Fund (NWF) to develop a Social Housing Retrofit Loan product. Specifically designed to meet the longer-term needs of the UK’s not-for-profit social housing providers, it offers flexible and competitively priced retrofit loans, which are 70% guaranteed by the NWF.

Just over six months after the NWF launched its £1.3bn scheme, Barclays has provided the first loan under the scheme to VIVID in May 2025. The £50m term loan – the maximum that can be issued under the scheme – will support VIVID’s goal to provide customers with warmer, more energy-efficient homes. These funds enable the retrofitting of over 2,000 homes, supporting more than 4,000 customers living in social housing.

➔ Further information about Barclays’ partnership with the National Wealth Fund can be found at [here](#).

➔ [vividhomes.co.uk](https://www.vividhomes.co.uk)



To meet the needs of our UK Corporate and Business Banking clients, we provide financing solutions and tailored sector support, working alongside specialists such as Save Money Cut Carbon and the Environment Bank. Among SME clients, demand is growing for financing to support energy resilience, operational efficiency and adaptation to meet changing customer and supply chain expectations.

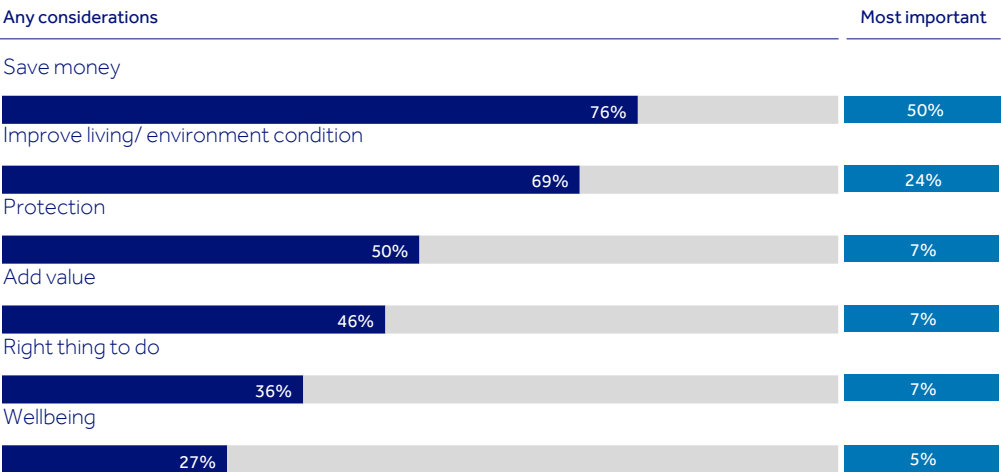
Business customers are adopting pragmatic approaches, with clients focused on commercially viable measures that deliver cost savings and risk reduction, with growing interest in technologies and practices that can also support long-term sustainability and market positioning.

This is particularly true of our farming clients – we support over 30,000 farmers in the UK and have focused on the specific needs of that sector, which is covered in more detail in the Food and Agriculture chapter.

Through our Greener Home Reward offer, Barclays offers eligible residential mortgage customers a cash reward of up to £2,000 to help install eligible energy-efficiency-related measures such as solar panels, insulation and heat pumps.

The transition is increasingly important to UK retail customers, particularly in terms of managing their finances. Many see improving energy efficiency as a way to reduce household running costs and enhance their property’s value. Indeed our research of homeowners (see Figure 3) found that 76% would make home energy efficiency improvements to save money¹.

Figure 3: Drivers of retrofitting behaviour



Note: Chart has been simplified. For non-aggregated data see the full report (see link to right).

Insights from our research tell us that it is not just finance that customers see as a barrier to action. We aim to provide practical support to help address information barriers through our partnerships such as with British Gas and our discounted Hive Thermostat offer, and Energy Saving Trust, which helps homeowners identify and implement practical energy-saving measures. We also offer a six-month free trial of Hugo Pro, providing insights into home energy usage.

Download the report [Electrifying the future: boosting the energy efficiency of UK homes](#)

Notes:
1. https://home.barclays/content/dam/home-barclays/documents/news/Insights/Barclays_Electrifying_the_future_report_FINAL.pdf

over 30,000 farmers
As at end 2024, we supported over 30,000 farmers in the UK and have focused on the specific needs of that sector

76%
Our research found that 76% of homeowners would make home energy efficiency improvements to save money¹

£2,000
Through our Greener Home Reward offer, Barclays offers eligible UK residential mortgage customers a cash reward of up to £2,000 to help install energy efficiency-related measures

Understanding client transition priorities continued

Financing clients' transition

We have facilitated over a quarter of trillion dollars in Sustainable and Transition Financing since 2020 and over \$160 billion since 2023.

The growth of financing aligned to our Sustainable and Transition Finance Frameworks has been a significant driver of the reduction in our financed emissions in key Investment Banking sectors.

Since 2020, we have tripled the share of financing to transactions which align to our Sustainable and Transition Finance Frameworks in these sectors¹. As a result, our Power portfolio, for example, shows financed emissions reductions 19% greater than they would be without Sustainable and Transition financing.

We are one of the largest arrangers of sustainable and transition finance in global capital markets, consistently ranking number one for sustainable and green bonds in the UK and with a top position globally. We have helped place bonds across a range of innovative themes including the largest allocation to biodiversity at the time in the power & utilities sector for Verbund and the first ever green nuclear hybrid bond issue, funding nuclear reactors in France for EDF.

We have also played a key role in developing the sustainable securitisation market. Particularly in the UK and Europe, growing our business from a limited presence in 2020 to a market-leading position in European renewables, including executing the UK's first solar securitisation in the UK and Europe's first ever green digital infrastructure securitisation.

Our project finance volumes have grown threefold since 2020 including financing over 80% of all UK Project Finance fixed-bottom offshore wind². Since 2023, we have ranked number one for higher education and top five for affordable housing and healthcare in US municipal finance³. Through which we also finance a variety of environmental projects, such as a \$350 million transaction with the City of Chicago to finance sustainable water management infrastructure.

We also work at the consumer level. Our UK Green Home Mortgage, launched in 2018, and extended to buy-to-let in 2022, continues to expand, offering lower rates to buyers of highly energy-efficient homes (EPC A or B) with over £1 billion financed in 2024. We continue to support eligible residential mortgage customers to install eligible energy efficiency-related measures in their homes, offering a cash reward of up to £2,000 via our Greener Home Reward offer. Alongside these, our Business Banking team has launched dedicated SME facilities for financing energy efficiency upgrades and cleaner equipment, helping embed transition funding into the real economy.

We work with a range of partners to unlock additional capital and accelerate financing for the transition helping to de-risk investments, crowd in private capital, and support innovative transition finance structures. For example, in the UK, Barclays partners with the National Wealth Fund (NWF) on its social housing retrofit programme, providing financing solutions to improve the energy performance of the UK's housing stock.

Similarly, we collaborate with the Environment Bank, supporting UK farming and landowning clients to access emerging biodiversity markets and create new revenue streams.

Aligning our financing to the Paris Agreement

Barclays is committed to aligning its financing with the goals and timelines of the Paris Agreement consistent with limiting the increase in long term global temperatures to 1.5°C above pre-industrial levels.

We work closely with our clients and have set financed emissions targets and climate related policies to support our efforts. We have also deployed tools such as the Client Transition Framework to enable more informed conversations with clients about their transition strategies, challenges, and progress. These capabilities strengthen our ability to support client progress while maintaining accountability for our own financed emissions targets.

We have also grown the volume and breadth of our Sustainable and Transition Finance, and are increasingly able to link the deployment of that capital with measurable decarbonisation, in portfolios such as power.

Reflecting society's need for available and affordable energy, we also remain a significant provider of capital to the conventional energy and power sector. Financing for clients in this sector is managed in line with Barclays' risk appetite, with origination decisions informed by transition progress, commercial returns, client engagement and market realities.

The bank's approach recognises that energy security and transition progress must advance in parallel and that continued investment in both is critical to meeting evolving client needs and supporting economic stability.

Latest scientific data suggests that the window to maintain a 1.5°C trajectory is

narrowing. 2024 is the first year to exceed 1.5°C above pre-industrial levels⁴ and the World Meteorological Organization's (WMO) projections suggest a 70% chance that the five year average will exceed 1.5°C between 2025 and 2029. While WMO's central forecast is that average long term warming may remain just below the 1.5°C threshold, it notes growing risks to those estimates⁵.

While innovation and private investment in climate technologies continue to advance, many of the world's largest economies are pursuing divergent or delayed transition pathways. This creates growing uncertainty about the policy environment and increases the likelihood of a prolonged overshoot above 1.5°C – potentially making it more difficult for the world to return to the pathway that underpins current corporate and financial planning.

The shift to a low-carbon economy is complex. The transition, and therefore our future progress, will be affected by the significant uncertainties about the future policy environment and will not be linear.

We are actively monitoring the latest science and economic modelling to assess how such risks could affect our portfolios and targets and will continue to maintain a disciplined, forward-looking approach as we seek to meet our climate ambition while continuing to serve the real economy.

Notes:

1. Includes Upstream Energy, Power, Cement, Steel, Autos and Aviation. SFF/TFF volumes from 2020 to 2022 only includes financing to clients with zero carbon intensity.
2. Based on data from Infralogic
3. According to Bloomberg
4. <https://climate.copernicus.eu/copernicus-2024-first-year-exceed-15degc-above-pre-industrial-level>
5. WMO Global Annual to Decadal Climate Update 2025-2029

Understanding client transition priorities continued

Scaling climate technology

Scaling climate technology is integral to accelerating the transition. Innovation is a key driver for opening new avenues for profitable decarbonisation. However, innovation alone is not enough. Widespread adoption is needed to convert emerging solutions into commercially mainstream, system-integrated offerings.

As new technologies emerge, costs fall and performance improves, and technologies that were previously uneconomic can enable deeper decarbonisation if market, operational and behavioural barriers to adoption can be addressed.

Barclays' Climate Tech Escalator provides a connected pathway dedicated to growing climate tech companies, supporting them from idea to initial public offering (IPO). The Escalator connects teams across our Barclays UK Business Bank, UK Corporate Bank and Investment Bank that work closely with climate tech companies from startups, through to successfully scaling companies, to those looking for project finance, capital markets solutions and structured finance and M&A and IPO advice in our Investment Bank. It also links to our partners who provide mentorship and non-financial support to help innovators and clients to scale adoption of new technologies.

A key pillar of the Climate Tech Escalator is Barclays Climate Ventures, which has a mandate to invest up to £500 million of Barclays' capital in climate tech start ups by the end of 2027 to help address the funding gap facing early and growth-stage climate technology companies.

Many such companies are capital-intensive and face longer paths to commercial scale than traditional venture-backed businesses. Barclays Climate Ventures aims to help bridge this gap, helping to crowd in additional funding to accelerate the growth of commercially scalable climate technologies¹.

£203m

Barclays Climate Ventures invested as at end December 2024, with every £1 invested in lead or co-led rounds unlocking £2.18 of further private capital

1,309 jobs

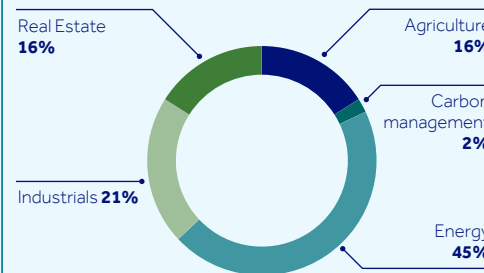
created by Barclays Climate Ventures investments with 664 across the UK including in Belfast, Dundee, Suffolk and Sussex²

In parallel, Barclays supports innovation through platforms such as Eagle Labs, including our Cambridge climate tech hub, which helps bridge connections between early-stage technology developers, corporates and investors. Partnerships also play a key role: through Unreasonable Impact and Barclays' investment in Sustainable Ventures, which operates the largest climate tech ecosystem in Europe, the bank supports the broader market ecosystem needed to scale innovation across sectors and geographies.

\$14bn

Ventures from our Unreasonable Impact programme have raised more than \$14bn in financing and employ 31,000+ people globally³

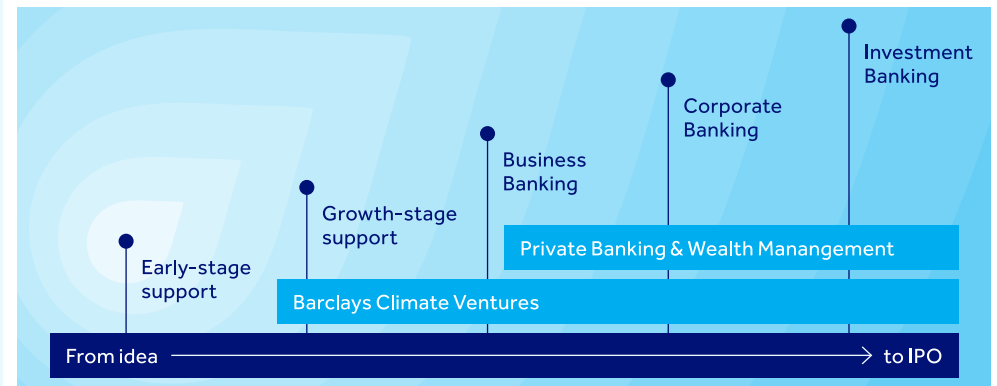
Figure 9: Barclays Climate Ventures - capital deployed by sector as at end 2024



In the sector chapters, we draw on our experience investing and working with companies and partners across the climate tech ecosystem. Overall:

- Scaling climate tech requires long-term commitment and capital.
- Commercial opportunities are growing as tech costs reduce.
- There is a 'missing middle' of capital to support growth between venture and infrastructure finance.
- Long-term policy certainty is critical.

Figure 10: Barclays Climate Tech Escalator



Notes:

1. <https://home.barclays/content/dam/home-barclays/documents/citizenship/Sustainability/2024-Climate-Tech-Report-FINAL.pdf>
2. Jobs figures reflect number of people employed in portfolio companies as at October 2024.
3. <https://unreasonablegroup.com/initiatives/unreasonable-impact/>

Commercial opportunity

Barclays is achieving scale and impact in its financing and facilitation of the transition.

Volumes

Sustainable and Transition Financing facilitated (2023–end of 2030)

\$1trn target

\$162.2bn
achieved as at end December 2024

Figure 4: Annual breakdown by category \$bn

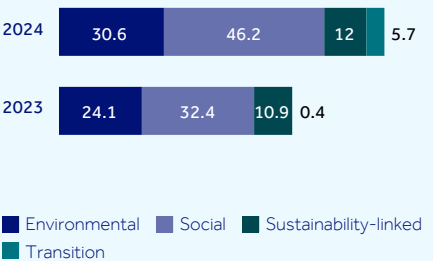


Figure 6: Annual breakdown by product \$bn

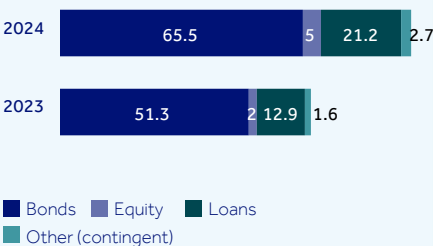
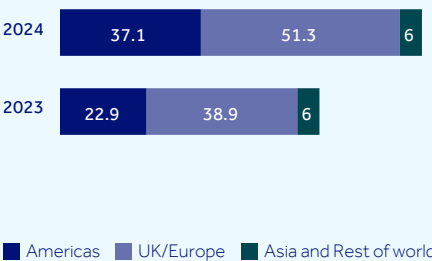


Figure 5: Annual breakdown by region \$bn



Notes:

- 1. Sustainable Revenues as at 31 December 2024 is defined more broadly than financing covered by the Sustainable Finance Framework and the Transition Finance Framework and covers net revenue on the following:
 - Revenues generated from providing financing and lending activities and products qualified as per the Sustainable Finance Framework (SFF) and Transition Finance Framework (TFF)
 - Revenues from providing a broader range of products and services to counterparties assessed as 'pure play' as defined in the SFF and TFF. This includes all applicable qualifying revenues from M&A advisory, risk management solutions including derivatives, and liability products associated with the counterparty (as referenced in table on page 72)
 - Revenues from qualifying products and services outside of the SFF and TFF, from Markets and Private Bank and Wealth Management offerings (as referenced in table on page 72)
 - Revenues from investments in Barclays Climate Ventures
- 2. Data as at 31 December 2024. Represents 12-month return on Risk-Weighted Assets (RWA). Includes client revenues and RWA from all Investment Banking, Global Markets and UK Corporate businesses client revenues (including M&A advisory fees) to corporate lending clients.

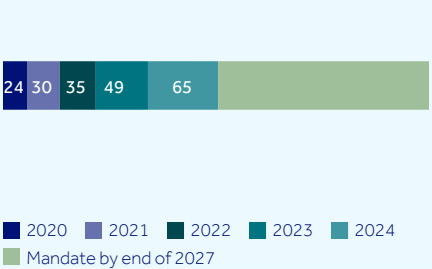
Barclays Climate Ventures

Mandate increased from £175m by 2025 to up to £500m by the end of 2027

£203m

achieved as at end December 2024

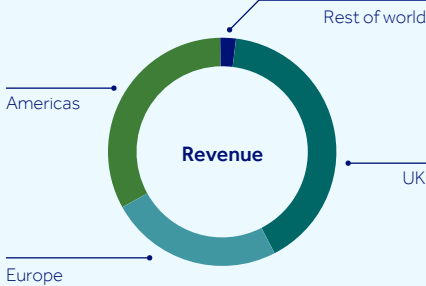
Figure 7: Our portfolio of investments since 2020 £m



Sustainable and Transition Revenues

Approximately half a billion pounds revenues in FY24 from sustainable and transition transactions, products and counterparties¹

Figure 8: Geographic share of FY24 Sustainable Revenues



Client Returns

Higher returns

Lending clients utilising sustainable and transition finance products exhibited higher average returns²

Further details of the data provided, including further granularity of decimal points can be found at home.barclays/sustainability/esg-resource-hub/reporting-and-disclosures/

Managing climate-related risks to our business and portfolios

Barclays views climate risk as a driver of significant financial risks, including credit risk, and non-financial risks.

Climate risk is already affecting our clients and Barclays itself. Since 2020, the frequency and severity of extreme weather events have increased, disrupting client operations, damaging assets, and pushing up insurance and input costs. The transition landscape has also grown more uncertain: global policy responses are diverging, creating fragmented consumer and policy expectations and undermining visibility on investment paths. The Bank of England's Prudential Regulation Authority has highlighted this dual challenge; noting that rising physical risk exposures and transition uncertainty together elevate financial risk and require enhanced risk management capabilities¹.

Barclays manages financial and operational climate risks as the Climate Risk Principal Risk within our Enterprise Risk Management Framework (ERMF), recognising climate's cross-cutting impact on our business. Our approach is focused on the effective identification, management and monitoring of the material climate risks within Barclays' portfolios. It has been designed to take into account portfolio characteristics, size and exposure to specific climate risk drivers.

We test our business plan against a five year stress scenario that combines macroeconomic, physical and transition risks.

We also manage the associated financial risks via a series of indicators, guidelines, triggers and limits for the portfolios we assess to face material climate risks. We seek to further our understanding of our vulnerabilities to climate risk by conducting 'reverse stress tests', which consider risks of higher severity over a longer time horizon.

In November 2020, we published our BlueTrack™ white paper, setting out a transparent framework to measure and monitor financed emissions in line with the goals of the Paris Agreement. Since then, we have strengthened our approach, evolving the methodology, expanding our sector coverage and developing forward-looking metrics.

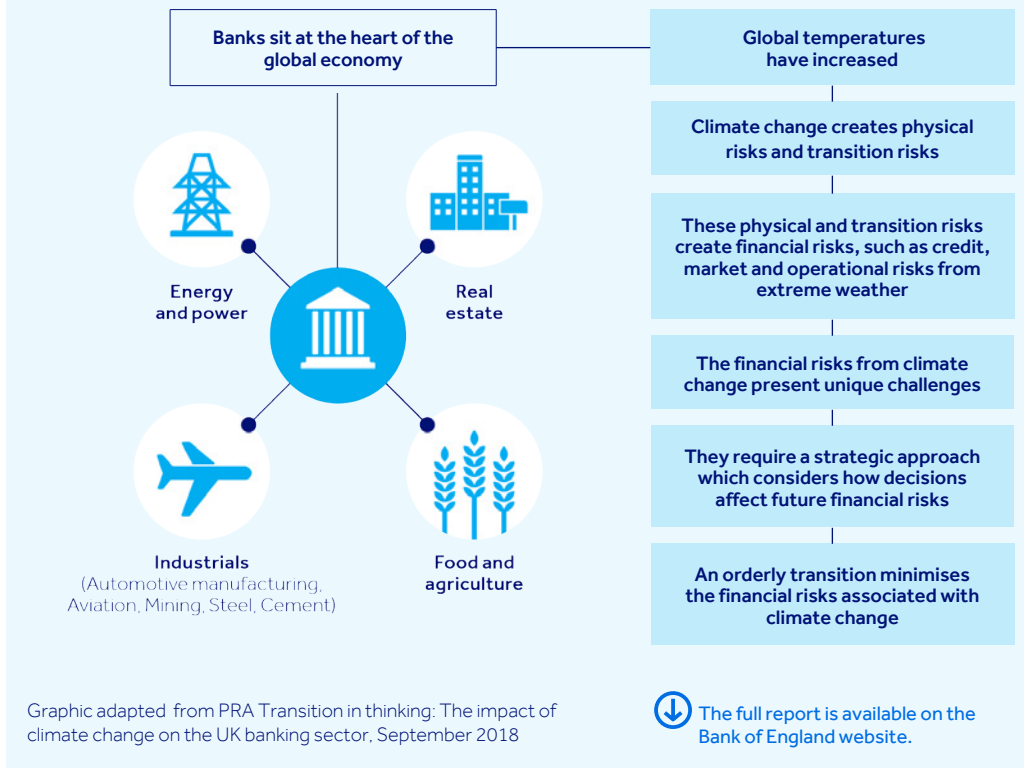
Barclays maintains board-level oversight of climate-related risks, with governance in place to align our internal risk processes with our risk appetite and regulatory expectations.

Responsibility for climate risk is embedded at the most senior levels, including the Group Risk Committee and Board Risk Committee, which regularly review climate-related risk exposures, scenario outcomes, and risk management implications. Our Climate Risk Management approach is explored in further detail from page 63 of this Transition Update and detailed information is available in our Annual Report and Pillar 3 documents.

Our risk management approach is supported by regular engagement with regulators, investors and other stakeholders, with diverse view points, including through the Climate Financial Risk Forum (established for the financial services industry by the PRA and the FCA), on topics such as financed emissions, sectoral exposures, and the integration of climate into our stress testing. We benchmark our approach against market best practice and evolving expectations from our regulators.

Our overall approach to climate risk reflects Barclays' commitment to be transparent and seeks to be consistently excellent in our risk management, ensuring that the bank remains commercially resilient while supporting clients in managing transition and physical risks.

Figure 11: Climate change presents financial risks to the UK banking sector



Additional considerations

We have begun to integrate nature considerations into our financial risk management for Barclays Europe. In 2024, Barclays applied the Taskforce on Nature-related Financial Disclosure's (TNFD) Locate, Evaluate, Assess and Prepare (LEAP) approach to conduct detailed assessments of our European Power and global Mining sectors clients' operational assets.

This preliminary exercise built on the Nature Exploratory Stress Test (NEST) run in Barclays Europe to assess the vulnerability and resilience of Barclays Europe's portfolio to environment-related shocks. In addition, we continue to develop our work on social considerations associated with the transition, given these can be material to the cost or pace of a client's transition.

Further details on our risk management approach are set out on pages 63-68

Note:

- <https://www.bankofengland.co.uk/-/media/boe/files/prudential-regulation/consultation-paper/2025/april/cp1025-appendix.pdf>
<https://www.bankofengland.co.uk/prudential-regulation/publication/2025/january/pr-climate-change-adaptation-report-2025>

Net zero operations

We are actively working towards achieving net zero operations as part of our ambition to be a net zero bank by 2050. This includes setting and meeting various targets and milestones to reduce our operational emissions, with significant progress already made.

Barclays sources 100% renewable electricity¹ for our global real estate portfolio, and we have achieved a 95% absolute reduction in our Scope 1 and Scope 2 market-based emissions².

Progress was driven by a multi-year programme of real estate right-sizing³, energy efficiency improvements and shifting to renewable electricity sourcing across the Group's real estate footprint. This reflects the importance we place on our operational emissions as part of our ambition to be a net zero bank by 2050.

We continue to scale efforts across our real estate portfolio and have launched transformation projects across several of our campuses⁴, including a significant redevelopment of our UK technology campus in Radbroke, which on completion will operate by using on-site renewable electricity and battery storage, in addition to using electricity from the UK grid. This is complemented by efforts to improve energy efficiency, electrify our infrastructure and build on our onsite renewable electricity capacity across selected sites globally.

Barclays has continued to strengthen its supply chain decarbonisation approach, developing a Supplier Transition Framework and enhancing its data set, with 46% of Barclays' supply chain emissions data now accounted for through primary data.

Figure 12: On-site solar installation as part of our redevelopment of our UK technology campus in Radbroke, Cheshire



We have achieved this by enhancing internal and external data and tools, enabling more granular insights into supply chain emissions and transition readiness than standard public disclosure alone allows.

We intend to advance our approach by using Barclays technology, which we continue to enhance by introducing new solutions, including AI. Our Sustainability Data Hub, which provides our teams with sustainability-related information, is being enabled through AI to support automated workflows and research capabilities. These developments support the evolving data and technology solution needs required for our transition.

95% reduction

Barclays has achieved a 95% absolute reduction in our Scope 1 and Scope 2 market-based emissions²

We are also exploring how we can advance our approach by integrating social and nature-related considerations.

We are using insights from our recently completed supply chain human rights saliency assessment and Locate, Evaluate, Assess, Prepare (LEAP)⁵ assessment of our direct operations to help develop and inform our work in this space.

[➔ More details on our own operations can be found on page 57.](#)

Harnessing Barclays' ecosystem

Barclays not only supports Unreasonable Impact companies through networks, resources and mentorship, but we also incorporate some of these companies into our own operations.

Winnow, an AI-driven tool for commercial kitchens, is deployed in select campuses with the aim to halve food waste and cut costs. We have also engaged Re:Dish, whose reusable dishware programme has resulted in avoiding over one million single-use items from landfill in the United States⁶. Lithium Urban Technologies powers parts of our employee shuttle fleet in Chennai, Pune and Noida with electric vehicles, cutting emissions and demonstrating real world credibility for fleet decarbonisation solutions.

Each example reflects how Barclays leverages our role as a customer to validate and learn from the climate technologies and innovations we champion, while delivering environmental benefits in our operations.

Notes:

1. In 2024 we maintained 100% renewable electricity sourcing for our global real estate portfolio through instruments including green tariffs (16%), energy attribute certificates (EACs) (48%), and energy attribute certificates from power purchase agreement (PPA) (36%).
2. Against a 2018 baseline, for FY2024 reporting year.
3. In this Achieving net zero operations section, a reference to, right-sizing means, we are exercising opportunities through lease events or by way of negotiation to alter the square footage of an existing occupation to optimise our space and associated resources for our operational requirements in that location.
4. Campuses include 1 Churchill Place, Radbroke, Northampton, Glasgow, Pune, Whippary, 745 7th Avenue, Dryrock.
5. Taskforce on Nature-related Financial Disclosure's (TNFD) methodology.
6. Data on single-use items saved from landfill is provided by Re:Dish.



Sectors

Energy and Power	15
Food and Agriculture	25
Real Estate	34
Industrials	44
Automotive manufacturing	51
Aviation	52
Cement	53
Mining	54
Steel	55

Energy and Power

Spanning molecules to electrons, we are supporting clients in the sectors at the heart of the transition.

Energy and Power continued

The sector and Barclays' focus

The Energy and Power sectors are central to economic growth and global prosperity. They also play a critical role in reducing their own emissions and enabling economy wide decarbonisation. Global investment in clean energy continues to accelerate offering exciting potential for innovation and cost-effective deployment of new technologies across storage, grid flexibility, clean fuels and carbon management. However, for governments and consumers alike, the demand for reliable, affordable energy remains paramount and many countries are adopting an "all-of-the-above" approach to balance demands for secure and resilient energy supply, looking to both conventional energy sources as well as low-emissions alternatives to meet accelerating energy demand growth.

A key issue in the sector is how to balance customers' expectations for consistent and affordable services with investing for a low-carbon future. Barclays is seeking to support its clients with navigating this environment. Specifically, we are seizing the commercial opportunity which low carbon energy projects and infrastructure present through targeted financing and advisory services. Through 2024, we grew our total green financing for power generation by more than double since 2020. This has contributed to decarbonising our sector financing portfolio faster than the power markets in the UK, Europe and US have decarbonised their grids. Reflecting society's need for available and affordable energy we also remain a significant provider of capital to the conventional energy and power sectors. Our engagement with clients across the entire energy and power system enables us to identify and focus on areas of change and of increasing capital requirements.

Top 4 Energy Transition Group¹

\$25bn
of Sustainable and
Transition Finance
facilitated² (2023 and 2024)

Top 5 Energy franchise¹

Energy portfolio represents 2.3% of our total lending and 16.1% of total Scope 1 and 2 financed emissions as of Dec 2023

Top 3 Power and utilities franchise¹

Power portfolio represents 3.6% of our total lending and 25.9% of total Scope 1 and 2 financed emissions as of Dec 2023

Notes:

1. 2024 Dealogic global fee ranking
2. Included in our \$1 trillion Sustainable and Transition Finance target by 2030.

Energy and Power continued

Working with clients on their transition

Regular dialogue with our clients enables us to better understand their business objectives and is central to how we approach the energy transition at Barclays. This enables us to provide targeted and meaningful advisory services principally in our Investment Banking and Markets businesses.

This advice is particularly critical as our clients seek to balance near term business delivery with longer-term transition risks and goals in an increasingly uncertain policy environment and alternative capital requirements.

Against this backdrop, we integrated our expertise in Investment Banking across energy, power and climate tech in early 2024 to form our Energy Transition Group. It mirrors the way that many of our corporate clients think about the transition and allocate their resources, and increasingly how investors deploy capital, as reflected in the growth in “energy transition” funds and assets under management. A single group covering the entire energy system better supports clients by having a holistic perspective, optimal knowledge sharing and anticipating cross-sectoral trends such as varied applications of solutions like carbon capture in multiple industrial settings.

Figure 1: Barclays' Energy sector lending by region (as at end 2023)

Based on clients' headquarters

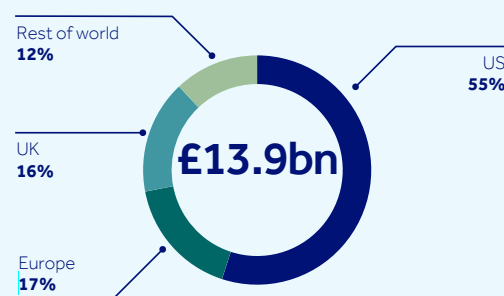
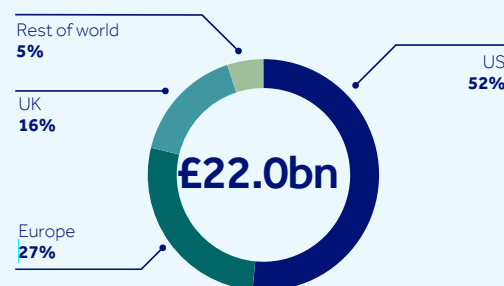


Figure 2: Barclays' Power sector lending by region (as at end 2023)

Based on clients' headquarters



Energy & Power Conference

The longevity and strength of our franchise saw us host our 38th annual Energy & Power Conference in NYC in 2024, bringing together over 500 companies and 800 investors in one of the longest standing industry events.

Our independent research¹ on the Energy and Power sectors reaches across asset classes, and provides both bottom-up, company-specific investment recommendations, as well as identifying and exploring thematic opportunities emanating from the transition top-down. Our company, sector and industry models support investors to help them better assess potentially disruptive trends and associated risks and opportunities, evolving business models and how this translates into business and financial performance in the form of growth, profitability and securities pricing.

We gleaned insights from our Client Transition Public Policy Advocacy Analysis on areas of agreement across both regions and client groups (see Figures 3 and 4). There is broad consensus on key elements necessary for a successful transition, with scaling of new technologies among the principal areas of agreement for many clients which aligns with Barclays' focus on investing in this space.

Similarly, many clients agree on the need to support the consumer transition, the focus of our Greener Home Loans and Green Mortgages and also on the need for significant grid investment and planning/permitting reform to enable wider electrification of the economy, a key area of focus for our engagement with our power clients.

While carbon pricing is not a significant area of focus for US energy clients, based on this analysis, it is for EU/UK energy, as well as all our clients in the power sector. This ties into a further recurring theme, which is the need to recognise the continued role of hydrocarbons in the energy system, though the emphasis on its importance varies by geography.

[For more information on our Client Transition Public Policy Advocacy Analysis see page 6](#)

Note:

1. <https://www.ib.barclays/research.html>

Energy and Power continued

Working with clients on their transition continued

Findings from our Client Transition Public Policy Advocacy Analysis

Figure 3: Energy clients' transition public policy priorities by jurisdiction

	USA	Europe	UK
1	Supporting the development and use of low carbon technologies	Supporting the development and use of low carbon technologies	Supporting the development and use of low carbon technologies
2	Promoting transparency and harmonised disclosure	Promoting transparency and harmonised disclosure	Supporting the use/ implementation of carbon pricing regimes
3	Advocating the need for a continued role of gas / hydrocarbons	Supporting the use/ implementation of carbon pricing regimes	Importance of hydrogen and advocacy for policy supporting its development and application
4	Policy measures related to methane	Advocating the need for a continued role of gas/ hydrocarbons	Decarbonisation of transport

Figure 4: Power clients' transition public policy priorities by jurisdiction

	USA	Europe	UK
1	Supporting technology development and innovation	Supporting technology development and innovation	Supporting technology development and innovation
2	Supporting the progress of electrification and deployment of clean energy	Scaling development and use of clean hydrogen	The need for government to deliver a long-term strategy
3	Infrastructure and transmission, including permitting and citing	Scaling up the deployment of renewables	Support for consumers as they transition
4	Consumer and customer support and incentives	Carbon pricing and carbon markets	A strategic approach to the grid
5	Carbon pricing	Investments in the grid and delivering permitting reform	Delivering energy security, including the role of storage and continued role of hydrocarbon production

Through our external partnerships we convene our clients, policymakers, investors and other financial institutions to discuss the topics identified in Figures 3 and 4, and increasingly the role of nature in the transition, to drive the development of public thought leadership that can best support an acceleration of the transition. Our CEO's, C. S. Venkatakrishnan, role as Chairman of the Financial Services Task Force, of HRH King Charles III's Sustainable Markets Initiative (SMI) is an example of one platform.

Conducting assessments of our clients, through our Client Transition Framework (CTF), builds a clearer picture of how the transition is unfolding for our clients, where momentum is building, and where barriers remain. Our CTF assessments are valuable in shaping engagement and offering clients structured insight into their current position and how it compares to peers. This approach resonates and prompts constructive dialogue.

The scores shown in Figure 5 highlight that most of our high coverage intensity clients and lending exposure is concentrated in T3 or better CTF scores. As Figures 6 and 7 demonstrate, we have seen changes in the scoring of the CTF results over time, with further details of client transition plans becoming available as a contributing factor. We have identified from the client plans the following broad trends: for the power sector, strong targets, robust disclosures, and a commercially viable strategy to transition; and for the energy sector an increased focus on Scope 1 emissions, particularly methane.

We continue to evolve the CTF. In 2024, we piloted nature-related questions within our assessment for power portfolio clients. The evaluation covered governance, strategy, policy approach, and disclosure, and initial results showed that most clients reference nature in their sustainability strategy and policy commitments, and around one-third of clients have board level oversight.

Nature LEAP assessment

We undertook a preliminary assessment of nature-related impacts and risks within our Barclays Europe Power portfolio, leveraging the TNFD's LEAP approach. We gained insights including the location of c. 9,000 power generation facilities linked to c. 40 clients. Around one third of facilities were assessed as overlapping with sensitive locations, with areas of high physical water risk¹ being the primary cause.

Our nature stress scenario methodology² concluded that physical risk drivers may pose the biggest potential financial risk to our portfolio, with losses observed largely emanating from droughts and floods. However, diversification of assets and the investment grade quality of the portfolio meant that overall impact on projected credit quality was marginal.

Findings from our assessment will help develop our internal risk management capabilities and inform engagement with clients on this emerging topic.

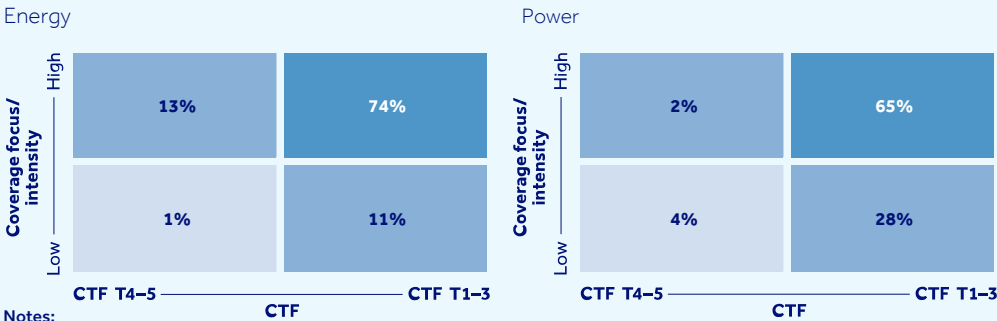
Notes:

1. Defined as areas of water scarcity and poor quality.
2. Based on available data and most appropriate methodologies as of 2024.

Energy and Power continued

Working with clients on their transition continued

Figure 5: CTF results by coverage focus/intensity¹, percentage by 2024 lending limits²



- Notes:
- Coverage focus/intensity refers to Barclays' internal prioritisation of client coverage resourcing efforts determined based on a range of factors;
 - Scores are grouped by total applicable lending limits of in-scope clients

Figure 6: Upstream energy portfolio, CTF results

Percentage by lending limits

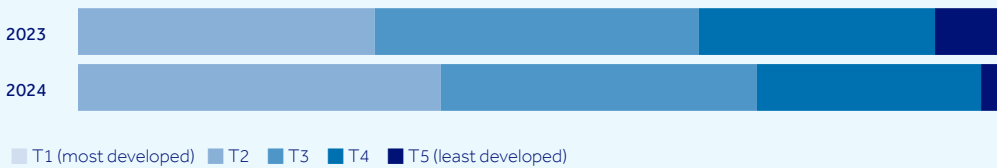
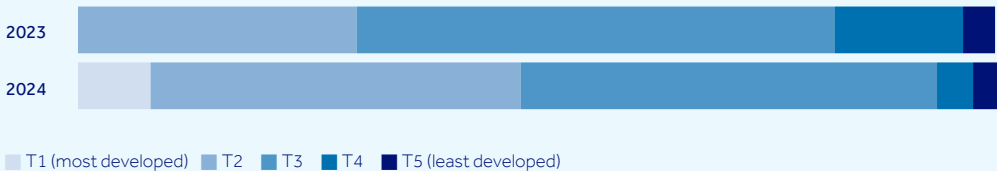


Figure 7: Power portfolio, CTF results

Percentage by lending limits



Financing clients' transition

The capital-intensive and infrastructure-heavy nature of the transition of the energy system presents significant opportunities to both facilitate and directly finance businesses and projects.

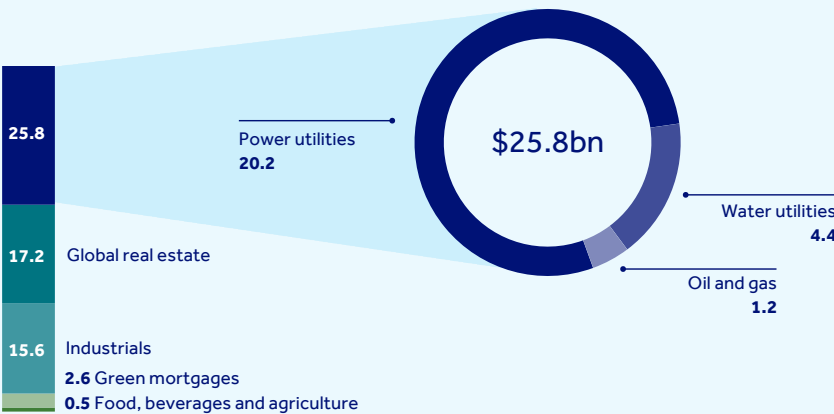
Our familiarity with the specific financing considerations across a wide spectrum allows us to provide detailed and bespoke structuring advice, as well as leaning in on critical areas requiring further policy support.

We work with clients in mature areas of the sector in need of significant reinvestment, for instance to stem the strain on grid infrastructure due to an increasingly

electrified economy and the integration of renewable power generation.

Resilience from a nature perspective is an increasing focus, recognising the value of its role in protecting energy infrastructure and reducing climate-related risks. The success of the National Grid fully-underwritten rights issue (see case study, page 20) highlights that significant capital is available to address the need for upgrading and making resilient existing critical infrastructure, where there is strategic clarity and market confidence in a company's ability to execute a multi-decade investment plan.

Figure 8: 2023 and 2024 total contribution from carbon-related sectors³ to \$1 trillion Sustainable and Transition Financing target by end of 2030
\$ billion



- Notes:
- Defined in 2024 Barclays PLC Annual Report, page 295.

Energy and Power continued

Financing clients' transition continued

Case study: National Grid

Supporting the world's largest utility and energy rights issue

nationalgrid

In June 2024, Barclays helped energy infrastructure company National Grid to raise £7bn in the largest ever utility and energy equity rights issue globally.

The funds raised will be used to help enable National Grid to deliver its £60bn capital programme in its critical energy networks infrastructure in the UK and US, supporting electrification and delivery of the energy transition.



The substantial investment needed at both national and regional levels requires careful structuring to attract private and public capital across equity and debt solutions.

Our sector engagement, particularly in UK offshore wind, highlights distinctions between mature infrastructure and newer segments with greater uncertainty. Global supply chains, large, multi-year project delivery, and evolving energy security considerations introduce complexity, requiring flexible approaches to financing closely aligned to clients' specific business and risk exposure.

Products such as supply chain finance and inflation or exchange rate hedges, help clients manage these risks and improve the economics and attractiveness of the overall project.

Other key enablers include strong sponsors and a measured approach to risk-sharing with lenders, while unforeseeable macro events can delay projects and cause overruns on time and budget. We are increasingly observing the importance of managing social risks early and proactively, in particular in the context of large infrastructure projects, to avoid higher costs and longer timelines.

Related to this, we have significantly increased our engagement with clients where we provide project finance, including providing guidance to clients to help them meet higher social standards.

Carbon Capture, Utilisation and Storage (CCUS) technology is crucial for industries that find it technically difficult or very expensive to reduce their emissions. While opinions on CCUS vary, the International Energy Agency and other experts agree that limiting global warming below 1.5°C will require these technologies to deal with unavoidable industrial emissions and balance remaining carbon output. CCUS provides a commercially relevant option, especially in industrial and energy-intensive sectors, alongside electrification and fuel switching.

We have provided finance to the UK cornerstone projects Net Zero Teesside and Northern Endurance Project. These are among the most advanced carbon capture and storage projects in development globally, offering a full-chain model that integrates industrial decarbonisation with offshore CO₂ storage. Their success will establish a blueprint for scaling CCUS in other industrial regions worldwide.

We have observed that key elements for success include co-location with emitters and supportive, clear regulatory frameworks such as the Dispatchable Power Agreement business model in the UK, while access to existing infrastructure and stable revenue models such as offtake agreements further strengthen the investment case.

Balancing the need for energy security alongside transition, we continue to finance conventional energy, including midstream infrastructure, recognising its current role in today's energy systems and in some cases its potential to support the transition. These assets are essential for ensuring stable supply particularly where alternatives are still scaling, and we are developing our understanding of the opportunities where midstream can adapt over time and also where it could result in lock-in risk.

The quantum of private capital required to support the transition to a lower-carbon energy system will continue to drive meaningful market activity and transactions. We will continue to work for our corporate clients, and also with our extensive number of financial investor clients, in order to help match these opportunities with the optimal and lowest-cost financing possible.

Supporting clients' policy engagement

Where appropriate, we advocate for policies that support our clients' transition plans and what they require to transition on commercially sustainable terms. We have developed UK positions on policy actions needed to support the transition informed by client views. These include outlining the policy framework needed to support the development of hydrogen in the UK, and broader recommendations on scaling climate tech.

Energy and Power continued

Scaling climate technology

Nearly half of our Barclays Climate Ventures investment has gone into energy and power technologies, reflecting both the high-emission profile of the sector and the potential of emerging low-carbon solutions to drive systemic change.

These include long-duration storage, grid optimisation and hydrogen infrastructure. These are areas where innovation can enable deeper decarbonisation and resilience and align directly with our clients' top transition priorities.

Through Barclays Climate Ventures and Unreasonable Impact, we have backed a range of energy and power ventures that are moving beyond proof-of-concept to real-world deployment. Our Barclays Climate Ventures investment in Energy Dome supports the commercialisation of long-duration storage using CO₂ widely available in industrial processes. Energy Dome's potential was recognised in 2024 with a €35 million award through the EU-Breakthrough Energy Catalyst partnership, alongside an additional €35m in venture debt facilitated by the European Investment Bank.

Relevant ventures backed through our Unreasonable Impact partnership include:



Hydrostor provides long-duration energy storage through advanced compressed air systems, helping to balance grids, integrate more renewables, and enhance reliability in the Energy and Power sector with projects underway in US and Australia.



Orbital Marine Power is advancing floating tidal turbines to harness predictable marine energy, and recently launched their first 2MW tidal turbine off the Orkney Islands in Scotland;



gridComm enables real-time optimisation of electricity use through the monitoring and control of critical city infrastructure.

We have connected UK startups such as Seeng Ltd (electricity demand forecasting), and O Innovations (floating offshore wind) to established companies in the UK through our Sustainability Bridge programme¹.

We have learnt several lessons around scaling climate tech in Energy and Power from our investments, client interactions and partnerships. In particular:

- System integration matters: even the most compelling new technologies will not scale if they do not align with existing grid operations, market design or regulation. For new solutions to see wide adoption, they must be compatible and easily integrate with existing grid, market and regulatory frameworks, as well as supporting overall system stability.
- Technologies such as around green hydrogen, while holding strong long-term potential, have progressed slower than many had expected. Green hydrogen is not a singular product but rather an interdependent system in which the development of supply, transportation and storage, demand, and effective market mechanisms (such as pricing and trading) are concurrently required to build confidence and attract the financial investments from private capital sources.
- Long-term policy clarity, alongside enabling reform to planning and permitting and market-based mechanisms, is critical in order to encourage adoption of new technology, attract investment and drive down costs.

Note:

1. labs.uk.barclays/our-industries/climate-and-nature-innovation/

- We have observed long lead-times for the adoption of new grid technologies given the complexity, risk aversion, and regulatory environment where an outage can have major economic and safety consequences. Successful deployment requires coordination across multiple parts of the system from generation to transmission, distribution and end-use.

Case studies: Energy Dome

Long-duration energy storage deployment

Energy Dome is a storage technology company using pressurised carbon dioxide to store energy. Their 'CO₂ Battery' provides storage for up to 24 hours, helping users to access cheaper, clean, reliable power and access value in power markets.

energydome.com



ENERGYDOME
Our **WORLD** can't wait.

Energy and Power continued

Barclays' targets and progress

We have targets to reduce our absolute financed emissions in our upstream energy portfolio by 15% by the end of 2025 compared to 2020, and by 40% by the end of 2030 – aligned with a 1.5°C trajectory.

These targets cover Scope 1, 2 and 3 emissions, including methane, from upstream oil, gas, natural gas liquids, and coal. The targets cover pure play and integrated companies carrying out mining, exploration and production activities.

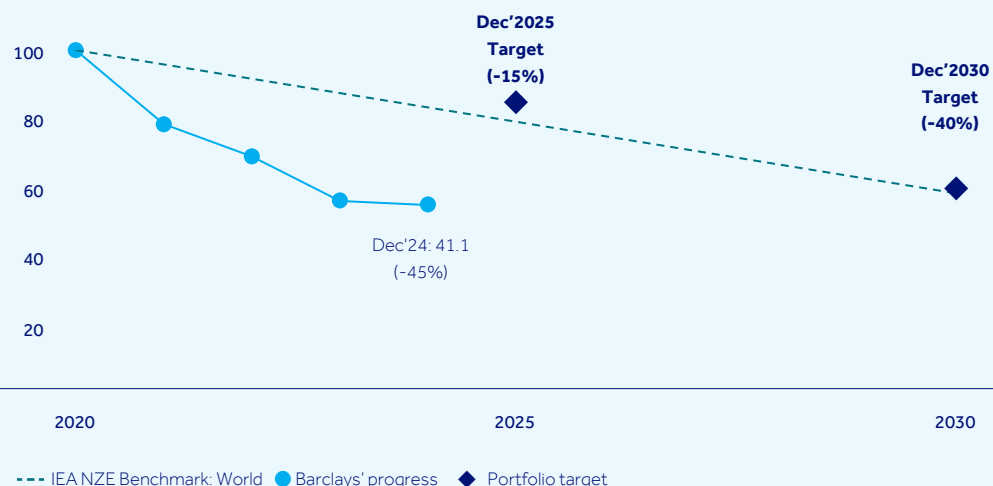
At the end of 2024, we achieved a 45% reduction in our absolute financed emissions compared to the 2020 baseline. This reduction exceeds our target for 2025 and 2030, and is ahead of the IEA NZE global benchmark.

We have reduced emissions in our upstream energy portfolio at a faster rate than the average in our key markets. Between 2023 and 2024 Barclays' financing to the energy sector grew, in line with an increase in issuance across all sectors. However, emissions decreased 1% year-on-year and remain in-line with our 2030 target.

While we have made strong progress towards our targets, we recognise that the transition will become increasingly complex, and progress may not be linear. Our cumulative progress largely reflects reductions in our total financing volumes for this portfolio as well as impacts from changes in company book values which fluctuate year to year and thus impact progress (either positively or negatively) against our target.

Figure 9: Upstream energy¹

Absolute emissions MtCO₂e (Indexed 2020 = 100)



Note:

1. 2024 Barclays PLC Annual Report (2025).

Energy and Power continued

Barclays’ targets and progress

Our target is to reduce the intensity of financed emissions in our power portfolio by 30% by the end of 2025, compared to 2020, and by between 50-69% by the end of 2030.

Our 2024 reported intensity reduction is in line with our 2025 target. To date, we have reduced emissions in our power portfolio at a faster rate than the average in each of our key markets.

Within the overall path to 2030, we expect to see a continued divergence between geographies. Our analysis shows that greatest reduction in emissions intensity will likely come from clients in the UK and Europe, with smaller reductions expected in the US reflecting the difference in market and regulatory environments. We expect that future progress will not be linear and any volatility will impact our continued progress.



Figure 10: Power¹

Physical intensity kgCO₂e/MWh (Indexed 2020 = 100)

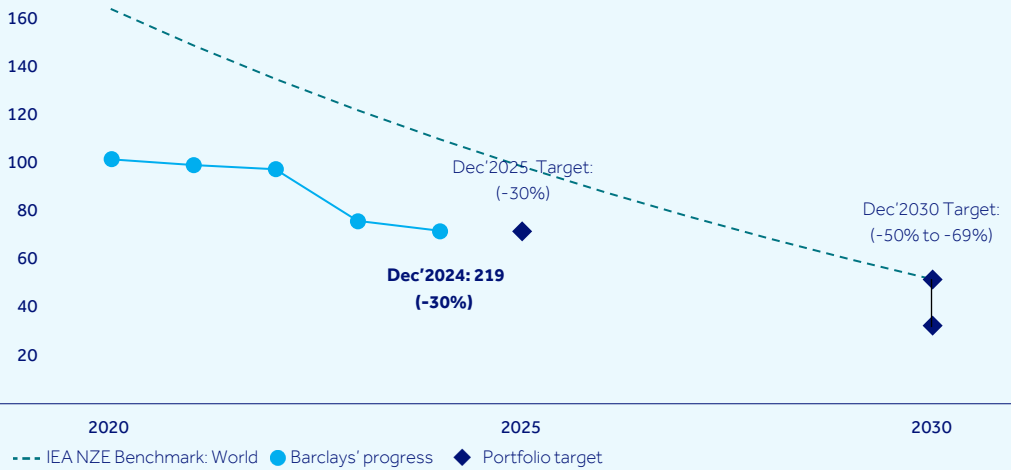
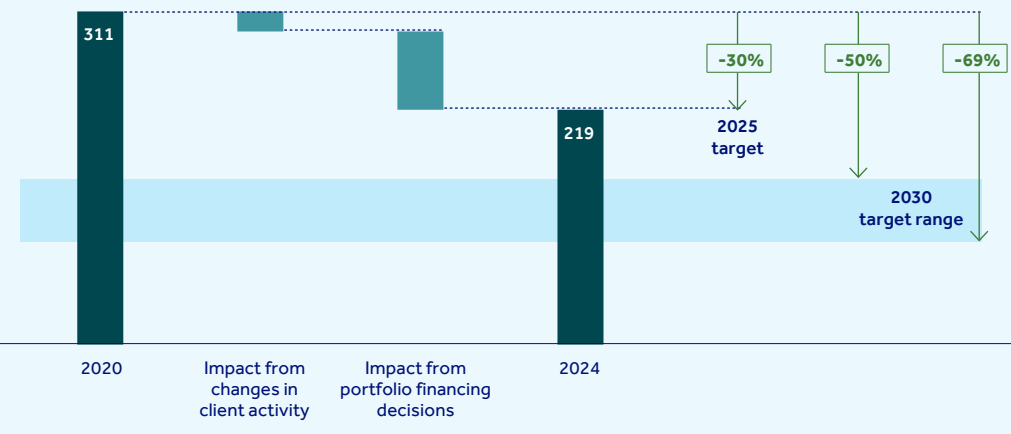


Figure 11: Barclays’ power portfolio – pathway to date

kgCO₂e/MWh



Note:

1. Barclays, 2024 Barclays PLC Annual Report (2025).

Energy and Power continued

Managing climate-related risk¹

The energy and power sectors are exposed to both physical and transition climate risks.

In terms of physical risks, clients in both sectors own or rely on assets and infrastructure that could be affected by physical risks, depending on their location. The Intergovernmental Panel on Climate Change expects these risks to increase in frequency or severity, which could lead to direct damages, increase in insurance premiums or business disruptions.

Transition risks for the Energy sector include lower demand for hydrocarbons, stricter or uncertain regulations, declining asset values, as well as constrained capital flows and reduced investor appetite for hydrocarbon projects.

Transition risks for the power sector include stricter or uncertain regulation, carbon taxes, lower demand for power generated from hydrocarbons and a need for high capital expenditure. Overall, transition pathways all mean the sector would see increased demand for electricity and increased share of low-carbon electricity, the build-up of which would involve technical challenges, such as intermittency issues associated with wind and solar power sources and the need for coordinated changes across the electricity system.

We classify some parts of those sectors as “elevated climate risk” sectors in our risk management framework and assess them as part of our climate-aware Internal Stress Test, which shows that the oil and gas sector is vulnerable to a sharp transition, in particular the servicing and upstream component.

We perform a series of activities to manage the risk of those sectors.

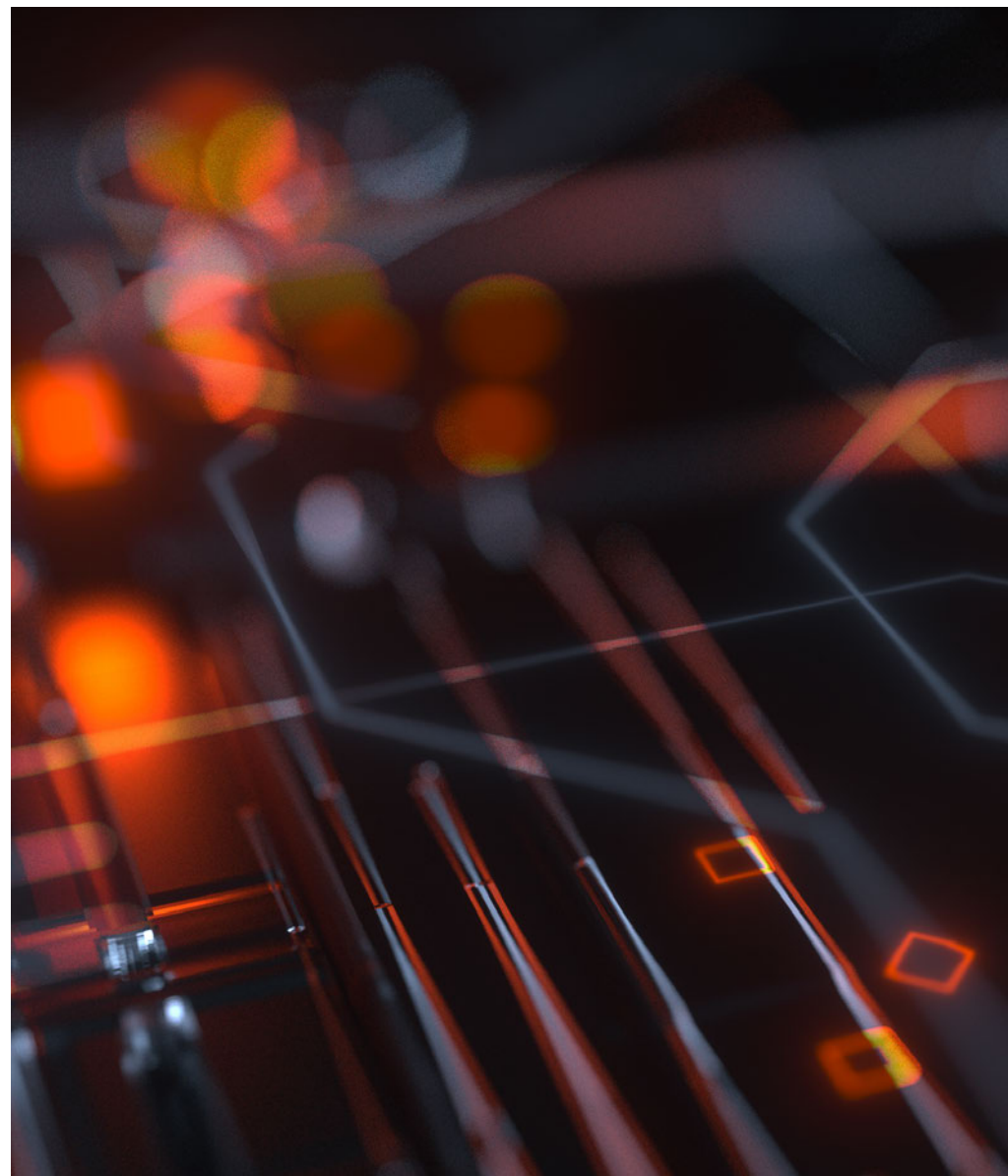
For Upstream Energy and Power Generation, we have BlueTrack™ targets, and our Client Transition Framework (CTF) scores help us understand our clients’ needs and progress on transitioning. Our lending process includes a scorecard assessment of the climate risk profile of material clients, which uses available data and metrics.

We have also implemented risk limits and triggers for those sectors, in particular around the segments of our portfolio we judge most exposed to climate risk and aligned with our financed emissions targets.

For example, in Oil and Gas, we monitor the exposure to non-investment grade clients and we classify their upstream assets into tiers, which we consider in our underwriting process.

Note:

1. For further details on our risk management approach see the Risk Management chapter from page 63.



Food and Agriculture

Barclays leverages its broad and longstanding relationships across the sector to be a valuable partner to our clients, providing core banking services, as well as supporting their efforts to deliver a resilient, affordable and sustainable food system.



Food and Agriculture

The sector and Barclays' focus

The food and agriculture sectors are central to both the global economy and the transition: as a provider of essential goods, the largest source of global employment, and a system with deep dependencies on climate and nature¹. It is also a commercial opportunity, as global demand for more efficient, lower-impact food systems is creating new markets for investment, innovation and value chain transformation. The sector remains a significant contributor to global emissions, particularly through livestock, changing land use and deforestation.

Barclays brings a distinctive perspective to this sector: as a bank supporting over 30,000 farmers predominantly through our UK Business Bank, and working with multinational food clients through our Corporate and Investment Bank, we are able to take a global, end-to-end view of the opportunities and challenges across the system. This depth of engagement has enabled us to develop practical finance solutions and products that respect the complexity of the food system and the critical importance of local context in shaping its transition.

Note:

1. United Nations. Food and Agriculture Organisation. 2023.



Barclays supported
over 30,000
farming clients as at
end 2024

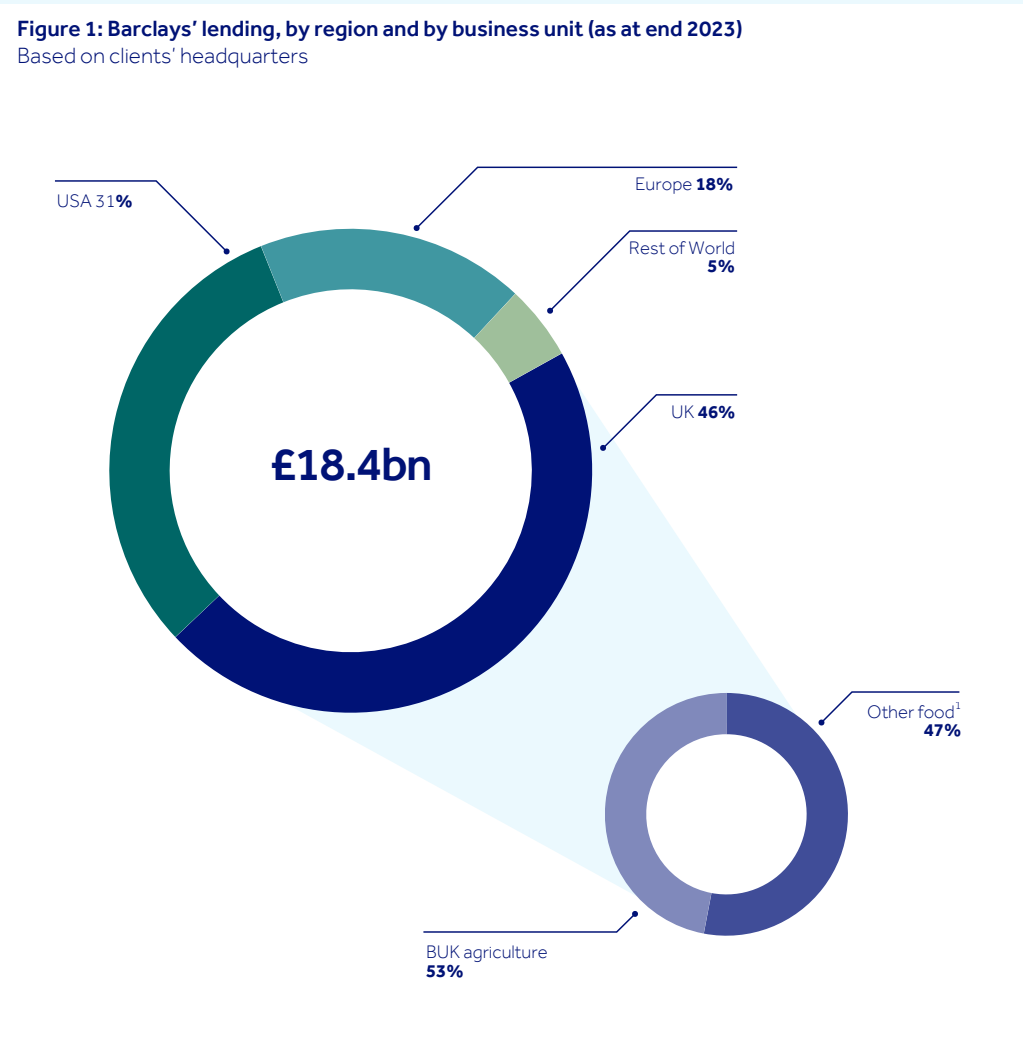
Food and Agriculture continued

Working with clients on their transition

Our national network of relationship managers had over 24,000 conversations with UK farmers in 2024, helping them navigate their day-to-day banking needs as well as understanding the climate and sustainability challenges and opportunities.

We have facilitated gatherings to provide peer to peer learning opportunities and to help farmers understand national best practice. Our Farm2Farm network was established in 2023 to enable farmers to learn from one another, sharing practical insights from on-farm experience. This network has created a space for open discussion where farmers can exchange ideas on what's working, where barriers remain and how to approach the transition in a way that suits their local context.

Nature markets, such as the Biodiversity Net Gain (BNG) scheme in England, are opening up potential new revenue streams for farmers, creating opportunities to transition or better utilise areas of unproductive land. In response, we have launched a first-of-its kind collaboration with the Environment Bank, helping farmers access these markets and unlock value from nature-positive land management.



Multinational food companies

Our engagement on transition with our multinational food company clients is at an earlier, exploratory stage. We're supporting them to explore how climate and nature will impact their businesses, including commercial opportunities and emerging risks.

In partnership with Resilience, an early stage climate tech company applying research frameworks pioneered by the University of Cambridge Centre for Risk Studies, we have piloted an Earnings Value at Risk model to quantify potential financial impacts from both climate and nature-related factors.

By simulating 'what if' scenarios, such as supply chain disruptions, acquisitions, or product shifts, we enable companies to assess their exposure to financial and operational risks and to build resilience into their business models.

£18.4bn
Our food and agriculture portfolio had £18.4bn of lending across the value chain as at end 2023

Note
1. Predominantly consists of food manufacturing clients

Food and Agriculture continued

Working with clients on their transition continued

Through our farmer surveys and Client Transition Public Policy Advocacy Analysis for multinational food companies we've identified insights on the areas of focus for each sector and geography.

One key highlight from both British farmers and food companies is the importance of developing practical steps to help farms adopt regenerative farming practices. In response, we are working with farmers, peers, multinationals and other stakeholders to develop trials of regenerative practices through the Sustainable Markets Initiative's 'Routes to Regen' project.

Scaling climate technologies is also a focus for British companies and farmers and European corporates: six in ten farmers we surveyed plan to adopt new technologies¹. Our work on 'Agritech', detailed later in this chapter, highlights its promise and the significant hurdles on its deployment. This area is less of a focus for US food clients, who place greater emphasis on standards and supply chain risk.

Our client transition assessments for UK agriculture clients, and pilot research for multinational food companies, have given us improved clarity on how the transition is progressing for our clients, highlighting where change is happening, where actions are planned and what challenges are still holding clients back.

Case study: John Jiggins Ltd

Support for regenerative practices

John Jiggins Ltd, a diversified arable farm in north-east Essex, is embedding regenerative agriculture into the heart of its operations. The farm has adopted practices including integrated soil and pest management, winter cover cropping, and habitat preservation.

Following a recommendation from its Barclays relationship manager, John Jiggins Ltd joined the SMI 'Routes to Regen' project. The business is now exploring premium markets for regenerative crops and considering green finance options to invest in renewable energy for crop processing and storage.



Figure 2: UK farmer priorities²

Policy clarity
Over two thirds cited uncertainty around future subsidies as a major barrier to planning and investment.
Practical guidance
Nearly a third lack accessible information on sustainable practices like regenerative agriculture and nature restoration.
Access to nature markets
Over two thirds value improving nature with over a third noting the need for support in accessing biodiversity markets and incentives.

Findings from our Client Transition Public Policy Advocacy Analysis

Figure 3: Food clients' transition public policy priorities by jurisdiction

UK & European client focus	US client focus
Embedding regenerative sourcing Working with farmers to adopt regenerative practices	Packaging standards, labelling and nutrition Redesigning packaging to reduce waste, improving labelling transparency, and reformulating products
Scaling climate technologies Investing in low-carbon and energy- and resource-efficient technologies	Expanding global market access Participation in new trade agreements, reducing export barriers, and preserving access
Strengthening data and reporting Enhancing emissions tracking and disclosures, while enabling efficiencies	Investing in supply chain resilience Upgrading infrastructure to manage climate risk, reduce emissions, and ensure continuity of supply

Notes:

- 1. Barclays. Cultivating Success. 2025.
- 2. Barclays internal research, October 2024

Food and Agriculture continued

Working with clients on their transition continued

Figure 4: Client Transition Assessments

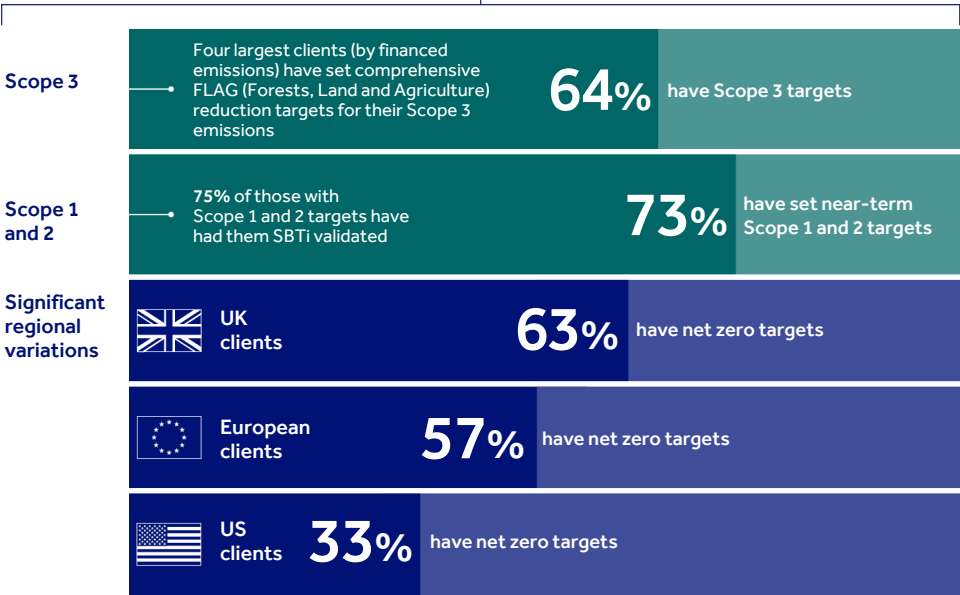
To help us manage our UK agriculture portfolio and help us ensure we are tailoring our support to clients appropriately we have developed a separate framework to assess those we consider most exposed to transition risk.



We are extending the Client Transition Framework assessments to our multinational food clients. To help establish an initial understanding of our clients' needs and where we are best placed to support them we have started to review their transition plans.

33

Multinational food clients included in the pilot research in 2024



Financing clients' transition

Global agriculture receives only a fraction of the investment it needs to transition, around 5% of the estimated \$1.1 trillion required over the next five years, highlighting a significant opportunity².

We are exploring a number of avenues directly, and through partners, to catalyse greater financing to the sector.

At the farm level, we provide green financing options to support the adoption of transition and sustainability linked activities.

Figure 5: Sustainable and transition aligned lending – sector breakdown (as at end 2023)

Sector Breakdown (£m)	Barclays Exposure	SFF Aligned ³
Agri	4,481	0 ⁵
Food	6,151	391
Related subsectors ⁴	7,796	833
Total	18,429	1,224

£1.2bn

of Barclays' £18.4bn exposure to the agri-food value chain qualified as Sustainable Financing as at end 2023

Our current suite of green loans offers discounted lending to provide access to eligible green assets. However, our engagement with the UK farming community shows availability of financing is not the only challenge and that the uptake of green financing is often constrained by high upfront investment costs, policy uncertainty, and limited access to practical guidance on emerging nature markets.

We also recognise the critical role that conventional lending continues to play and are evolving our broader lending approach to embed sustainability factors.

For multinational food clients, we offer sustainability-linked loans and products that are linked to progress against defined sustainability-linked targets, alongside green trade and working capital solutions.

Among global food multinationals, demand for transition-aligned capital is often constrained by limited eligible activities, and the relative difficulty to demonstrate its impact, under current sustainable finance taxonomies. As a result, some have developed their own sustainable financing frameworks or focused on sustainability linked lending, where financing is tied to broader performance targets rather than specific investment, giving them flexibility to address transition across their complex operations.

Notes:

- 1. New and re-financing UK dairy, livestock and mixed farming clients assessed in 2024.
- 2. World Economic Forum. Putting Food on the Balance Sheet, 2025
- 3. SFF aligned refers to finance that meets Barclays' criteria for sustainable activities captured in Barclays Sustainable Finance Framework
- 4. Related sub-sectors include food and agriculture within manufacturing, retail and wholesale.
- 5. While our Green Loans for Business product suite was launched in September 2023, Business Banking products were not included in the SFF until 2024.

Food and Agriculture continued

Financing clients' transition continued

Case studies: Brook Farm

Financing nature-friendly farming



Brook Farm, a family-run business since 1948, has evolved from a market garden into a sustainability-led operation. In 2024, a Barclays Agricultural mortgage supported the purchase of land now designated as a registered biodiversity site.

The farm is also working to adopt regenerative practices, restore habitats, and has launched an environmental services arm. Brook Farm is working to generate income through biodiversity credits from the new site, alongside olive and nut production, and woodland management, while simultaneously working to reduce input costs and enhance soil health.

The Brook Farm evolution illustrates how tailored finance can help to unlock new revenue streams and strengthen resilience.

Case studies: Compass Group

Sustainable Bond

In 2024 Barclays acted as Joint Bookrunner in an oversubscribed €500m sustainable bond for Compass Group. In line with the company's sustainable financing framework, the proceeds that have been allocated to date, have been allocated towards expenditures on goods certified as sustainable, expenditures meeting specific animal welfare standards, and expenditures on products purchased from local and diverse suppliers. Compass Group was the first international company in the contract catering industry to make a global commitment to net zero by 2050.



Scaling climate technology

Through our Barclays Climate Ventures investments we are supporting companies that have the potential to help meet some of the key challenges in transitioning the food sector, such as reducing food miles, enabling farmers to participate in carbon markets through soil carbon measurement, and producing alternative proteins.

At the same time, we are supporting early-stage innovations through the Unreasonable Impact programme. While some of these ideas are still in the early stages of development, they represent practical steps towards more sustainable food systems. One such example is Winnow, an AI-powered food waste prevention technology, that uses scales and scanning devices to track, learn, and classify back-of-house prep food waste that we have deployed across several of our campuses.

We have gained valuable insight around scaling climate tech in agriculture from our investments, client interactions and partnerships. In particular:

1) Economic viability is imperative

- Technologies that add cost or complexity without clear on-farm economic benefits face adoption barriers.
- Adoption of new products will be slow when they bring high risk to farmers.
- Any solution requiring up front capital expenditure does not typically make sense for smallholding farmers.

2) Data and measurement remain critical gaps

- High quality, scalable measurement, reporting, verification solutions for soil carbon, biodiversity, and input efficiency are underdeveloped – but are essential for unlocking capital.

3) Local context matters greatly

- Technologies must be adaptable to specific geographies, farm types and regulatory environments – one size fits all solutions are unlikely to scale in this sector.

Food and Agriculture continued

Scaling climate technology continued

We continue to work with external partners to encourage innovation. In 2025, Barclays renewed its partnership with the University of Lincoln, building on the launch of the Eagle Lab Farm in 2020.

Located at the Riseholme campus, the Eagle Lab Farm features state-of-the-art facilities, including a robotics lab, a demonstration packhouse, and a model refrigerated supermarket aisle. Eagle Labs in Lincoln works closely with partners like CERES and the UK Food Valley to support innovation in Agritech.

By connecting startups, researchers, and industry experts, we help drive collaboration across the sector. University spinouts can use the facilities on site to develop their research – for example – using the polytunnel facilities to train AI models which is now being used to reduce waste in the UK fruit growing industry. Since 2020, 40 companies supported through Lincoln Eagle Lab have raised over £130 million in funding¹ demonstrating the impact of this collaborative approach.

We also host regular events for farmers, showcasing the latest Agritech solutions and highlighting opportunities to adopt new technologies that improve productivity and sustainability.

Case studies: Agricarbon

Investing in Agritech



Barclays Climate Ventures has invested in Agricarbon, supporting a £9m Series A round in 2023.

Agricarbon is a carbon measurement company which samples agricultural soil and natural landscapes to measure and verify soil carbon content.

Agricarbon was also part of the 2024 Unreasonable Impact programme. Our investment is supporting the expansion of Agricarbon's services in the US.

→ www.agricarbon.co.uk

Through Unreasonable Impact we have supported:

C16 Biosciences

C16 Biosciences combines nature and biotechnology to produce bio-designed alternatives to petroleum, animal fats, and vegetable oils, including the company's first product offering, the Palmless™ platform for sustainable palm oil alternatives.



Cultivo uses AI and satellite data to identify and regenerate degraded natural landscapes, creating high-integrity nature-based carbon removal projects. By bridging landowners and institutional investors, Cultivo enables scalable investment in ecosystem restoration across forests and grasslands.

Note:

1. Crunchbase, Dec 2024.

Food and Agriculture continued

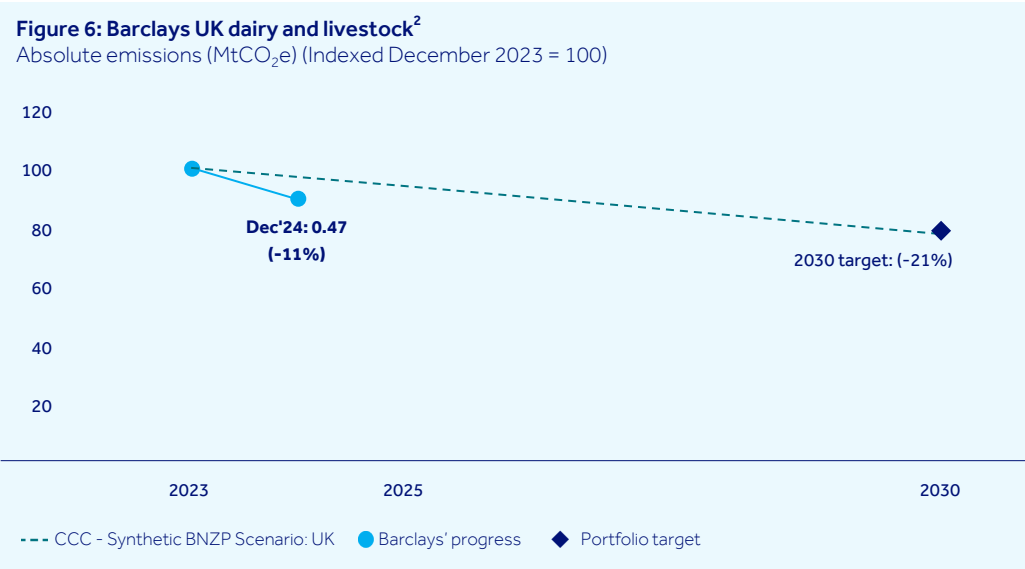
Barclays' targets and progress: UK dairy and livestock

Barclays has a target to reduce the absolute financed emissions from its UK dairy and livestock farming portfolio by 21% by the end of 2030 against a 2023 baseline year. This sub-sector accounts for nearly two thirds of the UK's agricultural emissions¹. By the end of 2024, we had achieved an 11% reduction in our absolute financed emissions compared to our 2023 baseline.

Most reductions are expected from on-farm interventions such as feed additives, improved manure management, and fertiliser efficiency. Broader portfolio targets have not been set due to sector-wide challenges in data quality and emissions measurement.

Access to high quality farm-level data continues to be a challenge for the sector's transition. We are working to improve both data quality and availability through a partnership with Oxford University and a one-year pilot with Map of Ag that provides participating clients with their detailed carbon footprints.

These efforts aim to support more accurate emissions tracking and enable tailored support for clients. BlueTrack™ now incorporates livestock and crop data, allowing emissions to be calculated by greenhouse gas and source – rather than revenue – making it more resilient to commodity price fluctuations and better suited to tracking financed emissions.



21%

Barclays has a target to reduce the absolute financed emissions from its UK dairy and livestock farming portfolio by 21% by the end of 2030

11%

By the end of 2024, we had achieved an 11% reduction in our absolute financed emissions compared to our 2023 baseline

Notes:
1. CCC. Seventh Carbon Budget. 2025.
2. Barclays, 2024 Barclays PLC Annual Report (2025).

Food and Agriculture continued

Supporting clients' policy engagement

We engage on policy issues that matter to our clients, recognising that a supportive and predictable policy environment is critical to enabling the transition to more sustainable and resilient food systems. We have developed positions on a number of actions using insights gained from our clients on what they need to transition.

These include calling for a UK national Agritech strategy, increased public funding, and a sector-wide collaboration hub, alongside effective carbon and nature markets. We have also published recommendations on how to design the UK Biodiversity Net Gain market to better serve farmers^{1,2}.



Notes:

1. Barclays. Creating a New Nature Market that Works for Farmers. October 2024.
2. Barclays. Agritech – Supporting the Future of Farming. April 2025.
3. For further details on our risk management approach see the Risk Management chapter from page 63.

Managing climate-related risks³

The Food and Agriculture sector faces a range of climate-related risks.

These include shifting consumer preferences (particularly away from emissions-intensive products like red meat and dairy), tightening supply chain requirements, and evolving regulation such as emissions taxation.

Physical risks, driven by extreme weather events becoming increasingly severe and frequent, threaten crop yields and land values, particularly in geographies exposed to drought or flooding.

The scale and nature of these risks vary by client, depending on their activities, location, and position in the value chain. We categorise Agriculture as an "elevated risk sector" for physical risk, with dairy and cattle activities also elevated for transition risks.

The 2024 Internal Stress Test (IST) assessed the impact of physical and transition risks on the Barclays UK Agriculture portfolio. For physical risk, the impact on yields and land valuations was assessed. For transition risk, customer demand was considered. These shocks reduced clients' profits and credit worthiness, but this remained manageable.

The 2024 IST climate scenario included the implementation of a sales tax on all beef, dairy and lamb products, in line with the standard UK VAT rate (20%) with the aim of reducing methane emissions. The stress test highlighted how this tax would translate to a reduction in demand for such products, which would in turn

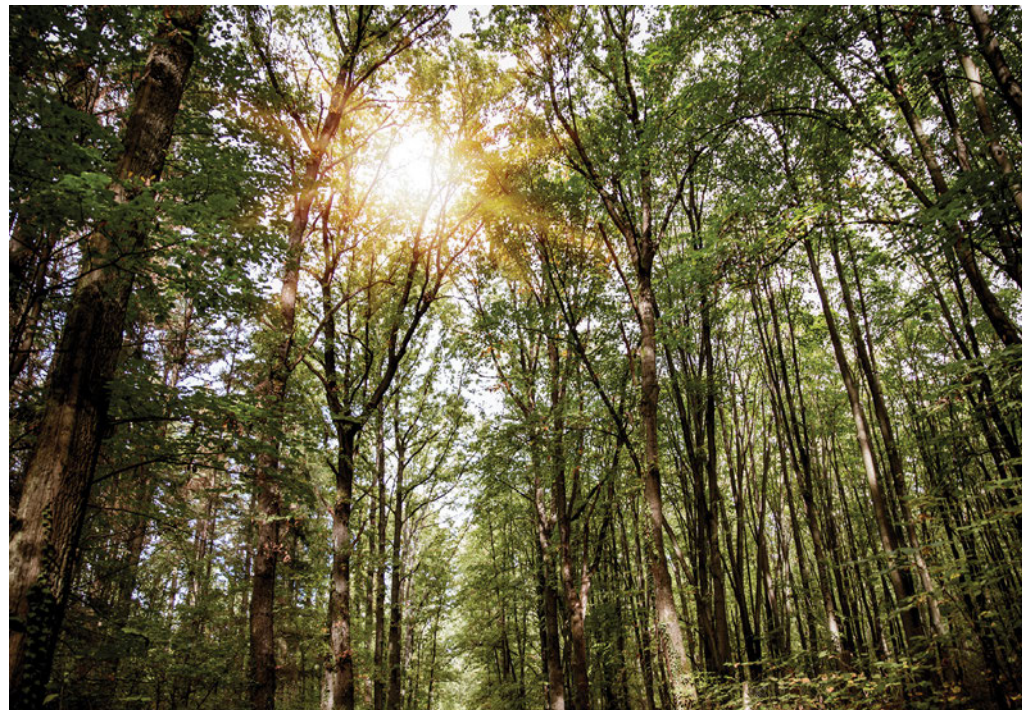
impact the creditworthiness of Barclays' livestock and dairy customers. The scenario also analysed the impact of flood and drought on agricultural clients, noting arable customers are likely to be more significantly impacted with higher devaluations in collateral.

In response to these assessments, Barclays has implemented risk limits and triggers, including those aligned to our financed emissions target for UK Dairy & Livestock, which are monitored regularly.

To better understand these exposures, we conducted an exploratory assessment of our UK agriculture and European food portfolio in

2022-23 using the Taskforce on Nature-related Financial Disclosures' (TNFD) Locate, Evaluate, Assess and Prepare (LEAP) approach, with the results informing our approach to risk assessment.

Agricultural expansion is recognised as a leading driver of global deforestation, particularly in commodities like soy, palm oil, and beef, which are often associated with environmental and social impacts, including climate change, deforestation, biodiversity loss and human rights issues. Our Forestry and Agricultural Commodities Statement outlines our restrictions and due diligence approach for clients involved in these activities.



Real Estate

Investment in innovation and the transition is accelerating across the sector, however some of our residential customers and commercial real estate clients continue to face challenges in their efforts to decarbonise.

With Barclays' breadth of experience across the sector, we are supporting our customers and clients.

Real Estate

The sector and Barclays' focus

The Real Estate sector plays a critical role in both the UK economy and in the lives of Barclays' customers and clients.

For many, a mortgage is their largest financial commitment and a key path to wealth creation and financial independence. More broadly, residential and commercial real estate are fundamental to the UK's economic performance – creating investment opportunities, supporting employment, and enabling social welfare.

The transition is creating new opportunities across the sector: from the growing demand for energy-efficient homes and buildings, to emerging technologies for retrofitting and low-carbon real estate development. Climate change and nature are becoming more prominent considerations by impacting asset valuations, influencing operational performance and related costs, and reshaping investment priorities across both residential and commercial real estate.

As one of the UK's largest mortgage lenders and a major adviser and financier to residential developers, social housing associations and commercial real estate clients, Barclays brings a system-wide perspective to the sector's transition. We are supporting customers and clients with practical tools and financing solutions as they transition. We also recognise the importance of continued access to mortgage products and avoiding unintended exclusion which could have deep societal implications.

A large majority of our portfolio is in the UK, which is where we have focused our efforts to date.

£1.1bn

lent to Green Home Mortgages customers in 2024

\$17bn

of Sustainable and Transition Financing facilitated¹ (2023 and 2024)

16%

of the total capital deployed by Barclays Climate Ventures has been directed to technologies relevant to real estate (2020 - to end of 2024)

Note:

1. Included in our \$1 trillion Sustainable and Transition Finance target by the end of 2030.

Notable transactions



£170m

Sustainability-linked term loan and revolving credit facility

Lender, arranger, hedge counterparty, agent and security agent, sustainability coordinator

October 2024



£400m

Joint bookrunner sustainable notes

February 2025



£250m

Warehouse facility financing commercial and industrial utility scale solar assets

Sole lender and swap counterparty

April 2025

Real Estate continued

Barclays' portfolio and clients

Our Real Estate portfolio covers the full property spectrum.

As Figure 2 shows, the composition of our UK housing portfolio's Energy Performance Certificates (EPCs) are aligned to the national distribution, while our UK commercial real estate portfolio has a higher average EPC rating than the sector.

This supports our view that Barclays' customers and clients are broadly representative of the UK real estate market, including their use of gas boilers for heating and the efficiency of their buildings as measured by EPCs.

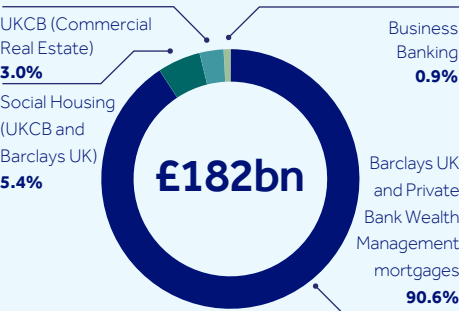
We actively review the EPC composition of our UK housing portfolio to ensure that we meet our EPC mix ambition for 55% of in-scope properties and collateral with a known EPC to be rated band C or better by 2030. Within the UK commercial real estate portfolio, EPC composition is considered at the point of origination to support client engagement on the transition. Across all businesses, we continue to develop products and solutions that incentivise customers and clients to improve the energy efficiency of their properties.

32.5%
Barclays' Real Estate portfolio represents 32.5% of our total financing (as at Dec 2023).

4%
Barclays' Real Estate portfolio represents 4% of our total financed emissions (as at Dec 2023).

Figure 1: Barclays' UK real estate portfolio¹

Lending (£bn) (as at end 2023)



Financed emissions (MtCO₂e) (as at end 2023)

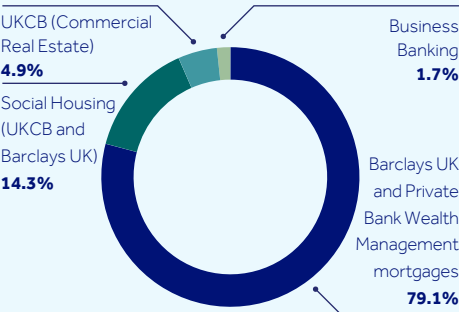
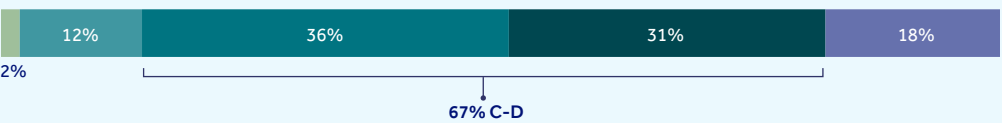


Figure 2: Barclays' clients' EPC ratings, compared to UK average (2024)

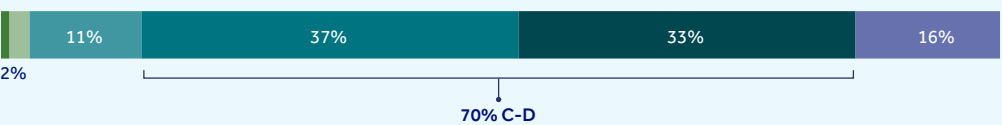
For UK housing and commercial real estate portfolios

UK housing

Barclays' portfolio: EPC rating of Barclays' UK housing portfolio (December 2024)

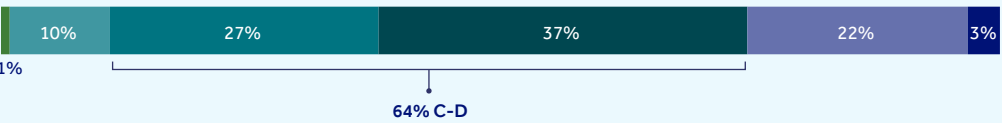


UK market average: EPC rating of residential properties in England and Wales (March 2024)²

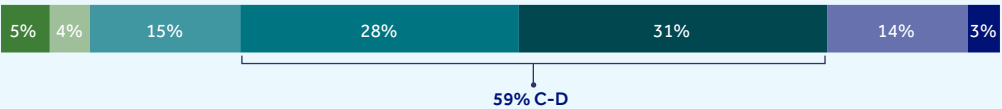


UK commercial real estate

Barclays' portfolio: EPC rating of Barclays' UK commercial real estate portfolio (December 2024)



UK market average: EPC rating of non-residential properties in England and Wales (March 2024)³



Legend: G F E D C B A

Notes:

The EPC ratings for Barclays' portfolio reflect known elements. 43% of the UK commercial real estate portfolio has an unknown EPC rating.

1. Portfolios included are incorporated by the BlueTrack™ methodology.

2. Barclays analysis based on ONS, gov.uk and gov.wales data.

3. Barclays analysis based on gov.uk data.

Real Estate continued

Barclays' portfolio and clients

With deep understanding of our customers and clients, Barclays is well positioned to support them in navigating and overcoming barriers to the transition. Through surveys conducted to support our policy papers and thought leadership, across residential customers, real estate clients and SME tenants, we have identified a number of shared themes and commonalities in their transition journeys.

Informed decision-making

The lack of high-quality sector data hinders the development of targeted solutions, effective measurement of cost, and the ability to monitor and accelerate progress towards climate change and nature goals.

32% of UK homeowner respondents say they do not know enough to understand their home energy efficiency potential¹.

One challenge is that EPC ratings often fail to reflect a building's actual energy use and are based on an outdated methodology and approach. The UK government has recently undertaken a consultation looking to address this.

Deploying new solutions

Among **residential customers** (homeowners) there is mixed awareness of potential solutions to decarbonising homes. We found that while 70% would like their home to be more energy efficient, about one in three (35%) are dissuaded from making efficiency improvements because they don't understand which options are right for their property¹.

For our commercial clients, confidence in the longevity of technology is cited by survey respondents as a key enabler².

Notes:

- https://home.barclays/content/dam/home-barclays/documents/news/Insights/Barclays_Electrifying_the_future_report_FINAL.pdf
- <https://home.barclays/content/dam/home-barclays/documents/news/Insights/Final%20Report%20-%20SMEs%20and%20the%20Built%20Environment.pdf>
- <https://home.barclays/insights-old/2023/07/homeowners-put-off-energy-efficiency-upgrades-due-to-misconception/>
- <https://www.barclayscorporate.com/content/dam/barclayscorporate-com/documents/insights/Industry-expertise-24/Navigating-Sustainable-Retrofit-in-Real-Estate.pdf>
- <https://assets.publishing.service.gov.uk/media/68529d0bff16d05c5e6aa680/warm-homes-social-housing-fund-wave-3-guidance.pdf>

Retrofit return on investment

Residential customers often feel constrained by the perceived cost of home retrofits.

The majority over-estimate the cost of retrofit measures and, as a result, many 'feel anxious' about making their homes more energy efficient³.

Further, perceived value is a common barrier to undertaking home energy efficiency improvements.

This is different for **commercial clients**, where retrofit investment is driven by potential financial opportunity and tenant demand to reduce costs.

Over half (52%) of commercial clients surveyed are already engaged in retrofitting⁴.

Policy support

Residential customers have high expectations of government to help enable widespread action to facilitate the transition, including funding and the provision of support with practical changes.

67% of respondents say the government is responsible for addressing homeowner's energy efficiency¹.

Within their transition plans, **commercial clients** regularly emphasise the need for clearer government guidance on retrofit funding and the role of well-resourced local authorities to deliver support.



For more information on our Client Transition Public Policy Advocacy Analysis see page 6

Additionally, we identified specific priorities of clients in social housing and commercial real estate.

Social housing clients

- The sector faces substantial competing financial pressures, including the delivery of a significant proportion of the new homes the government aims to build over the next five years.
- Under the government's 'Warm Homes Plan', all social housing providers must upgrade their properties to EPC rating 'C' by 2030 for new leases. While 70% of social housing providers are making progress to EPC C, it may be at the expense of developing new energy efficient homes.

Approximately one-quarter of social homes, around 1.2m, are rated D or below⁵.

- The sector is advocating for planning reform, notably to the green belt, as the housebuilding industry and the government consider how to balance environmental protection with the need to deliver net-zero housing supply.
- Social housing clients place particular emphasis on government grants, incentives and innovative funding solutions for retrofitting and pioneering house building.

Commercial real estate clients

Key sustainability priorities in investment plans include:

- Resource management, including energy and waste management and the use of more sustainable materials.
- Heavy investment in renewable energy and moving away from fossil fuel sources.
- Transport, including the role of low-emission fleets and EV charging to decarbonise their operations.
- Delivering a positive biodiversity impact through their development and refurbishment activities, meeting Biodiversity Net Gain regulatory requirements.

Real Estate continued

We are taking action to address the priorities of our customers and clients across the sector, with consideration for their different contexts.

We see commercial opportunity in the sector's transition as we are actively supporting customers and clients by deploying tailored and traditional products and propositions, convening key players, and developing thought leadership and policy papers.

Working with clients on their transition

Supporting customers and clients to improve the energy efficiency and climate resilience of UK real estate is a priority for Barclays.

Through dedicated research and engagement, Barclays shares insights to help our customers and clients navigate a fast-evolving regulatory and market landscape. We listen closely to our customers and clients to ensure that we understand the real-world issues they face and have developed a range of financing solutions and tools to help them.

Barclays supports collaboration across industry and advocacy groups, from established sector bodies to focused organisations including Project Perseus, led by Icebreaker One, seeking to help improve the availability and quality of emissions data.

Transition impact and risks

To best support our customers and clients, it is essential that we understand how climate-related factors, including transition and physical risk, impact them. Further details on how we assess these risks is available on page 43.

The sector both impacts and depends on nature, particularly through construction and development which can drive land conversion and habitat loss. As the climate transition advances, ecosystem services connected to

water availability and temperature regulation will become increasingly critical.

These nature-related impacts and dependencies expose the sector to both transition and physical risks. For example, biodiversity loss from land conversion is now subject to regulation, such as England's Biodiversity Net Gain (BNG) requirements. To help our Corporate Banking clients meet these obligations, we are facilitating access to the Environment Bank, a first-of-its-kind arrangement in the nature market.

We also recognise the social risks to our customers, clients and communities of a slow transition including access to energy-efficient buildings, affordability challenges in implementing retrofit, data gaps that hinder informed decision-making, and the rise of stranded assets that may compromise communities' access to essential goods and services. We are helping to address these risks and deepening our customers' and clients' understanding of the costs and benefits of the transition by improving access to data, offering longer term lending for retrofit in social housing – accelerated through our partnership with the National Wealth Fund – and incentivising sustainability-aligned behaviours through dedicated products.



Residential customers

Barclays has developed a suite of partnerships to provide practical advice, offers, and tools to help customers plan and implement energy efficiency upgrades, such as:

- Partnering with Energy Saving Trust to provide customers access to their Home Energy Tool, offering a free way to calculate the energy efficiency of their homes and to provide personalised improvement recommendations.
- Energy-saving offers that provide our customers with tailored solutions and advice, such as discounted Hive Thermostats.

Real Estate continued

Working with clients on their transition continued

In a recent policy paper, Barclays made recommendations detailing how UK government action can drive real impact through a holistic approach that can engage key industry players and help motivate consumers to advance home energy efficiency efforts.

→ <https://home.barclays/insights/2024/11/Boosting-the-energy-efficiency-of-UK-homes/>

Social housing and commercial real estate clients

We tailor our support and engagement to each commercial client's approach, recognising that they are at different stages of integrating transition considerations into their business strategies.

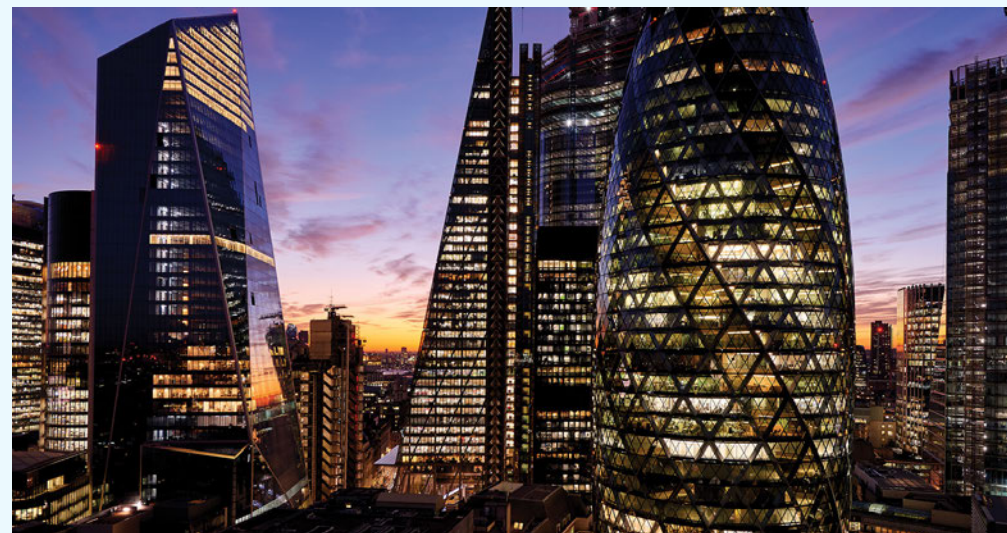
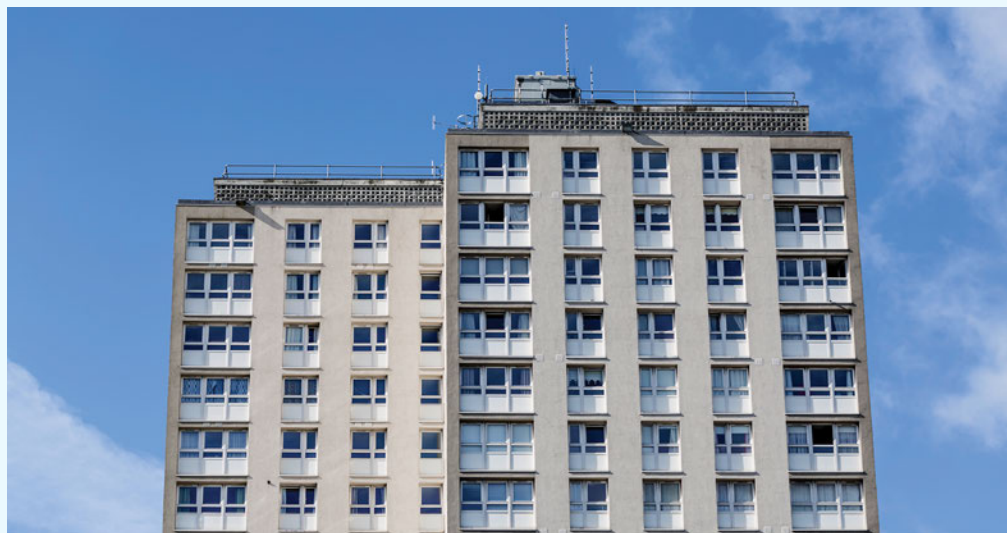
For example, our EPC dashboard helps us to provide our commercial clients with an understanding of potential energy savings that can be made from improvements.

Barclays made recommendations to the UK government outlining how public policy can be used to incentivise SMEs and commercial property owners to invest in energy efficiency improvements to their business premises. The paper recognises the challenges created by the split incentive between the party that pays for energy-efficient retrofit (landlord) and the receiver of benefits (tenants), as well as the critical role SME-owned property has in decarbonisation.

These recommendations are echoed in the Willow Report, co-chaired by Barclays.

→ <https://home.barclays/insights/2025/02/Incentivising-investment-in-the-energy-efficiency-of-SME-business-premises/>

We are currently adapting our Client Transition Framework for our UK Commercial Real Estate portfolio to assess the transition plans of all public companies and clients with material borrowings. This will provide deeper insights on the ambition and feasibility of our clients' transition strategies, helping us to work with them in identifying transition opportunities and managing risks.



Real Estate continued

Financing customer and clients' transitions

As demand for more efficient, lower emission buildings grows, Barclays is providing a growing suite of sustainable and green financing solutions and products, complementing traditional offerings for the sector.

Residential customers

Our products include the Greener Home Reward, available to retail customers in the UK, which offers eligible Barclays residential mortgage customers help with the costs of selected home energy efficiency-related improvements.

Our Green Home Mortgage, available to retail customers in the UK, incentivises the purchase of highly energy-efficient new build properties by providing a lower mortgage rate.

£2,000

The Greener Home Reward, which offers eligible Barclays residential mortgage customers up to £2,000 to help make eligible energy efficiency-related measures in their homes.

Case study: Croudace Homes Group

Supporting clients with sustainability-linked loans



Barclays closed a refinance of an existing credit facility into a sustainability-linked revolving credit facility with family-owned housebuilder Croudace Homes Group. The transaction developed three performance targets as part of the agreement, each tied to key aspects of the Group's transition: Scopes 1 and 2 emissions intensity, waste intensity and embodied carbon. These new KPIs are aimed at helping Croudace to realise its sustainability goals and continue to build homes that are zero carbon ready, and sustainable.

croudacehomes.co.uk

croudacehomes

Social housing and commercial real estate clients

We leverage our deep understanding of client needs to develop bespoke financing solutions, from adapting lending structures through to sustainability-linked and green loans. Since the beginning of 2023, we have facilitated \$17.2bn in Sustainable and Transition Financing to commercial real estate and social housing clients. Of this, \$7.5bn has been to clients in the UK.

Barclays has partnered with the National Wealth Fund, providing up to £500m of sustainable lending to deliver quality decarbonisation improvements across social housing. In May 2025, Barclays delivered the first loan to market with VIVID, a leading provider of affordable homes in the South of England.

[Find out more here.](#)

Our Sustainable Residential Development Framework supports Barclays Corporate Bank clients in the UK with embedding sustainability characteristics into their development projects. It rewards ambitious developments with a margin benefit based on a 28-point scoring system, which includes standout criteria such as strong biodiversity net gain and mandatory water efficiency.

Our Green Loan for Business, available to Barclays Business Banking clients in the UK, provides a discounted interest rate to fund eligible green assets, which includes retrofitting and our Green Eligibility Guidance provides a framework to help clients understand which assets are eligible for our green loans.

Case study: Bartlett Business Park

Scaling solar power



Bartlett Business Park is a former fresh produce facility that closed in 2021. It was later redeveloped to provide 16 individual units to let. The site provides secure, modern facilities for a wide range of businesses. Its focus then moved to sustainability, with the installation of solar photovoltaics to supply energy to tenants and provide surplus back to the grid.

To support the £1m required to fund the project, Bartlett Business Park worked with the Barclays team to approve a loan within two weeks of application allowing the business to place the order with the supplier and align the project to utilise its annual investment allowance.

www.bartlettbusinesspark.co.uk

**BARTLETT
BUSINESS
PARK**

Real Estate continued

Scaling climate technology

Technological innovation will play a critical role in reducing emissions and improving building performance.

We actively support early-stage companies through Barclays Climate Ventures, and accelerate promising technologies via our Unreasonable Impact programme and targeted client engagement.

We have learnt key lessons from investments that are scaling climate tech in this sector, including:

- Adoption is often held back by market inertia derived from a lack of clear demand signals, payback uncertainty and an ecosystem that supports the scaled technology.
- Potential opportunities in this sector involve retrofitting solutions or demand reduction technologies which can be integrated with building systems and/or enhance user experiences.
- Climate tech founders are also considering implications for social improvement, such as air quality or heat poverty.

Barclays is working with clients, industry bodies and policymakers to share these insights and support the development of a more enabling environment to fully unlock the potential from new technologies.

Through Barclays Climate Ventures, we have supported six companies in the real estate sector, two of which are specifically focused on improving energy efficiency in the sector: **LuxWall** and **HT Materials Science**.

Through our Unreasonable Impact programme we have also supported:

- **Carbon Lighthouse**, a software platform turning energy performance data for buildings into rebates and therefore income for commercial real estate owners in any lease type.
- **Dandelion**, working with US home builders to build geothermal heating and cooling in large-scale new residential developments, providing on-site renewable energy.
- **Aeroseal**, developing a technology which injects a fog of aerosolised sealant particles into pressurised spaces to seal leaks in Heating, Ventilation and Air Conditioning ('HVAC') ducts, improving energy efficiency in buildings.

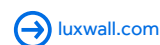
Case study: LuxWall

Investing in new ways to reduce heat loss



The company's vacuum insulated glass, Enthermal™, is up to five times more insulating than double-paned glass, can be retrofitted into existing window frames and reduces building heating costs by up to 45%.

Barclays Climate Ventures invested in LuxWall in 2024. The investment will enable the company to scale up production at their existing factory, build a second facility, and scale research and development.

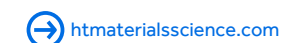


Case study: HT Materials Science

Supporting innovation to make clean heat easier and more efficient

The company has developed an innovative heat transfer fluid that improves the efficiency of commercial buildings' heating and cooling systems, reducing overall energy consumption by up to 15% as a result.

Barclays Climate Ventures invested in HT Materials Science in 2023.



15%

HT Materials Science's innovations reduce overall energy consumption of commercial buildings by up to 15%



Real Estate continued

Barclays' targets and progress

We started tracking mortgage lending financed emissions intensity in this sector in 2022. In 2023, this scope was expanded to encompass the UK Housing portfolio. That same year, we also initiated emissions intensity tracking for our UK Commercial Real Estate portfolio.

Shifting our UK Housing portfolio to more energy efficient properties could make it harder for customers to access a mortgage, and this, combined with external dependencies and reliance on policy interventions, could result in potential unintended negative consequences for our customers. For customers who are not considered 'able-to-pay' for retrofit work, this could have a more acute impact, potentially creating mortgage prisoners or a more unequal transition. We have therefore decided not to set a target for this portfolio. Instead, we identified a 'convergence point' which is the decarbonisation required to align with a 1.5°C trajectory, representing a 40% reduction in the intensity of our financed emissions by the end of 2030 when compared to 2023. We report against this convergence point for transparency.

Our UK Housing portfolio's emissions intensity decreased by 1% during 2024, and we made strong progress against our EPC ambition for 55% of in-scope properties and collateral with a known EPC to be rated band C or better by 2030, achieving 49.7% by the end of 2024.

For our UK Commercial Real Estate portfolio, we set a target to reduce the intensity of our financed emissions by 51% to align with a 1.5°C pathway between 2023 and 2030.

Our UK Commercial Real Estate portfolio emissions intensity decreased by 2% from our 2023 baseline. This is against a backdrop of a 5% increase in new lending in our portfolio in 2024, reflecting that the new lending was orientated towards better EPC rated properties.

Significant barriers in the real economy² could have an adverse impact on our ability to meet our 2030 convergence point for our UK Housing portfolio and our 2030 target for our UK Commercial Real Estate portfolio.

Figure 3: UK Housing¹

Physical Intensity (kgCO₂e/m²)
(Indexed December 2023 = 100)

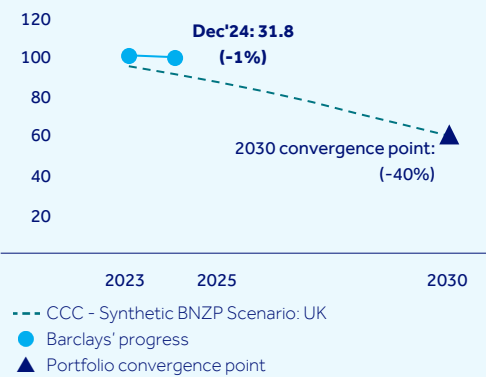
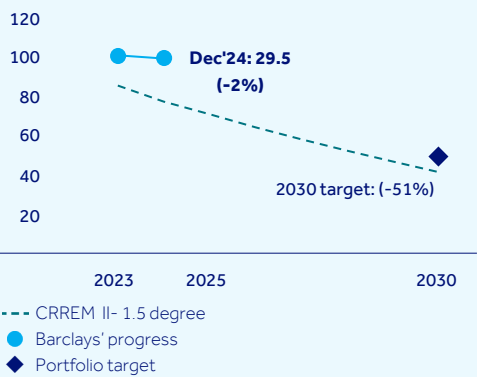


Figure 4: UK Commercial Real Estate¹

Physical Intensity (kgCO₂e/m²)
(Indexed December 2023 = 100)



Notes:
1. Barclays, 2024 Annual Report (2025).
2. The Seventh Carbon Budget, Climate Change Committee.

Real Estate continued

Managing climate-related risks¹

The real estate sector is vulnerable to a range of transition and physical risks which have the potential to impact the credit quality of our clients.

In terms of transition risk, the sector could be impacted by tightening energy efficiency standards (such as the Minimum Energy Efficiency Standards in the UK) and by increasing preference from buyers or tenants for higher energy efficiency properties. This could impact property values, rental income and customer affordability.

The vulnerability of a property to the physical risks of climate change is dependent on location and the specific characteristics of the property itself. In the UK, for example, the most prevalent physical risks are flooding and subsidence. These could cause direct damage and lead to higher insurance premiums, as well as impact the desirability of properties and their valuations.

Whilst Figure 5 shows that there are areas of high flood risk concentration, Flood Re (a government subsidised flood insurance scheme) aims to make flood cover more affordable for homeowners (subject to certain qualifying criteria) helping Barclays support the UK mortgage market whilst managing its risk exposure.

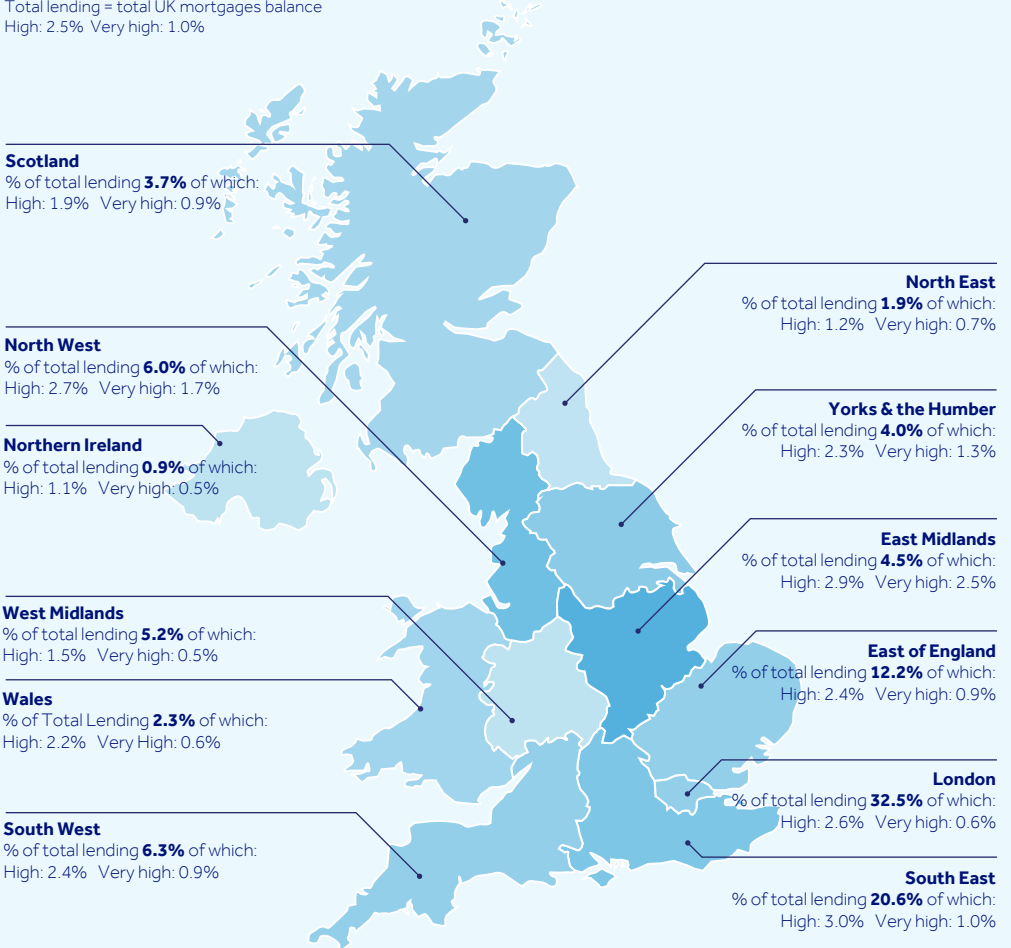
We assess those risks as part of our climate-aware Internal Stress Test, which showed a muted impact of physical risk given the loan-to-value profile of the portfolio and the insurance coverage.

We have also performed analysis on the impact of loss of insurance. The transition risk impact seen in the stress test was material, but it remains manageable given the energy efficiency of the portfolio (measured via Energy Performance Certificates) and the loan-to-value profile. The availability and quality of data to perform such analysis are a particular challenge, with a routine use of proxies.

We have implemented risk limits across different segments of the Real Estate portfolio to help us avoid adverse concentrations of high-risk properties.

Figure 5: Very high and high flood risk exposure per region
% of total UK lending

Darker shades indicate a higher proportion of high or very high flood risk exposure
High and Very High Flood Risk are shown as % of regional exposure
Total lending = total UK mortgages balance
High: 2.5% Very high: 1.0%



The map represents the proportion of properties within the UK Mortgages portfolio at High and Very High risk of flood per region as a percentage of the total regional exposure (excluding Kensington Mortgage Company originated properties)

Note: Data collected from third party source based on one quarter lag. 30 September 2024 closest available dataset.

Note:
1. For further details on our risk management approach see the Risk Management chapter from page 63.

Industrials

The high levels of energy used in many industrial processes creates a particular challenge for decarbonisation, and Barclays is working with clients across industries to provide the financing, products, and advice they need.

Industrials continued

The sector and Barclays' focus

Our Industrials portfolio spans multiple foundational sectors of the modern economy including Automotive manufacturing, Aviation, Cement, Mining and Steel; these sectors are the focus of this update.

Though these sectors produce different outputs they share common challenges: all are energy intensive and face uncertainties in how to make the transition to a low-carbon economy. Their ability to successfully decarbonise depends heavily on the Energy and Power sectors scaling affordable, reliable, and low-carbon energy solutions.

As a major source of emissions today, the industrial sectors' transition will be essential to achieving net zero. Yet they remain indispensable, providing essential inputs, enabling transportation of people and goods, and supplying the construction materials needed for cities and infrastructure: making them critical to other sectors' transitions as well.

Across industrial sectors, Barclays is a trusted partner to our clients. We deeply understand their unique businesses, needs, and the strategic decisions they face. By providing tailored advisory services, delivering comprehensive financial solutions including financing for sustainable and transition-aligned activities, and scaling the adoption of innovative climate tech, we help enable clients to navigate the transition to a low-carbon economy.

The capital requirements of the industrial sectors' transition is significant; in the Steel sector alone, \$1.3 trillion will be needed between 2026 and 2030 to decarbonise in line with 1.5°C¹. This presents a significant commercial opportunity for Barclays.

Our experience supporting clients across different areas of the Industrials portfolio, as well as in highly interrelated sectors such as Energy and Power, positions us well to support clients and take advantage of the transition opportunities presented.

Figure 1: Barclays' Industrials lending portfolio by sector (as at end 2023)

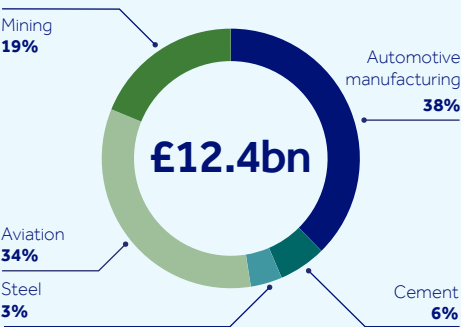


Figure 2: Barclays' Industrials lending portfolio by region (as at end 2023)
Based on clients' headquarters

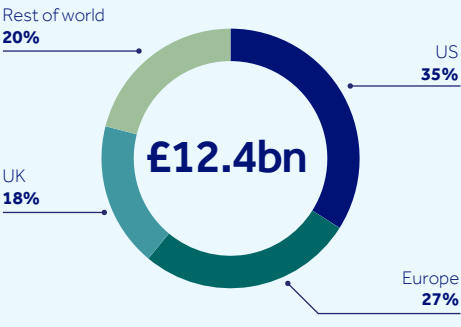
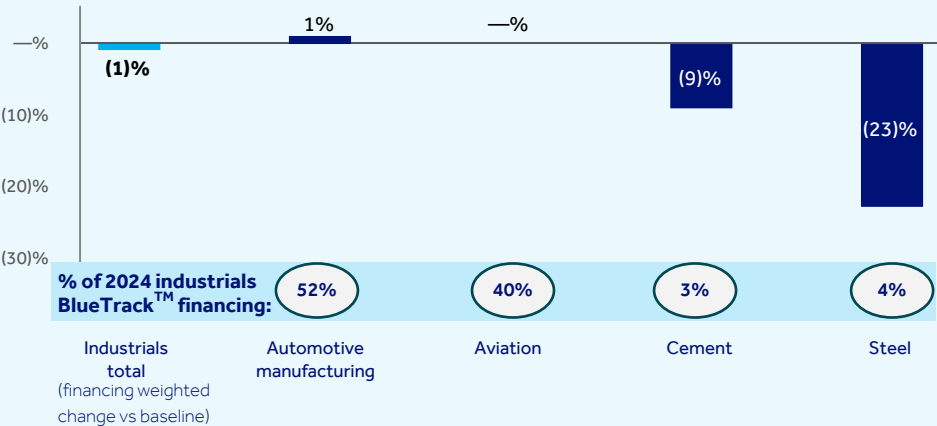


Figure 3: Industrials sector percentage change in financed emissions through December 2024 vs baseline (varies per sector)

Across the four sectors in our industrials portfolio with financed emissions targets, we have reduced our weighted financed emissions intensity by: -1%



Notes:

1. Mission Possible Partnership, Making Net-Zero Steel Possible: An industry-backed, 1.5C-aligned transition strategy (2022).
2. Throughout this chapter, we present information on clients' transition plans, reflecting the different metrics which can be used to track progress. This approach allows us to highlight various relevant aspects of transition planning for each sector.

Industrials continued

From our Client Transition Public Policy Advocacy Analysis we have identified a number of common decarbonisation themes that our industrial clients are focused on:



Scaling renewable energy

As heavy consumers of electricity, decarbonising the grid is key: clients identified a need for increasing renewable energy sources, supported by well-functioning electricity markets and policy support for electrification.

Our Steel sector clients all raised the issue and highlighted the role that policy can play in supporting this. Mining sector clients also advocated for a decarbonised grid.



Developing and deploying new solutions

In particular, clients are focused on hydrogen and carbon capture, utilisation and storage (CCUS). As a supplement or potential alternative to expanding battery EV adoption, automotive manufacturers have focused on hydrogen powered fuel cells.

In Aviation, clients stressed the importance of incentives being technology-neutral to support the scale-up of a broad range of solutions.



Carbon pricing mechanisms

Ensuring a level playing field with, for example, carbon border adjustment mechanisms can help address carbon leakage and competitiveness risks.

Over half of our Cement sector clients highlight the role carbon pricing can play in creating incentives to invest in low-carbon technologies and infrastructure.

Findings from our Client Transition Public Policy Advocacy Analysis

Automotive manufacturing

Two-thirds of clients highlighted the need for support for consumer adoption of electric vehicles (EVs), including charging infrastructure, consumer rebates and tax incentives.

Supply chain resilience and responsible sourcing, including battery cell recycling and critical minerals supply, was highlighted by half of clients.

Aviation

Sustainable aviation fuel (SAF) is a key decarbonisation lever for Aviation clients, though cost and the complexities of production create significant barriers to widespread adoption.

Air traffic control modernisation, improving infrastructure, and funding new technology could deliver greater flight efficiency, as well as reducing non-CO₂ environmental impacts such as noise and pollution.

Cement

Cement clients raised the need for a circular economy and waste reduction, supported by lifecycle thinking throughout the value-chain, and material-neutral building regulations.

Clients called out the role of consistent and standardised frameworks and standards to incentivise new markets for sustainable building solutions and support competitiveness.

Mining

Clients highlighted the importance of incentives to drive uptake of lower-carbon technologies, and of carbon pricing as a key tool in addressing emissions.

Steel

All Steel clients highlighted the role of reducing waste and managing water resources in their sustainability strategies.

➔ Further detail on Barclays' Client Transition Public Policy Advocacy Analysis can be found on page 6.

Industrials continued

We are actively working with clients on their strategic goals and transition financing needs, placing a special focus on the areas they have identified as priorities, such as scaling-up renewable energy and deployment of new solutions like CCUS and hydrogen.

Through our product and coverage teams, we seek to understand clients' transition needs and the solutions that best match their business, as well as where we believe we are best placed to support their plans, including through underwriting, credit facilities, and general-purpose financing.

Working with clients on their transition

In sectors where we have set financed emissions targets, we use our Client Transition Framework (CTF) to assess clients' progress and plans which helps us better understand their challenges, and the opportunities to support them. Clients' CTF scores will need to be considered against the backdrop of evolving market dynamics and developments in the policy landscape, which may limit or accelerate the expected pace of progress.

The industrial sector's transition relies heavily on the decarbonisation of the energy and power sectors, as well as the development of climate tech and solutions which are not necessarily specific to the industrial sector.

We are exploring ways to support clients who are investing in technologies required for these energy intensive sectors, including CCUS and SAF. This includes understanding clients' SAF and renewable fuel production plans and identifying opportunities to help support these efforts.

In Aviation, we are also building on our relationships with airlines and co-branded credit card partners to launch new digital tools that will enable cardholders to track their carbon footprints as well as donate to carbon reduction initiatives.

In Mining, we are planning to leverage our CTF to better understand our clients' transition journeys and how best we can support them. We plan to apply nature questions through the CTF for the Mining and Automotive manufacturing sectors in 2025.

We conducted a preliminary assessment of nature-related impacts and dependencies for the Industrial sector, and a deeper review of our Mining portfolio using the TNFD's LEAP approach. The results are informing a pilot engagement with select clients to discuss indicative findings (see page 54).

Our clients' transitions help to inform Barclays' own policy advocacy positions. We continue to carry out policy work in many of the areas they have identified.

For example, carbon pricing has been an issue highlighted by clients across our Industrials portfolio. We have published a recommendation for how to integrate emission removals into the UK's Emissions Trading Scheme².

Barclays has played an active role in supporting public policy and financing to help enable the scaling of climate tech, a cross-sector priority for our clients, including publishing recommendations for how the UK Government could support scaling climate tech, including increasing access to finance and skills³.

On CCUS, we are looking at where policy could support increased private investment. We have also published recommendations on how policy could support the scale-up of private finance to deliver clean hydrogen⁴.

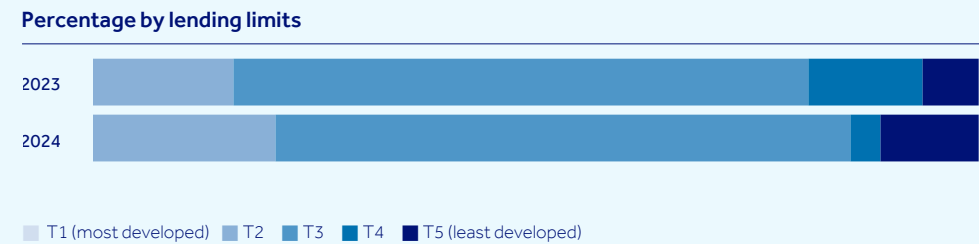
Events and research

Barclays delivers an integrated blend of thematic research, market forecasts, and bespoke analyst access anchored by major events like the 42nd Annual Industrial Select Conference. This flagship gathering brings together senior executives, spanning aerospace, defence, smart infrastructure, and manufacturing for in-depth dialogue and live engagement.

We also produce thought leadership, covering macro trends like AI adoption and sustainability, alongside granular company-level analysis.

Together, these offerings help support our clients with real-time insights and a confident, future-focused perspective across the industrials landscape.

Figure 4: Industrials portfolio¹ CTF scores



Notes:

- Scores are grouped by total applicable lending limits of in-scope clients; Excluding Mining sector.
- <https://home.barclays/content/dam/home-barclays/documents/citizenship/our-reporting-and-policy-positions/public-policy/UK%20ETS%20Authority%20Consultation%20on%20Integrating%20GGRs%20Executive%20Summary.pdf>
- <https://home.barclays/content/dam/home-barclays/documents/citizenship/Sustainability/2024-Climate-Tech-Report-FINAL.pdf>
- https://home.barclays/content/dam/home-barclays/documents/news/Insights/Barclays_Hydrogen_Policy_Paper.pdf

Industrials continued

Financing clients' transition

We help support our clients' transition offering financial products and solutions including those which contribute towards our target to facilitate \$1 trillion of Sustainable and Transition Finance between 2023 and the end of 2030.

Our Sustainable and Transition Finance Framework clearly defines eligibility criteria across both sector-specific initiatives and cross-sector activities.

We also intend to include more nature-related activities and technologies in our Sustainable and Transition Finance Framework. More detail on both our Sustainable and Transition Finance Framework, including excluded activities, can be found on our website.

	Activities included in our Sustainable Finance Framework	Activities included in our Transition Finance Framework
Cross-sector	<ul style="list-style-type: none">Green hydrogen production.Upgrades and improvements to industrial and manufacturing processes that are proven to increase energy efficiency.	<ul style="list-style-type: none">Research and development of carbon capture utilisation and storage (CCUS), including in the transportation and storage infrastructure.Production and distribution of blue hydrogen.Production and distribution of low carbon fuels.
Automotive manufacturing	<ul style="list-style-type: none">Manufacturing lithium batteries.Deploying EV charging infrastructure.	<ul style="list-style-type: none">Production of full hybrid or plug-in hybrid vehicles.
Aviation	<ul style="list-style-type: none">Some sectors are not eligible for sustainable financing due to their current emissions profile; instead, they may qualify for transition finance.	<ul style="list-style-type: none">Improvements for existing infrastructure and airplanes, e.g. to enable SAF usage and efficiency improvements in terminals.
Cement		<ul style="list-style-type: none">Electrification of equipment, e.g. electric kilns and ancillary equipment.
Mining		<ul style="list-style-type: none">Mining of critical minerals for use in energy transition technologies.
Steel		<ul style="list-style-type: none">Electric arc furnace expansion.

Case studies: Volkswagen

Financing electrification



In June 2024, Barclays acted as joint bookrunner on Volkswagen Financial Services AG's €2.25 billion triple tranche green bond issuance, supporting the company's ambition to accelerate the transition to sustainable mobility.

Proceeds from the issuance are exclusively allocated to financing or refinancing zero-tailpipe emission vehicles, such as battery electric vehicles (BEVs), with strict exclusions for internal combustion engine vehicles, including plug-in hybrids.

The transaction reflects VW FS AG's strategic role in supporting the Volkswagen Group's broader "NEW AUTO" vision and its goal to achieve 80% BEV penetration in key markets by 2030. It also marks a significant step in the company's commitment to climate action, with robust governance, ESG risk management, and transparent reporting practices underpinning the framework.



Case studies: London Gatwick

Linking bonds to emissions reductions

London Gatwick Airport (LGW), the second largest airport in the UK and the eighth largest in Europe, made its debut in the EUR market in October 2024 with an inaugural €750 million nine-year Sustainability Linked Bond with Barclays acting as joint bookrunner on the deal.

The bond showcased LGW's commitment to reducing its direct and indirect carbon dioxide emissions to the investor community, including its target to become a net-zero airport across Scope 1 and Scope 2 greenhouse gas emissions by 2030.



Industrials continued

Scaling climate tech

Developing and deploying new climate tech is a priority for clients in our Industrials portfolio, though challenges remain.

To achieve adoption at scale, technologies should aim to seamlessly integrate into existing industrial operations, with minimal disruption or downtime. Success requires coordination across entire value chains, as single-point solutions often fail due to complex distribution networks. In commoditised markets, pricing remains the primary driver of adoption, with limited evidence supporting premium pricing for green alternatives.

Industrial equipment typically has decades-long lifespans, and early decommissioning can carry substantial financial costs. This extended lifecycle, combined with the necessity to maximise return on existing assets, creates significant barriers to implementing new industrial processes, regardless of their environmental benefits.

Barclays is well positioned to support critical climate tech through our broad industrial client base, deep experience across the full energy value chain, and track record in supporting innovative solutions that align with market economics and operational realities.

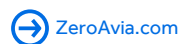
A number of these climate tech companies are also working to address the sector's nature impacts.

Industrial companies in Barclays Climate Ventures portfolio include:

Investing in hydrogen-electric engines

ZeroAvia develops hydrogen-powered electric powertrains for aircraft, aiming to replace jet fuel and offer a cleaner, affordable alternative to SAF. ZeroAvia's initial focus is on engines for aircraft with up to 80 seats, most suitable for regional flights, with plans to scale its hydrogen-electric powertrains for larger aircraft.

Barclays Climate Ventures first invested in ZeroAvia in 2022, and then went on to co-lead the company's Series C funding round in 2023, helping to raise \$150 million.



ZEROAVIA

Sunswap offers a fully electric alternative to diesel-powered transport refrigeration units, helping the logistics industry reduce its emissions.



Protium is a full value chain green hydrogen energy provider engaged in developing, owning and operating green hydrogen infrastructure.



Terra CO₂ is decarbonising concrete through proprietary cement replacement technology. Terra produces high-performance, low-carbon supplementary cementitious materials that integrate seamlessly into existing concrete operations.



Investing in battery innovation

Echion's XNO® niobium-based anode material enables lithium-ion (Li-ion) batteries for heavy duty vehicles to safely fast charge in less than ten minutes, maintain high energy densities even at extreme temperatures, and deliver high power across more than 10,000 cycles.

The company recently opened the world's largest niobium-based anode production facility, capable of producing 2,000 tonnes per year of XNO®, equivalent to 1 GWh of Li-ion cells.

Barclays Climate Ventures invested in Echion in 2024. The investment will enable the company to accelerate the speed at which its network of partnered cell manufacturers is able to produce commercially available cells which utilise Echion's innovative niobium-based XNO® anode material.



Industrials continued

Scaling climate tech continued

Alumni of our Unreasonable Impact programme that are supporting the Industrials sector

A new approach to Portland cement



Seeking to replace carbon-intensive limestone, **Brimstone** has developed an efficient, economical process to produce Portland cement using an abundant and carbon-free feedstock.

Brimstone cement is chemically and physically identical to conventional Portland cement, with the same quality and performance required by builders.



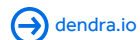
BRIMSTONE

Using data mapping to support environmental restoration

Working with over 30 of the world's largest mining companies in Australia, **Dendra Systems** provides ecosystem insights through the digitalisation of biodiversity and land-management to support environmental restoration.

Their offer combines ultra-high resolution remote data collection and monitoring with a purpose-built AI platform to help environmental teams streamline their work, ensure regulatory compliance, and achieve carbon reduction targets across land and coastal projects.

Dendra Systems also took part in the Unreasonable Impact World Forum.



dendra
SYSTEMS

Carbon capture innovation

Ardent Process Technologies has developed membranes that can be added to existing flue stacks to capture carbon from petrochemical plants and hard-to-abate sectors.

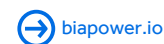
Their durable membrane technology captures CO₂ with lower energy than existing separation technologies on the market, and unlike many other carbon capture solutions, can tolerate the contaminants that are endemic to the steelmaking process.

In 2024, across all sectors, their products processed almost half a tonne of CO₂ emissions.



Ardent

Bia develops smart charging software optimising power flows to significantly reduce costs.

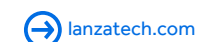


BIA
UK BioIndustry Association

Charger Help's technology enables more efficient and effective servicing of electric vehicle charging stations across the US, increasing their reliability.



LanzaTech uses a proprietary process to convert carbon monoxide and carbon dioxide emissions into ethanol. This can then be transformed into aviation fuel or polyethylene.



LanzaTech

H3 Dynamics is bringing together hydrogen, autonomous systems, and AI as the building blocks for the future of aviation. It announced the world's first hydrogen electric propulsion nacelle (a modular powertrain) for aircraft, which avoids storing hydrogen in the fuselage.



H³Dynamics

Industrials continued

Automotive manufacturing



Barclays' portfolio and clients

Electric vehicles (EVs) offer the potential for cheaper, and more sustainable transportation, but the sector's transition hinges on widespread adoption. This transformation requires substantial capital investment, with global estimates of c. \$3-\$5 trillion annually¹ for EVs and EV chargers.

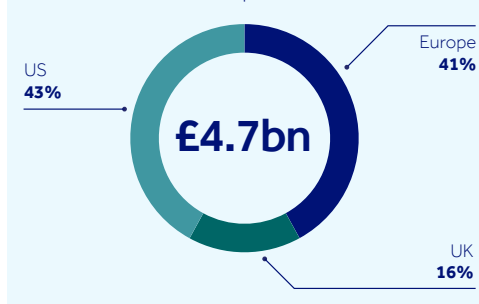
This presents a significant opportunity to support our clients with their financing needs. However, sales of new EVs are falling short of expectations as, for many consumers, they are currently more expensive than traditional internal combustion engine (ICE) vehicles. Demand is further dampened by concerns over insufficient public charging infrastructure.

We provide holistic support to the automotive sector by working with:

- Traditional ICE manufacturers and EV-only producers;
- Power clients to decarbonise the grid; and
- Mining clients to increase the supply of critical minerals required for EVs.

Our Automotive manufacturing lending portfolio is primarily to US and European based manufacturers. As of 2023, this represents 0.8% of our total lending and 0.3% of our total financed emissions.

Figure 5: Barclays' Automotive manufacturing lending by region (as at end 2023)
Based on clients' headquarters



Of those clients included in our financed emissions metrics, nearly all have set decarbonisation targets and developed transition plans.

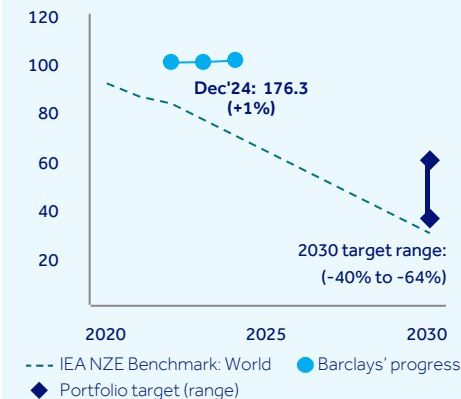
Barclays' targets and progress

In addition to the continued support of the sector, we also have a target to reduce the intensity of our financed emissions by between 40% and 64% by the end of 2030, with the greatest level of reduction aligned with a 1.5°C trajectory.

At the end of 2024, our financed emissions intensity was 1% higher compared to the 2022 baseline, primarily driven by increases to the emissions factors used in our metric partially offset by changes in our financing portfolio.

Figure 6: Automotive manufacturing²

Physical Intensity (gCO₂e/km)³
(Indexed December 2022 = 100)



Managing climate-related risk⁴

Transition risks to automotive manufacturing stem from potential misalignment of capital expenditure required for the electric vehicle transition with future consumer demand.

Clients face evolving regulations and consumer preferences.

The sector's high reliance on fixed plants and assets creates physical risks.

In our latest climate-aware Internal stress test, automotive manufacturing showed broad resilience to transition risk as firms grow EV sales.

Our lending process incorporates climate risk scorecards for material clients.

We classify many activities in this sector as facing 'elevated climate risk' track BlueTrack™ progress, and maintain sector-specific risk limits and triggers.

We have completed a preliminary nature-related impacts and dependencies assessment of the automotive manufacturing sector's transition drivers, and are now conducting a deep dive based on the Taskforce on Nature-related Financial Disclosures' (TNFD) Locate, Evaluate, Assess and Prepare (LEAP) approach.

Notes:

1. BNEF, New Energy Outlook 2025.
2. Barclays, 2024 Barclays PLC Annual Report (2025).
3. Physical intensity (CO₂e emissions per v-km travelled by LDV produced), expressed in gCO₂e/km.
4. For further details on our risk management approach see the Risk Management chapter from page 63.

Industrials continued

Aviation



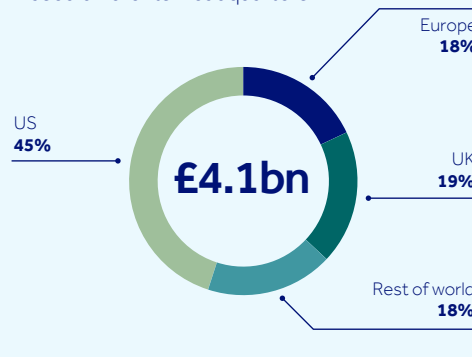
Barclays' portfolio and clients

Aviation currently accounts for 2-3% of global CO₂ emissions¹. Its transition is highly dependent on external factors, particularly the development of sustainable aviation fuels (SAF).

SAF production and distribution will be highly capital intensive – it is estimated that \$5.1 trillion¹ will be required by 2050 if the sector is to transition in line with a pathway to 1.5°C – presenting a potentially significant commercial opportunity, however, development faces a range of challenges, as well as nature-related impacts and dependencies.

Our Aviation lending portfolio includes global passenger airlines, airports and a limited number of air cargo airlines. As of 2023, this represents 0.7% of our total lending and 6.1% of our total financed emissions.

Figure 7: Barclays' Aviation lending by region (as at end 2023)
Based on clients' headquarters



Our airlines portfolio, excluding airports, has a lower emissions-intensity than the sector average, reflecting the more fuel-efficient fleets of our passenger airline clients and the greater overall efficiency of air cargo.

After reviewing, we have identified that the majority of our airline financing (around 75%) is to clients who have set short- to medium-term emissions reductions targets and strategies.

Our focus is on supporting our clients with their strategic goals, such as supporting the development of SAF; working with both airlines and energy companies.

Barclays helped coordinate a joint letter to the UK government with aviation and finance sector leaders from the Sustainable Markets Initiative membership, encouraging policy support to scale SAF, including a proposed Revenue Certainty Mechanism to mobilise private investment.

Barclays' targets and progress

Alongside our continued financing and support of the sector we have a target to reduce the intensity of our financed emissions from our Aviation portfolio by between 11% and 16% by the end of 2030 compared to a 2023 baseline, with the greatest level of reduction aligned with a 1.5°C trajectory.

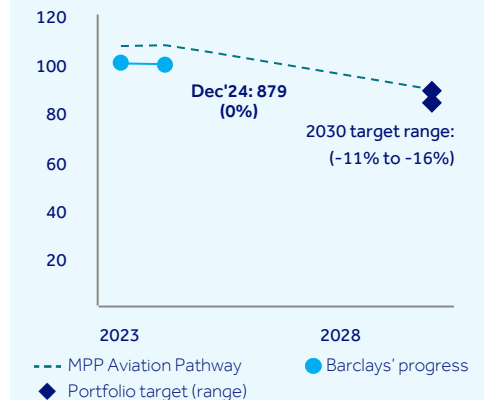
At the end of 2024, our financed emissions intensity remained flat, reflecting the barriers to decarbonisation in the real economy for this sector.

Notes:

1. Mission Possible Partnership, Making Net Zero Aviation Possible (2022).
2. Barclays, 2024 Barclays PLC Annual Report (2025).
3. For further details on our risk management approach see the Risk Management chapter from page 63.

Figure 8: Aviation (passenger and cargo)²

Physical Intensity (gCO₂e/RTK)
(Indexed December 2023 = 100)



Managing climate-related risk³

Transition risks for this sector include technology drivers, notably risks around SAF development at scale. Shifting short-distance air travel to high-speed rail could reduce demand.

High dependence on fixed capital assets (e.g. airports and logistics hubs) exposes the sector to physical risks.

In our latest Internal stress test, aviation showed increased loan loss rates, but losses were mitigated by improved client credit quality.

Our lending process incorporates climate risk scorecards for material clients.

We classify many aviation sector activities as facing 'elevated climate risk', track BlueTrack™ progress, and maintain sector-specific risk limits and triggers.

Industrials continued

Cement



Barclays' portfolio and clients
Cement production represents approximately 7% of global CO₂ emissions¹. Given the raw materials required and the nature of the production process itself, cement is amongst the most challenging sectors to decarbonise.

An estimated \$1.4 trillion² in investment will be required to decarbonise the sector by 2050, and we see an opportunity to support our clients with this transition, as well as in supporting early-stage companies and emerging technologies.

We have a limited lending portfolio of global cement producers. As of 2023, this represents 0.1% of our total lending and 2% of our total financed emissions.

Our focus is on partnering with clients who are pursuing near-term energy efficiency measures while supporting the nascent sector-wide solutions needed for sustained decarbonisation.

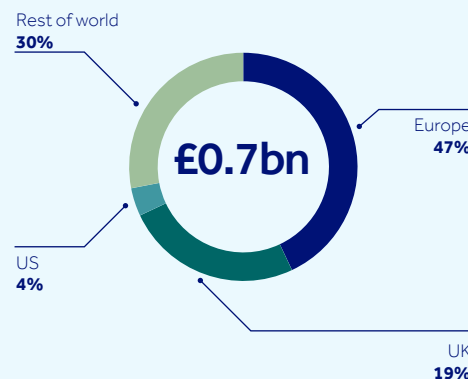
Reviewing our cement portfolio we find that most of our clients have emissions reduction targets that have been validated by the Science Based Targets initiative (SBTi) and these clients represent around 90% of our financed portfolio for this sector. In our CTF, cement clients have a variety of scores reflecting the regional differences within the sector.

Notes:

1. Science Direct: Low-CO₂ emission strategies to achieve net zero target in cement sector (2023).
2. Mission Possible Partnership, Making Net-Zero Concrete and Cement Possible (2022).
3. Barclays, 2024 Barclays PLC Annual Report (2025).
4. For further details on our risk management approach see the Risk Management chapter from page 63.

Figure 9: Barclays' Cement lending by region (as at end 2023)

Based on clients' headquarters



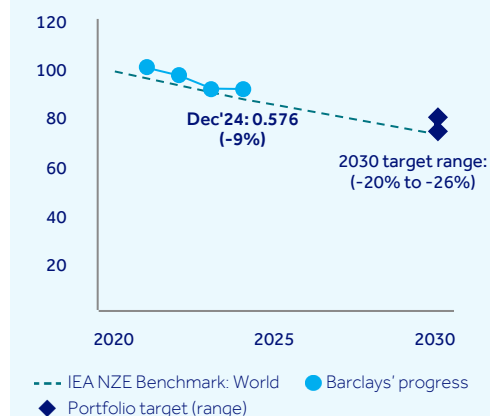
Barclays' targets and progress

In parallel to our ongoing support for the sector we have set a target to reduce the intensity of our financed emissions by between 20% and 26% by the end of 2030 compared to a 2021 baseline, with the greatest level of reduction aligned with a 1.5°C trajectory.

As at the end of 2024, we had achieved a 9% reduction in financed emissions compared to the 2021 baseline. Of the small number of clients in this portfolio our progress to date has been driven by increased activity with a very limited number of those clients.

Figure 10: Barclays' financed emissions – Cement³

Physical Intensity (tCO₂e/t)
(Indexed December 2021 = 100)



Managing climate-related risk⁴

Transition risks for this sector include policy, technology and market preference changes affecting conventional demand.

The sector's high reliance on fixed capital and transportation networks creates physical risks.

In our latest Internal stress test, impacts were limited due to low sector exposure.

Our lending process incorporates climate risk scorecards for material clients.

We classify cement sector activities as facing 'elevated climate risk', track BlueTrack™ progress, and maintain sector-specific risk limits and triggers.

Industrials continued

Mining



Barclays' portfolio and clients

Mining is fundamental to enabling the transition, with growing demand for metals and minerals used in low-carbon technologies and power infrastructure.

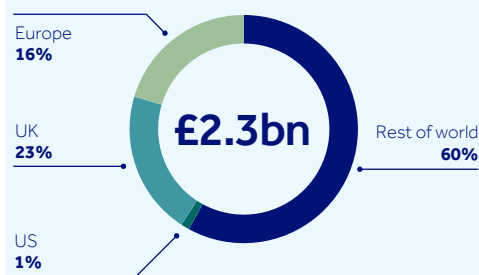
The sector accounts for 2-3% of global greenhouse gas emissions¹ and faces unique challenges in measuring and reducing its emissions profile.

Unlike other industrial sectors, Mining lacks an established decarbonisation pathway or common model for describing value chain emissions, reflecting the significant variations across different commodities and production methods.

Our clients are primarily headquartered across Europe (16%), UK (23%), and the Rest of world (60%). The portfolio includes producers of diverse commodities including diamonds, iron ore, cobalt, copper, zinc, gold, and nickel. As of 2023, this represents 0.4% of our total lending and 3.2% of our total financed emissions².

Figure 11: Barclays' Mining lending by region (as at end 2023)

Based on clients' headquarters



Barclays' targets and progress

While we have not yet set specific financed emissions targets for Mining, reflecting the sector's unique complexity and diversity, our portfolio is strategically positioned across key commodities essential for the transition.

We are:

- Expanding our Client Transition Framework to assess and help support Mining clients' strategic development, including criteria on climate and nature.
- Sharing nature-focused insights with relevant clients to discuss potential opportunities, based on our assessment of our Mining portfolio using the Taskforce on Nature-related Financial Disclosures' (TNFD) Locate, Evaluate, Assess and Prepare (LEAP) approach.

Managing climate-related risk⁵

Transition risks include potentially declining demand, notably for coal, due to changes in technology, policy or market preferences.

Parts of the sector could benefit from increased earnings in critical minerals.

Our clients are generally diversified and are involved in commodities that have different transition risk profiles.

Key physical risks that could disrupt production include extreme heat, water scarcity, flooding, land use, and pollution.

Activities in this sector have 'elevated climate risk'; in our latest climate-aware Internal Stress Test, mining exhibited a higher loan loss rate, driven by clients with coal activities, but the impact was contained given our low exposure.

We undertook an assessment of nature-related impacts and risks within our mining portfolio using the TNFD's LEAP approach. Insights into our portfolio involved the analysis of circa 250 operational mines, and revealed that around three-quarters are in sensitive locations, in particular areas of high physical water risk³ (around one third of mines). However, many clients are investing in mitigation strategies to address these pressures.

Our nature stress scenario methodology⁴ found that transition risks may pose the largest cumulative financial risk. However drought-related losses are the largest single factor. There was overall limited portfolio impact due to the geographic diversification of assets and client credit quality; we further anticipate that transition-linked demand may drive increased earnings in critical minerals.

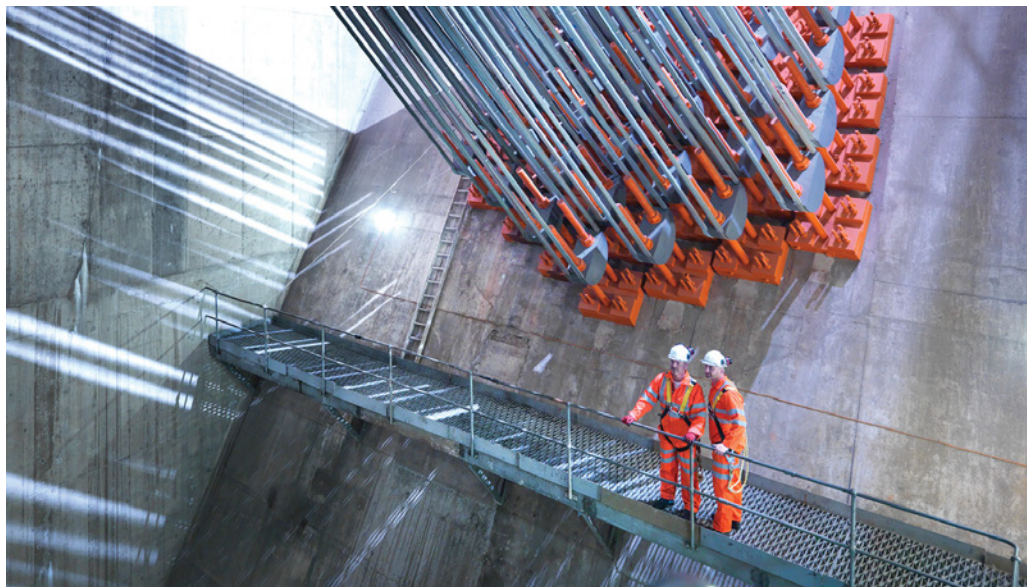
Such findings will help develop our internal risk management capabilities and inform engagement with relevant clients to share nature-focused insights to discuss potential opportunities.

Notes:

1. IISD: The impacts of climate change on the mining sector
2. Includes upstream Mining and Quarrying.
3. Defined as areas of water scarcity and poor quality.
4. Based on available data and most appropriate methodologies as of 2024.
5. For further details on our risk management approach see the Risk Management chapter from page 63.

Industrials continued

Steel



Barclays' portfolio and clients

Steel is a critical economic input. Its production accounts for around 7% of global emissions¹. Lower-emission electric arc furnaces (EAFs) will be key to decarbonising steel production.

Globally, significant investment is needed to increase the quantity of steel from EAF production methods, as well as scaling-up the use of hydrogen and carbon capture in blast furnaces.

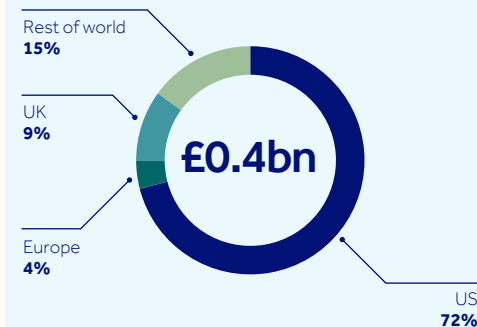
Our limited Steel² lending portfolio is to companies largely headquartered in the US. As of 2023, this represents 0.1% of our total lending and 2.5% of our total financed emissions.

The majority of our financing is to clients that have a higher-than-average proportion of blast furnace production in the markets in which they operate. Our European headquartered clients are transitioning to EAF production faster than our clients in North America or Asia, reflecting the regional differences in the sector's transition. Barclays can support our clients in their efforts to scale-up the use of hydrogen and carbon capture, and we work with the power sector to support meeting increasing power demand from EAFs.

After a review of our portfolio we find that as of the end of 2024, nearly all of Barclays' financing is to clients that have set targets to reduce their emissions by 2030 and clients with a CTF score of T3 or better.

Figure 12: Barclays' Steel lending by region (as at end 2023)

Based on clients' headquarters



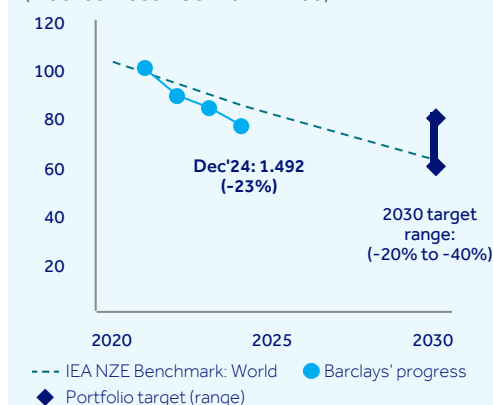
Barclays' targets and progress

In addition to our continued financing and support to the sector, we have a target to reduce the intensity of our financed emissions by between 20% and 40% by the end of 2030 compared to a 2021 baseline, where the highest level of reductions aligned with a 1.5°C aligned trajectory.

By the end of 2024, we reduced our Steel portfolio financed emissions intensity by 23%, primarily driven by changes in our financing portfolio.

Figure 13: Barclays' financed emissions – Steel²

Physical Intensity (tCO₂e/t)
(Indexed December 2021 = 100)



Managing climate-related risk³

Steel faces transition risks including carbon pricing and technology challenges.

The sector's high dependence on fixed assets exposes it to physical risks which could impact its supply of energy, water and raw materials.

In our latest Internal stress test, impacts were limited due to low sector exposure.

Our lending process incorporates climate risk scorecards for material clients.

We classify activities in this sector as facing 'elevated climate risk', track BlueTrack™ progress, and maintain sector-specific risk limits and triggers.

Notes:

1. Rocky Mountain Institute, Steel GHG Emissions Reporting Guidance (2023).
2. Barclays, 2024 Barclays PLC Annual Report (2025).
3. For further details on our risk management approach see the Risk Management chapter from page 63.

Embedding our approach

We continue to embed our approach to climate change and sustainability into our day-to-day operations. This includes transitioning our operations and ensuring that we have appropriate risk management and governance to oversee and monitor the delivery of our climate change goals.

We are also embedding our strategy into our wider financial planning processes, and putting in place appropriate skills and training programmes, and incentives, for our colleagues.

By aligning our internal processes and structures we can better track progress, build capabilities and encourage behaviours that support the transition.

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Transitioning our operations

Our ambition

As part of our ambition to be a net zero bank by 2050, we are actively working towards achieving net zero operations. This includes setting and meeting various targets and milestones to reduce our operational emissions, with significant progress already made. Detailed information on our milestones, targets, and achievements can be found in our Barclays PLC Annual Report.

Implementation plan

To continue reducing our operational emissions we will work towards, where possible, energy efficiency, electrification, and renewable electricity sourcing programmes across our global real estate portfolio.

We will also focus on managing our supply chain emissions, which account for approximately 68% of our total operational emissions¹. To do so, we intend to continue enhancing our supply chain data capture, upskill and train internal decision-makers responsible for Third-Party Service Providers (TPSPs)², including procurement teams, and further develop and implement the Barclays Supplier Transition Framework (STF).

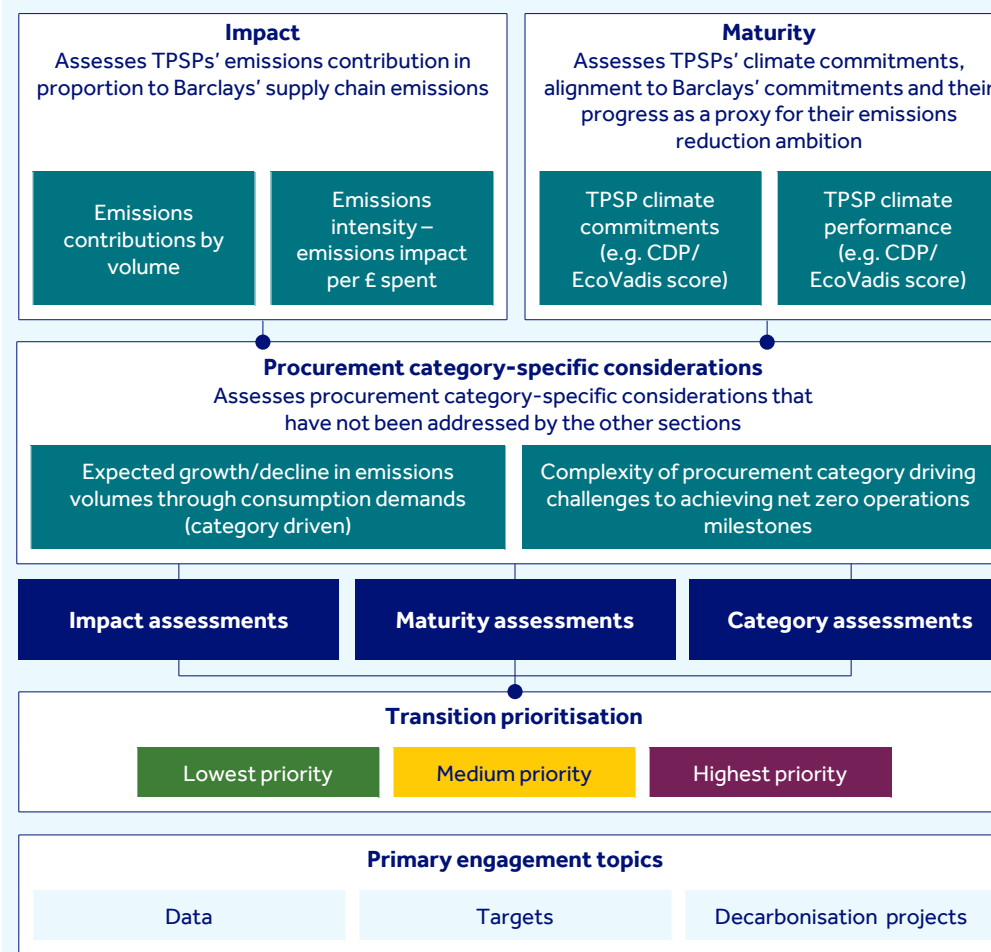
The STF aims to drive and scale our decarbonisation efforts with TPSPs. We will use three key factors to identify the most significant TPSPs for assisting with Barclays' decarbonisation efforts:

- Impact: measured by volume and intensity of TPSPs emissions.
- Maturity: measured by TPSPs' climate commitments and associated performance.
- Procurement category specific considerations: such as expected growth in emissions.

Notes:

1. For FY2024 reporting year, where our total accounted operational GHG emissions include Scope 1, Scope 2 (location based) and Scope 3 category 1-8 and 13.
2. TPSP means any entity that has entered an arrangement with Barclays in order to provide business functions, activities, goods, and/or services to Barclays.

Figure 1: Barclays' Supplier Transition Framework (STF)



These factors will be used to prioritise and inform our approach to engaging with TPSPs, managing category-specific considerations, and how we design and scope our products and services requirements. For example, if a TPSP has a high emissions contribution to Barclays' supply chain emissions, and does not have climate commitments in place, then it will be segmented as high priority for engagement through the STF. The framework design will help ensure that both commercial and risk-based factors are incorporated into our approach, enabling us to collaborate with our TPSPs on decarbonisation activities, whilst also managing our business priorities and transition-related exposures.

The intent is for the STF to be increasingly digitised and automated, incorporating enhanced data from our TPSPs into the Barclays Sustainability Data Hub. We are engaging with EcoVadis, a third-party data provider specialising in enterprise solutions for sustainable supply chains, to improve the quality of insight across our supply chain on climate performance.

We are exploring how we can integrate nature and social considerations into our approach, informed by our supply chain human rights saliency assessment and by building on Taskforce on Nature-related Financial Disclosures (TNFD) Locate, Evaluate, Assess and Prepare (LEAP) assessment we conducted across our direct operations, extending it to our supply chain.

Decarbonising our operations will not only support our ambition, but is also expected to offer benefits including: cost savings, greater operational resilience, potential commercial opportunities, and stronger relationships with clients and TPSPs.

Governance

Barclays’ climate and sustainability governance structure consists of the Barclays PLC Board (Board) and its Committees along with Executive and Management Committees which span both business and legal entity lines.


The Board sets the Group’s climate and sustainability-related strategy and oversees its implementation by senior management. The Board approved the Barclays Transition Update.

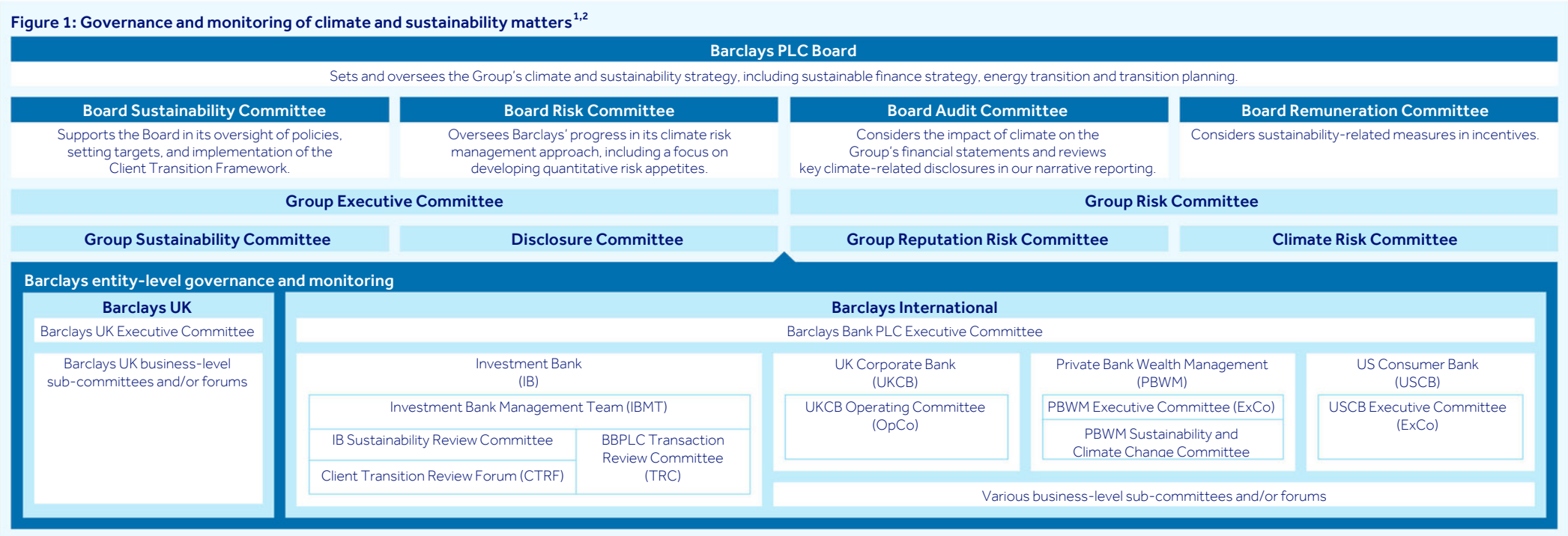
The Board Sustainability Committee (BSC) receives progress updates from management in relation to the Group’s climate and sustainability strategy and reviews proposals prior to Board consideration, among other matters.

The Group Sustainability Committee (GSC) is a sub-committee of the Group Executive Committee and is responsible for recommending the overall Group sustainability strategy to the Board Sustainability Committee.

The Client Transition Review Forum (CTRF) consists of senior representatives from across Sustainable Finance, Group Sustainability, Climate Risk, Portfolio Management, and Banking and is chaired by the Group Head of Sustainable & Transition Finance. Informed by the CTF, and taking into account relevant risks and other business factors, this forum conducts holistic reviews of our business appetite alongside the future client relationship potential.

Figure 1 sets out the main governance bodies at a Group and business division level that review, oversee, recommend and approve climate and sustainability actions, matters and strategy for Barclays (including climate change strategy and actions that are described in this report and in related disclosures).

 Please see pages 241-245 of the 2024 Annual Report for further information.



Notes:

1. The committees, forums and governance bodies shown here are non-exhaustive.

2. The presentation of Group Committees is not directly illustrative of the Board Committees they report into.

Evolving our approach across the Bank

We have made progress delivering on our ambition to be a net zero bank by 2050 including embedding appropriate measures and approaches to support the transition of our clients and customers across our different businesses.

- We have set emission reduction targets across eight high emitting sectors: Upstream Energy, Power, Steel, Cement, Automotive Manufacturing, Aviation, UK Commercial Real Estate, UK Agriculture and a convergence point for UK Housing – capturing our lending and financing activities across a number of business divisions.
- The Client Transition Framework (CTF) is a tool Barclays uses to evaluate progress towards business models aligned with a low-carbon economy. It is primarily focussed on clients' public disclosures and is AI driven. It provides a detailed understanding of client's current and future transition activities.
- We are committed to financing the transition and our \$1trn Sustainable and Transition Financing target encompasses our lending and financing for eligible companies and activities that span across a number of the bank's business divisions. We have developed a Sustainable Finance Framework and a Transition Finance Framework that defines the activities which can be reported as progress against this target.
- We have position statements that contain policies restricting financing to certain sensitive sectors – including the Climate Change Statement, the Forestry and Agricultural Commodities Statement and others.

- Where appropriate and where we think we have an ability to contribute to the development of public policy relevant to our clients and consistent with our strategy, we have actively engaged in advocacy on these matters. This public policy engagement activity typically takes place at a group level as it serves clients across a number of our business divisions.

Financed Emissions

We also estimate and report our full in-scope balance sheet financed emissions. We use a methodology based on the PCAF¹ Standard² to calculate these emissions. Figure 2 outlines the activities that Barclays includes and excludes when reporting its financed emissions. Some activity is excluded because there is no applicable PCAF methodology or because we report these emissions in other parts of our disclosures.

Notes:

- Partnership for Carbon Accounting Financials is a partnership of financial institutions working to develop a harmonised approach to assess and disclose the greenhouse gas emissions associated with their loans and investments.
- PCAF Standard - PCAF (2022). The Global GHG Accounting and Reporting Standard Part A: Financed Emissions. Second Edition.
- Latest data for information in Figure 2 is as at 31 December 2023 due to the lead time required to fully analyse all our in-scope exposures.

Figure 2: Identification of in-scope exposure to calculate financed emissions (as at December 2023)³

Category	Value (as at Dec 2023) in £m	Comments
Total Barclays balance sheet	1,477,487	
Exclusions:		
Cash and bank balances, Cash collateral and settlement balances, Derivative financial instruments, Goodwill and intangible assets, Current tax assets, Deferred tax assets, Other assets, Trading portfolio assets, Reverse Repos, and Retail lending (personal lending, retail cards)	(-)1,029,687	Exposures which have been excluded by the PCAF Standard
Property, plant and equipment	(-)3,417	Emissions covered under Barclays Scope 1 and Scope 2
Retirement benefit assets	(-)3,667	Emissions on Barclays Bank UK Retirement Fund reported separately as part of Task Force on Climate-related Financial Disclosures Report 2023
Total Barclays exposure in scope for computing financed emissions	440,716	
Inclusions		
Total Undrawn commitments and contingent liabilities	(+)250,227	We have gone beyond the scope of PCAF's definition of asset classes to additionally cover undrawn commitments and contingent liabilities. We have excluded exposures for which PCAF is yet to establish a methodology (personal lending, retail cards and Trading balances) from our total undrawn commitments and contingent liabilities.
Capital markets financing (33% of Barclays share)	(+)102,238	Equity holdings, Bond issuances, Equity issuances, Syndicated loans
Total Barclays activities considered for financed emissions calculations	793,181	

➔ Please refer to pages 78–82 of the 2024 Barclays PLC Annual Report for more information on our approach to calculations in Figure 2.

Evolving our approach across the Bank continued

Evolving our approach across the Bank continued

Implementing our strategy against a shifting landscape

Our ability to make progress against sector emission targets and more broadly towards our ambition depends heavily on our clients' ability to decarbonise their business models. This, in turn, is influenced by a wide range of external factors including market developments, technological progress and its financial viability, a stable and supportive policy environment, regulatory alignment, changes to societal behaviour, geopolitical developments and regional variations. Some of the most material or relevant of these have been described in prior chapters describing our approach to specific client sectors. In addition, a wide range of other external factors have an influence on our progress including shifts in capital markets, changes in client financing needs, and the need to support an orderly transition as well as changes in our financing mix and the continued management of our portfolios, balancing between our commercial goals, risk management and other non-financial objectives in support of our strategy.

Embedding our climate strategy into financial planning:

Our approach to financial planning includes:

- Embedding climate considerations into our medium-term planning process.
- Reviewing our strategy, its implementation, and tracking of our progress against climate-related targets – as well as capturing a view of climate-related risks and opportunities.

Our 2024 financial planning process identified that our current emissions targets are not currently forecasted to materially impact financial performance over the next five years. We will continue to consider the impact on impairment over the planning horizon of the financial plan. At this point, there are no associated material amendments required to the financial plan over the 2024 Medium-Term Planning horizon.

We will continue to endeavour to further enhance how Barclays' climate strategy is embedded into the way we think about financial planning over the coming years – reflecting on the progress we made during 2024.



For further information please see pages 113-114 of the 2024 Barclays PLC Annual Report.

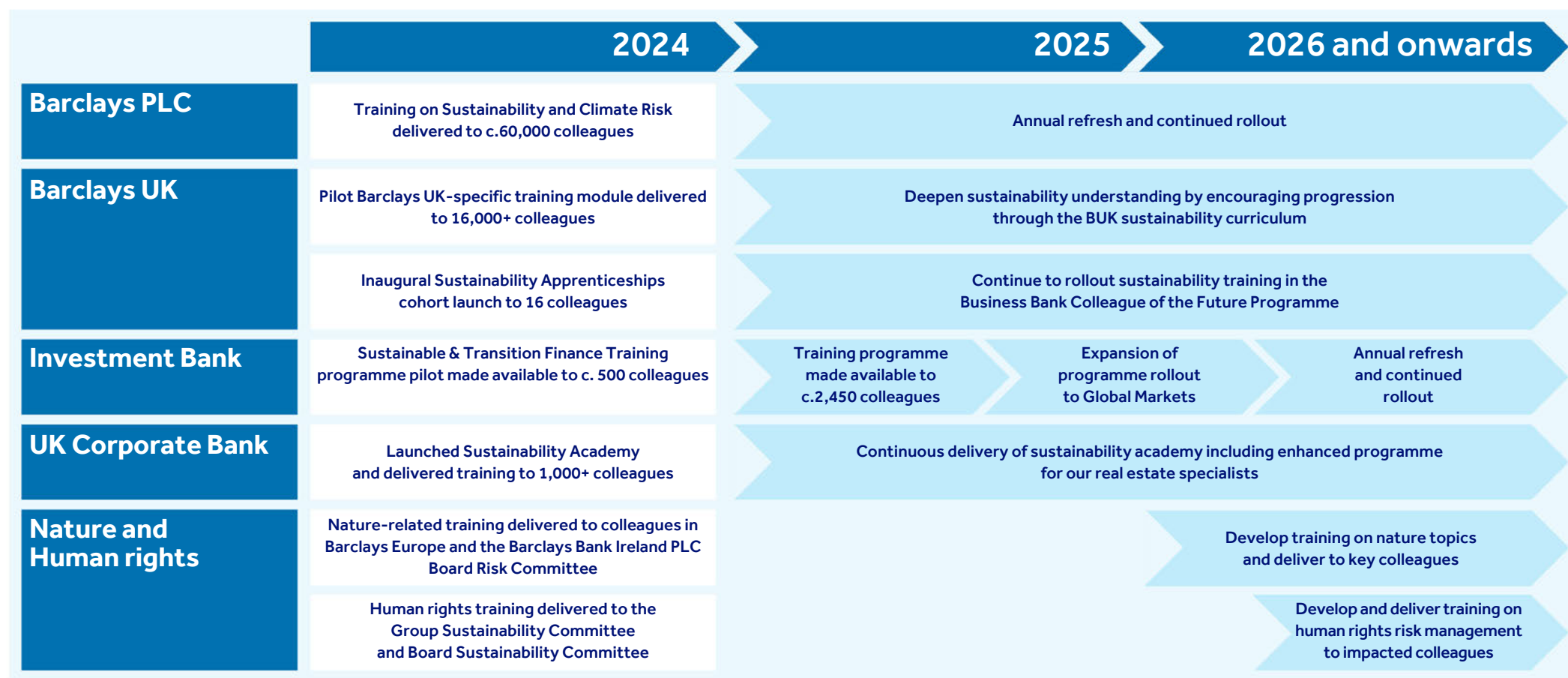


Skills and training

We have completed substantial work to understand our colleagues' skills and capability gaps, and to develop focused training programmes which address our needs.

Building on these foundations, we continue to roll out sustainability and climate change-linked training and explore emerging sustainability topics. We are embedding these into each business division's existing and wider training plans, with the aim of supporting our bankers with client conversations.

→ Please see pages 113-114 of the 2024 Barclays PLC Annual Report for further information.



Incentives

Financial and non-financial measures, including key sustainability-related measures, are considered in the determination of the Group incentive pool and the determination of incentive outcomes for the Executive Directors of Barclays PLC.

Measures are reviewed annually to ensure they reflect the Group’s strategic priorities.

Employees have role-specific performance objectives and these include sustainability-related considerations where relevant.

➔ Please refer to page 115 of the 2024 Barclays PLC Annual Report and the Remuneration report on pages 186-239, in particular pages 197, 218, 220, 225 for further information.

Group incentive pool

Performance against sustainability-related measures is factored into the determination of the incentive pool.

The incentive pool is also adjusted to take account of risks, both crystallised and potential future risks, and consideration is given to vulnerabilities across all of Barclays’ Principal Risks, which include Climate Risk.

Executive Directors of Barclays PLC	<ul style="list-style-type: none">• Sustainability-related measures are included as part of the Executive Directors’ Long Term Incentive Plan (LTIP), reflecting the long-term nature of our strategy, and that progress is expected to be non-linear and is best assessed over a multi-year period.• For the 2025-2027 LTIP, an overall weighting of 25% is allocated to the broader category of Sustainability, customers and clients.
Group Executive Committee	<ul style="list-style-type: none">• The Group Executive Committee members responsible for Barclays’ five business divisions have specific sustainability-related objectives relevant to the businesses they manage included in their performance objectives and assessment.
Wider workforce	<ul style="list-style-type: none">• Performance for all colleagues is assessed against individual performance objectives, which are aligned to the five lenses of the consistently excellent standard and include sustainability considerations where applicable. Specific sustainability-related objectives will depend on the role of the individual.

Risk Management

Under its Climate Risk Framework, Barclays manages the risk of financial losses arising from climate change, both from physical risks and from the transition to a lower carbon economy.

Recognising the impact climate risks can have on other financial (Credit, Market, Treasury & Capital) and non-financial (Operational) risks, we have designated Climate Risk as a Principal Risk within our Enterprise Risk Management Framework (ERMF). Climate risk may also drive non-financial risks such as reputational risk, which continue to be managed under their respective risk frameworks.

Risk Management

Our approach to managing the financial risks from climate change

Our approach to managing the financial risks of climate change follows that used for other risk types, as set out in our Enterprise Risk Management Framework. We set and then manage within our climate risk appetite, both in terms of financed emissions and financial losses under stress.

- a. **We identify our key climate risks** through activities including horizon scanning, assessing elevated climate risk sectors and geographies. We use the most material climate risks in our Risk Register to develop a climate stress scenario. The results of climate stress testing then in turn inform our assessment of the most material climate risks.

- b. **We develop our climate stress scenario**, including both physical and transition risks, to combine with a macroeconomic stress scenario in the Internal Stress Test (IST)¹, to test whether Barclays would remain adequately capitalised in such a stress scenario. The bank also undertakes a Reverse Stress Test (RST), with the objective of understanding specific extreme climate events that would make the Group’s business model no longer viable. In addition, a Nature Stress Test is executed to assess the resilience and vulnerabilities of Barclays Europe to environmental shocks.

- c. **We keep within our climate risk appetite** using both portfolio- and transaction-level risk management activities. These include risk triggers and limits for our high climate risk exposures—including some of our lending to elevated climate risk sectors such as Energy, Power, Automotive Manufacturing, as well as portfolios including UK Mortgages—which we monitor and report. We perform Climate and Environmental Lens assessments on corporate borrowers in elevated climate risk sectors.

- d. **Our Climate Change Statement and policies in relation to climate change, which set out our position and approach** to financing certain sensitive sectors, also help us to mitigate transition risks in these sectors.
- e. **We continue to evolve our approach**, in particular considering the guidance of our regulators, including the PRA, and legal requirements.

Notes:
1. Prior to 2024, the climate stress was an add-on to the IST rather than integrated

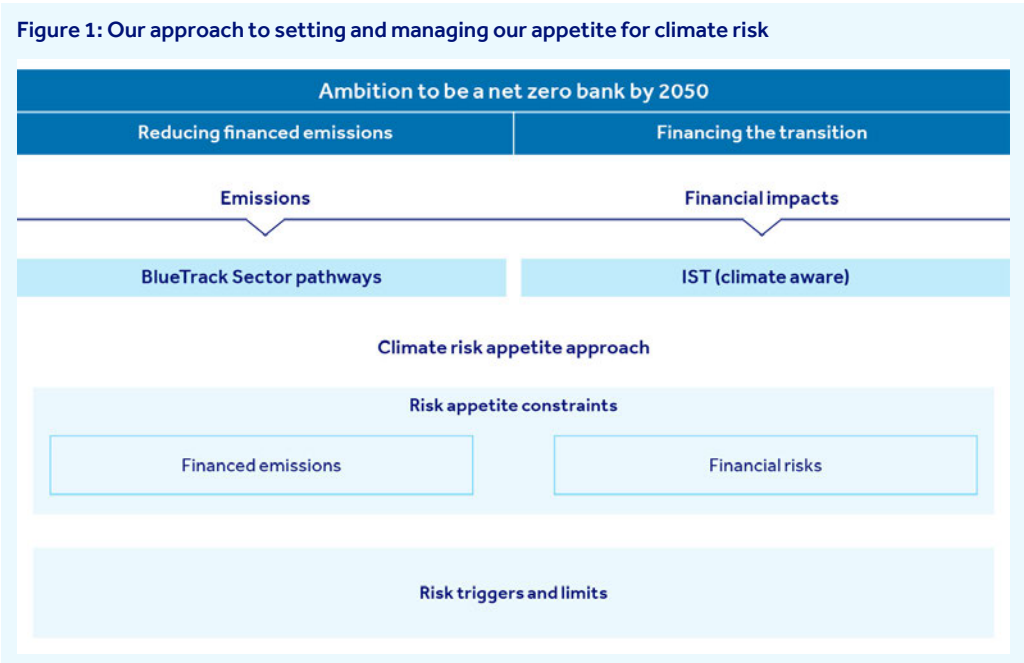


Figure 2: Barclays' approach to identifying and managing climate risk

Risk identification	Materiality assessment	Risk management														
<ul style="list-style-type: none"> Horizon scanning / risk themes Elevated sectors Elevated countries and location-specific vulnerabilities Litigation tracker 	<p>Based on scenario analysis</p> <table border="1"> <thead> <tr> <th>Principal risk type</th> <th>Climate risk type</th> </tr> </thead> <tbody> <tr> <td>Overall climate risk</td> <td>Transition risk Physical risk</td> </tr> <tr> <td>Credit – retail</td> <td>Transition risk Physical risk</td> </tr> <tr> <td>Credit – wholesale</td> <td>Transition risk Physical risk</td> </tr> <tr> <td>Market risk</td> <td>Transition risk Physical risk</td> </tr> <tr> <td>Ops risk</td> <td>Transition risk Physical risk</td> </tr> <tr> <td>T&C risk</td> <td>Transition risk Physical risk</td> </tr> </tbody> </table>	Principal risk type	Climate risk type	Overall climate risk	Transition risk Physical risk	Credit – retail	Transition risk Physical risk	Credit – wholesale	Transition risk Physical risk	Market risk	Transition risk Physical risk	Ops risk	Transition risk Physical risk	T&C risk	Transition risk Physical risk	<p>Portfolio level risk management activities</p> <ul style="list-style-type: none"> Risk appetite and limits/triggers to manage portfolio concentrations. <p>Transaction level risk management activities</p> <ul style="list-style-type: none"> Integrate climate considerations into transaction review processes.
Principal risk type	Climate risk type															
Overall climate risk	Transition risk Physical risk															
Credit – retail	Transition risk Physical risk															
Credit – wholesale	Transition risk Physical risk															
Market risk	Transition risk Physical risk															
Ops risk	Transition risk Physical risk															
T&C risk	Transition risk Physical risk															

For material risks

Risk Management continued

Evolving our approach to climate stress testing over time

Barclays has progressively strengthened and seeks to further enhance its scenario analysis and stress testing capabilities by incorporating climate risk considerations into data, models and processes like internal stress test, capital and liquidity adequacy assessment exercises.

We have designed bespoke scenarios, enhanced assessment methodologies and participated in several regulatory stress test exercises. Our climate scenario analysis exercises have been conducted over different time-horizons and using different scenarios and methodologies. We have mostly combined macroeconomic and climate shocks over a five-year horizon, although we test a range of scenarios over a longer horizon with the Reverse Stress Test. Despite these differences, the results tend to show similar results: e.g., higher vulnerability of carbon-intensive sectors, particularly Oil and Gas, to transition shocks and of Real Estate portfolios to physical risk events.

2024 Reverse Stress Test (RST)

Time horizon	<ul style="list-style-type: none"> To 2040
Transition risk assumptions	<ul style="list-style-type: none"> Leverages the Announced Pledges Scenario
Physical risk assumptions	<ul style="list-style-type: none"> Increase in physical risks leading to insurers withdrawing schemes. UK FloodRe scheme expiring in 2039 without being replaced. Governments do not intervene in insurance markets disruption.
Outcomes	<ul style="list-style-type: none"> Barclays reached non-viability under the most extreme assumptions. More plausible assumptions cause a significant capital impact.

Figure 3: Our climate scenario analysis and stress testing over time

2018	2019	2020	2021	2022	2023	2024
External case studies through the UN Environment Programme – Finance Initiative (UNEP FI)	Internal short-term transition scenario informed by external publications	Internal climate scenarios informed by the Network for Greening the Financial System (NGFS) scenarios	Bank of England Climate Biennial Exploratory Scenario	Framework, regulatory and internal scenario analysis	Integration of climate into internal capital adequacy assessments	Climate and macroeconomic risks combined in stress testing

	2021	2023	2024
Time horizon	30 years	5 years	5 years
Outcomes	Barclays' losses were broadly in line with our banking market share.	Higher losses observed in high carbon-intensity sectors and residential mortgage portfolios with weaker Energy Performance Certificate (EPC) ratings.	Increased losses in Oil and Gas and Real Estate portfolios.
Key enhancements	Development and enhancement of climate risk models and modelling capabilities and further integration of climate risk consideration in risk management practices.	Enhancement of the corporate and residential real-estate models used in stress testing. Enhancement of the design and parameters of climate stress scenarios.	A combined macro and climate exercise. Two sets of scenario variables (with and without climate risk) were developed to give a view of the isolated climate risk impact. Balance sheet items now reflect dynamically the impact of climate on macroeconomic variables.

■ Barclays voluntary stress testing ■ Supervisory body stress test ■ Incorporated into Internal Capital Adequacy Assessment

Risk Management continued

Climate stress testing in 2024

A combined scenario was produced for the 2024 Internal Stress Test (IST), designed to assess Barclays’ financial resilience to both climate and traditional macroeconomic risk, and the extent to which Barclays would remain within risk appetite.

The 2024 IST was designed as a bank-wide exercise conducted over a five-year period to assess impacts from an accelerated transition. It included transition risk factors such as new and stringent climate policy announcements and the ramping of emissions-trading schemes and electric vehicle adoption.

Carbon prices were assumed to increase to nearly \$350/tCO₂ by the end of the five-year horizon, whereas oil prices and demand dropped sharply over the same period. The combined macroeconomic and climate stresses led to significant drops in gross value added (GVA) for several elevated climate risk economic sectors, as shown in Figure 4.

The scenario included the following assumed impacts on Barclays among others: amplified credit shocks as a result of immediate repricing, amplified credit deterioration as carbon-intensive industries suffer lower earnings, refinancing risks, and an increased frequency of physical risk events such as flood, hurricanes and drought. The climate stress scenario was aligned to a less than +2°C pathway. The scenario variables were calibrated and guided by the stress narrative and considerations for compounding effects of an economic downturn and climate stresses.

Figure 4: GVA shocks for selected sectors in the IST scenario

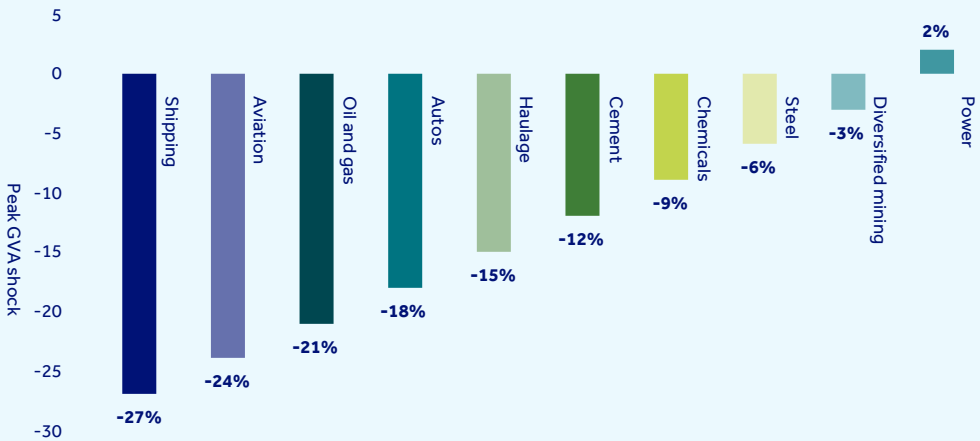
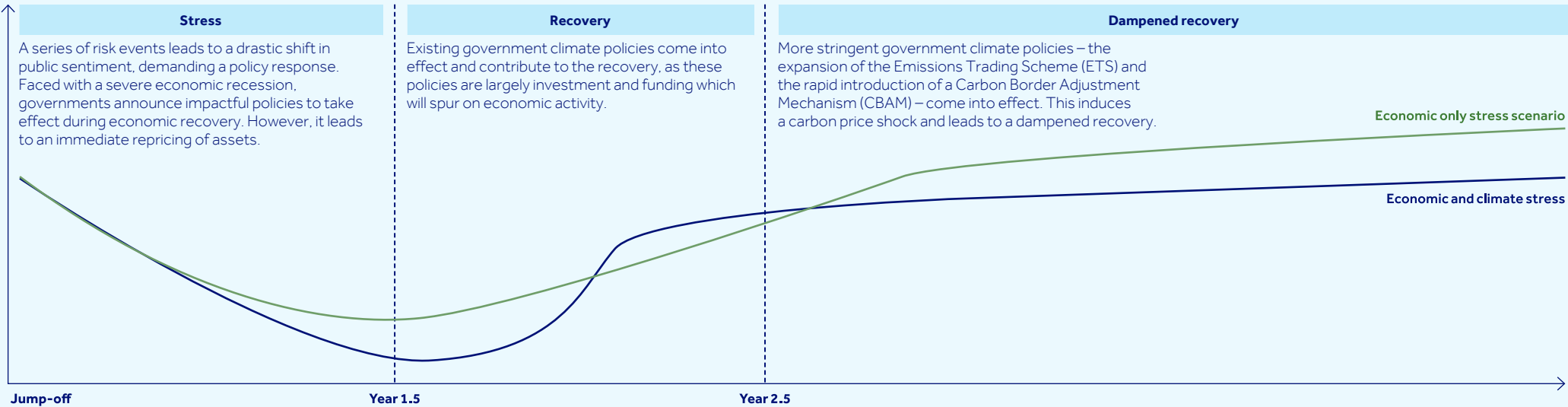


Figure 5: Scenario impact (illustrative only)



Risk Management continued

Climate stress testing in 2024 continued

Key findings

Over the five-year period, the results of the exercise indicate a 10% impact on cumulative attributable profit in line with prior exercises. Whilst these are significant, they remain manageable within the bank’s existing risk profile.

The largest contributor to losses over the 5 year period is the lending portfolio in the IB and UKCB, driven by transition risks in the Oil and Gas sector. Barclays UK experiences lower impact, with the largest contributor being transition risks to Mortgages, mitigated by strong credit metrics (average 52% LTV).

Evolving our risk appetite to support financing the transition

Supporting our clients' transition will involve extending to them balance sheet, mostly via established products, but also via new ones such as financing climate technologies and project finance. Barclays is evolving its risk appetite and capabilities in those areas in support of the expected growth in this activity.

Figure 6: IST indicative climate-related impairment by sector

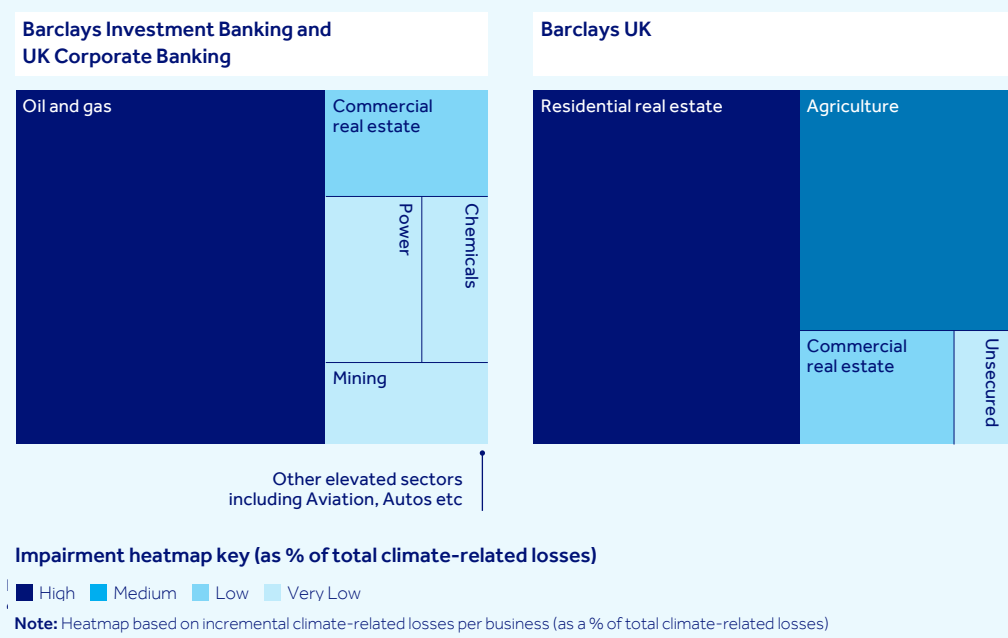
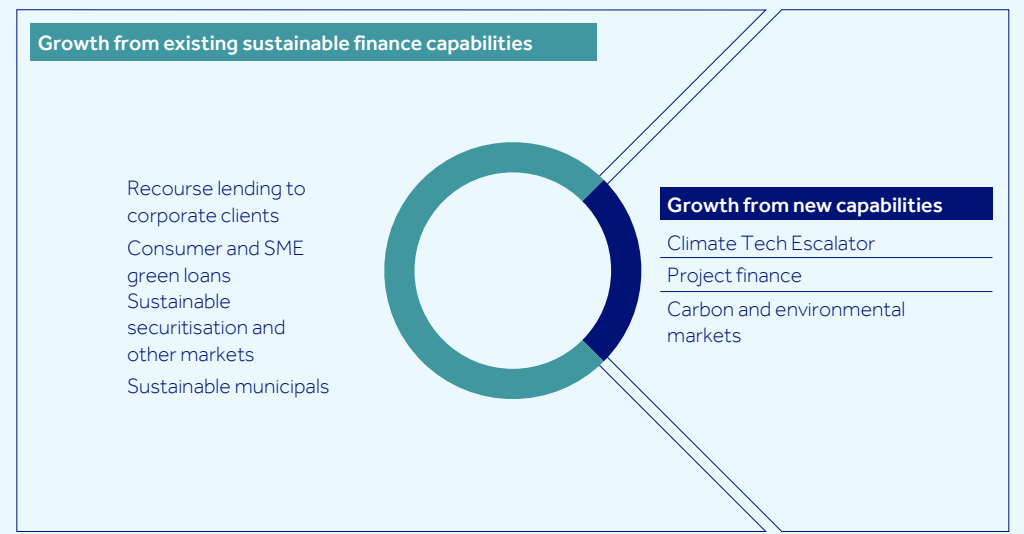


Figure 7: New and existing risk approaches will facilitate progress towards our sustainable finance goals



Risk Management continued

Developing our approach to nature risk

Nature Exploratory Stress Test

In 2024 we ran a Nature Exploratory Stress Test (NEST) within our Barclays Europe portfolio to assess its resilience and vulnerabilities to environmental shocks.

The outputs were intended to be used to assess risk materiality, and to make normative and economic capital assessments within our Internal Capital Adequacy Assessment Process (ICAAP). The assessment spanned credit, market, liquidity and operational risks.

Scenario

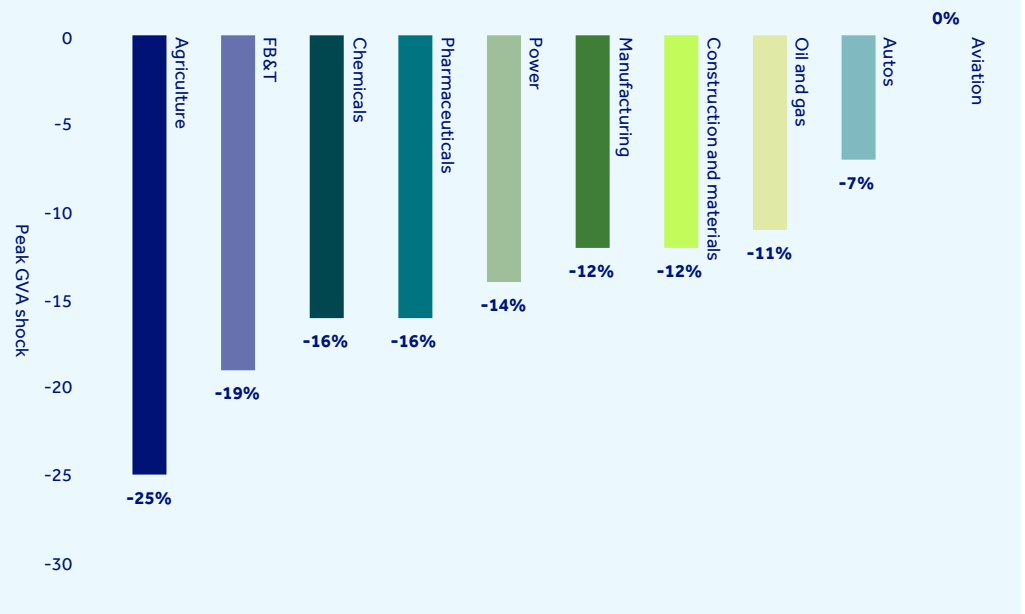
We aligned our narrative to the International Supply Chain scenario published by the Green Finance Institute (GFI) in February 2024, and developed our own sectoral shocks to incorporate additional transition-related impacts and to make this Europe-specific. These were defined in terms of Gross Value Added (GVA). The scenario occurs in conjunction with and over and above the Internal Stress Test (IST) scenario and is conducted over a five-year period. Water-related impacts were the largest driver of the shocks across most industries, driven by a reliance on water across all in-scope industries.

Sectors analysed included		
Agriculture	Food, Beverages & Tobacco (FB&T)	Chemicals
Pharmaceuticals	Power & Energy (Oil & Gas)	Manufacturing
Construction & Materials	Automotive manufacturing (Autos)	Aviation

Key results

- The results indicated an adverse impact on Barclays Europe, due to clients operating in the Automotive manufacturing (Autos), Chemicals, and Food, Beverage and Tobacco (FB&T) sectors. However, these impacts are manageable within the bank's existing risk profile. The Nature scenario and outcomes are more uncertain than climate-equivalents.
- The interplay between climate and nature outcomes has not been considered as part of the Nature Exploratory Stress Test.

Figure 8: GVA shocks for selected scenarios in the NEST scenario



LEAP assessments

In 2022-23, we completed an initial sector-based nature risk assessment, applying the Taskforce on Nature-related Financial Disclosures (TNFD) Locate, Evaluate, Assess and Prepare (LEAP) approach to our UK and European Agriculture and Food portfolio in 2024, we applied the TNFD's LEAP approach to our Mining and European Power clients' operational assets, which alongside assessment of sites' overlap with sensitive locations and analysis of potential nature impacts, included assessing the likelihood and severity of financial risk associated with nature-related transition and physical risks.

This preliminary exercise used scenario analysis over various time horizons, leveraging and extending NEST run in Barclays Europe to assess the vulnerability and resilience of Barclays Europe's portfolio to environment-related shocks. However, it was different in its bottom-up approach, with a focus on client assets, aggregating costs and revenues up to the company level. The LEAP financial risk assessment used six internally developed scenario narratives covering both physical and transition risks: drought, flooding, biodiversity protection measures, increased recycling, water and air pollution.

The stress scenario resulted in a moderate earnings impact across both Mining and European Power portfolios – primarily due to transition risks for Mining, and physical risks for European Power. Despite these impacts, overall creditworthiness remained broadly stable, underpinned by our portfolios' strong geographical diversification and credit quality. Nature-related risks related to climate and nature are interconnected - we will continue to evolve our understanding of nature-related risk, and the interplay with climate risk.

Disclaimers

Disclaimers

Important information / disclaimers

Information provided in climate and sustainability disclosures

What is important to our investors and stakeholders evolves over time, and we aim to anticipate and respond to these changes. Disclosure expectations in relation to climate change and sustainability matters are particularly fast moving, and differ from more traditional areas of reporting including in relation to the level of detail and forward-looking nature of the information involved and the consideration of impacts on the environment and other persons. We have adapted our approach in relation to the disclosure of such matters. Our climate and sustainability disclosures take into account the wider context relevant to these topics, which may include evolving stakeholder views, the development of our climate strategy, longer timeframes for assessing potential risks and impacts, international long-term climate and nature-based policy goals, evolving sustainability-related policy frameworks (and the harmonisation or interoperability of relevant regulation) and geopolitical developments and regional variations.

Our climate and sustainability disclosures are subject to more uncertainty than disclosures relating to other subjects, given market challenges in relation to data reliability, consistency and timeliness – the use of estimates, judgements and assumptions which are likely to change over time, the application and development of data, models, scenarios and methodologies, the change in regulatory landscape, and variations in reporting standards.

These factors mean disclosures may be amended, updated, and recalculated in future as market practice and data quality and availability develops, and could cause actual achievements, results, performance or other future events or conditions to differ, in some cases materially, from those stated, implied and/or reflected in any forward-looking statements or metrics included in our climate and sustainability disclosures. We give no assurance as to the likelihood of the achievement or reasonableness of any projections, estimates, forecasts, targets, commitments, ambitions, prospects or returns contained in our climate and sustainability disclosures and make no commitment to revise or update any such disclosures to reflect events or circumstances occurring or existing after the date of such statements.

Disclaimers

In preparing the climate and sustainability content within the Barclays Transition Update wherever it appears, we have:

- Made certain key judgements, estimations and assumptions. This is, for example, the case in relation to financed emissions, portfolio alignment, classification of environmental and social financing and revenues, operational emissions and sustainability metrics, measurement of climate risk and scenario analysis
- Used climate and sustainability data, models, scenarios and methodologies we consider to be appropriate and suitable for these purposes as at the date on which they were deployed. This includes data, models, scenarios and methodologies made available by third parties (over which we have no control) and which may have been prepared using a range of different methodologies, or where the basis of preparation may not be known to us. Methodologies, interpretations or assumptions may not be capable of being independently verified and may therefore be inaccurate. Climate and sustainability data, models, scenarios and methodologies are subject to future risks and uncertainties and may change over time. Climate and sustainability disclosures in this document, including climate and sustainability-related data, models and methodologies, are not of the same standard as those available in the context of other financial information and use a greater number and level of judgements, assumptions and estimates, including with respect to the classification of climate and sustainable financing activities. Climate and sustainability disclosures are

also not subject to the same or equivalent disclosure standards, historical reference points, benchmarks or globally accepted accounting principles. Historical data cannot be relied on as a strong indicator of future trajectories in the case of climate change and its evolution. Outputs of models, processed data, scenario analysis and the application of methodologies will also be affected by underlying data quality, which can be hard to assess, or challenges in accessing data on a timely basis.

- Continued (and will continue) to review and develop our approach to data, models, scenarios and methodologies in line with market principles and standards as this subject area matures. The data, models, scenarios and methodologies used (including those made available by third parties) and the judgements, estimates and/or assumptions made in them or by us are rapidly evolving, including scientific evidence relating to climate change and scenarios outlining pathways to net zero, and this may directly or indirectly affect the metrics, data points, targets, convergence points and milestones contained in the climate and sustainability content within the Barclays Transition Update. Further, changes in external factors which are outside of our control such as accounting and/or reporting standards, improvements in data quality, data availability, or updates to methodologies and models and/or updates or restatements of data by third parties, could impact – potentially materially – the performance metrics, data points, targets, convergence points and milestones contained in the climate and sustainability content within the Barclays Transition

Disclaimers continued

Important information / disclaimers continued

Update. In future reports we may present some or all of the information reported in this Barclays Transition Update (including information made available by third parties) using updated or more granular data or improved models, scenarios methodologies, market practices or standards. Equally, we may need to re-baseline, restate, revise, recalculate or recalibrate performance against targets, convergence points or milestones on the basis of such updated data. Such updated information may result in different outcomes than those included in the Barclays Transition Update. It is important for readers and users of the Barclays Transition Update to be aware that direct, like-for-like comparisons of each piece of information disclosed may not always be possible compared to information subsequently reported. Page 81 of the FY24 Annual report sets out the data sourcing and data quality considerations and our approach to reporting financed emissions data.

- Included in the Barclays Transition Update a number of graphics, infographics, text boxes and illustrative case studies and credentials which aim to give a high-level overview of certain elements of the climate and sustainability content within the Barclays Transition Update and improve accessibility for readers. These graphics, infographics, text boxes and illustrative case studies and credentials are designed to be read within the context of the Barclays Transition Update as a whole.

- On sustainable revenues, we review our revenue perimeter on an ongoing basis and assess our coverage against the pure-play criteria. As a result, reported baseline metrics may change from one reporting period to another, and direct like-for-like comparisons may not always be possible from one reporting period to another.

There are a variety of internal and external factors which may impact our reported metrics and progress against our targets, convergence points and milestones. We expect to continue to see this impact our metrics in the future as data availability and quality, methodologies, guidance, and best practices for calculating our financed emissions metrics – all of which include differing levels of estimation – continue to evolve and be refined.

Forward-looking statements

This document contains certain forward-looking statements within the meaning of Section 21E of the US Securities Exchange Act of 1934, as amended, and Section 27A of the US Securities Act of 1933, as amended, with respect to the Group. Barclays cautions readers that no forward-looking statement is a guarantee of future performance, and that actual results or other financial condition or performance measures could differ materially from those contained in the forward-looking statements. Forward-looking statements can be identified by the fact they do not relate only to historical or current facts. Forward-looking statements sometimes use words such as 'may', 'will', 'seek', 'continue', 'aim', 'anticipate', 'target', 'projected', 'expect', 'estimate', 'intend', 'plan', 'goal', 'believe', 'achieve' or other words of similar meaning. Forward-looking statements can be made in writing but may also be made verbally by directors, officers and employees of the Group, including during management presentations, in connection with this document. Examples of forward-looking statements include, among others, statements or guidance regarding or relating to the Group's future financial position, business strategy, income levels, costs, assets and liabilities, impairment charges, provisions, capital leverage and other regulatory ratios, capital distributions (including policy on dividends and share buybacks), return on tangible equity, projected levels of growth in banking and financial markets, industry trends, any commitments and targets (including ESG commitments and targets), plans and objectives for future operations, International Financial Reporting Standards (IFRS) and other statements that are not historical or current

facts. By their nature, forward-looking statements involve risk and uncertainty because they relate to future events and circumstances. Forward-looking statements speak only as at the date on which they are made. Forward-looking statements may be affected by a number of factors, including, without limitation: changes in legislation; regulations, governmental and regulatory policies, expectations and actions, voluntary codes of practices, and the interpretation thereof; changes in IFRS and other accounting standards, including practices with regard to the interpretation and application thereof and emerging and developing ESG reporting standards; the outcome of current and future legal proceedings and regulatory investigations; the Group's ability along with governments and other stakeholders to measure, manage and mitigate the impacts of climate change effectively or navigate inconsistencies and conflicts in the manner in which climate policy is implemented in the regions where the Group operates, including as a result of the adoption of anti-ESG rules; environmental, social and geopolitical risks and incidents and similar events beyond the Group's control; financial crime, the impact of competition in the banking and financial services industry; capital, liquidity, leverage and other regulatory rules and requirements applicable to past, current and future periods; UK, US, Eurozone and global macroeconomic and business conditions, including inflation; volatility in credit and capital markets; market-related risks such as changes in interest rates and foreign exchange rates; reforms to benchmark interest rates and indices; higher or lower asset valuations; changes in credit ratings of any entity within the Group or any securities issued by it; changes in

Disclaimers continued

Important information / disclaimers continued

counterparty risk; changes in consumer behaviour; the direct and indirect consequences of the conflicts in Ukraine and the Middle East on European and global macroeconomic conditions, political stability and Barclays PLC Governance Risk review Financial review Financial statements Annual Report 2024 financial markets; political elections, including the impact of the UK, European and US elections in 2024; developments in the UK's relationship with the European Union (EU); the risk of cyberattacks, information or security breaches, technology failures or other operational disruptions and any subsequent impact on the Group's reputation, business or operations; the Group's ability to access funding; and the success of acquisitions (including the acquisition of Tesco Bank completed in November 2024), disposals and other strategic transactions. A number of these factors are beyond the Group's control. As a result, the Group's actual financial position, results, financial and non financial metrics or performance measures or its ability to meet commitments and targets may differ materially from the statements or guidance set forth in the Group's forward-looking statements. In setting its targets and outlook for the period 2024-2026, Barclays has made certain assumptions about the macroeconomic environment, including, without limitation, inflation, interest and unemployment rates, the different markets and competitive conditions in which Barclays operates, and its ability to grow certain businesses and achieve costs savings and other structural actions. Additional risks and factors which may impact the Group's future financial condition and performance are identified in the description of material existing and emerging risks beginning on page 267 of

Barclays PLC 2024 Annual Report. Subject to Barclays PLC's obligations under the applicable laws and regulations of any relevant jurisdiction (including, without limitation, the UK and the US) in relation to disclosure and ongoing information, we undertake no obligation to update publicly or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

Basis of preparation on sustainable revenues and financed emissions

Our disclosures on the share of total lending, share of Scope 1,2 financed emissions and split of lending by region is based on our disclosures approach to estimating our full in-scope balance sheet financed emissions. The data reflects the Group's position as of December 2023, due to the lead time required to fully analyse our entire in-scope exposures. The share of total lending is based on considering lending limits, trade finance and other contingent liabilities to clients excluding sovereign entities.

The share of Scope 1,2 financed emissions considers only emissions from lending activities and excludes capital markets financing. Real estate exposures include residential mortgage lending. For all other sectors, allocations are based on a mapping of Barclays Industry Classification (BIC) codes of our clients. For disclosures pertaining to progress against financed emissions targets, data is reported as of December 2024.

LEAP Assessment

The assessments were undertaken using the available data and methodologies that we considered to be most appropriate at the time of the exercise (2024), however, data and methodological limitations contribute to uncertainty across our findings, and we may review and evolve our approach in the future.

Table: Products, transactions and counterparties included in Sustainable Finance volume and Revenues

	\$1tn Sustainable Finance volume target	Sustainable revenues
Products/transactions qualified per the Barclays SFF/TFF		
Transactions eligible under the Barclays SFF	✓	✓
Transactions eligible under the Barclays TFF	✓	✓
Pure play clients	✓	✓
Additional products beyond the scope of Barclays SFF/TFF provided to pure play clients		
Merger and acquisition advisory		✓
Risk management solutions products / derivatives		✓
Liability products		✓
Products and services outside the SFF/TFF framework		
Sustainable Discretionary Portfolio Management		✓
Risk management solution products / derivatives on sustainable & transition products		✓
Products with an underlying sustainable and/or transition feature		✓
Investment products with an underlying sustainable and/or transition feature		✓
Financing of sustainable or transition funds		✓
Revenue from Barclays Climate Ventures		✓



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