Our approach to net zero

BARCLAYS

Executive summary

Measuring Paris-alignment and defining what net zero means for a bank is challenging because of the complex and indirect nature of financed emissions. Specifically, banks face three design questions:

1. Which financial services should be included as part of the measurement? For example, we will count lending to a greenhouse gas emitter, but should we include helping the same firm obtain funds from debt or equity investors? Should banks assess the impact of mortgage loans (since houses consume fuel) and, if so, do we weight them by the amount and type of power and heat used by the borrower? Should banks evaluate credit card spending by the emissions associated with each purchase?
2. How should we measure financed emissions? For example, should the impact of financing upstream oil and gas producers include only emissions resulting from their operations, or also from the distribution and use of the fuels they produce? Secondly, a choice needs to be made between measuring financed emissions in absolute terms or as emissions intensity (e.g. quantity of emissions per unit of output), both of which have advantages and disadvantages.
3. How should we determine alignment of financed emissions with the goals of the Paris Agreement prior to reaching net zero? There are many possible ways for the world to reduce emissions in line with the goals of the Paris Agreement, and so a reference scenario needs to be chosen against which to measure alignment.

We have developed a methodology, called BlueTrack™, to address some of these questions by building on and extending existing industry approaches to better reflect the breadth of our support for clients through our investment bank.

We will use BlueTrack™ to commence our journey to meeting our commitment to Paris-alignment and our ambition to reach net zero by 2050. In doing so, we will apply ever-more sophisticated approaches, adapt to changing technologies and, above all, work with our clients in developing and aligning their industries and organisations to reduce their contribution to climate change.

We believe that this ambition does not stand in the way of our financial goals; indeed, we are confident that the enormous opportunity presented by the net zero transition will help us to grow and sustain a high level of financial performance.

You can find out more about our approach at home.barclays/netzero.

The science of climate change

Climate scientists agree that to avoid the most catastrophic impacts of global warming, we must limit future increase in global average temperatures to below 2°C compared to pre-Industrial levels. For this reason, the Paris Agreement seeks to limit warming to well below 2°C, and to pursue actions to keep it below 1.5°C. This challenge concerns all of us and requires all of us to act.

Stopping global warming (at any level) requires halting further human addition of long-lived greenhouse gases (GHGs) to the atmosphere. This can be achieved by stopping emissions, or by removing the same amount of GHGs from the atmosphere as are added in a given year. Achieving either of these outcomes can be referred to as having reached 'net zero emissions'. The more GHGs are added to the atmosphere before reaching net zero emissions, the warmer it gets.

To restrict warming to below 2°C, the world must keep future cumulative net emissions to within a specific carbon budget of ~1400 GtCO2[1]. Achieving a 1.5C ambition would require meeting an even stricter carbon budget of net ~500 GtCO2. In 2019, the world produced ~37 GtCO2 and negligible negative emissions – and so meeting the Paris goals poses a strong challenge, requiring us to rapidly both reduce emissions and scale up negative emissions.

The financial sector directly generates GHGs as it moves its people around the world and powers its buildings. Financial institutions, including banks, will need to reduce these emissions over time to net zero if the Paris Agreement goals are to be achieved. However, even for the entire industry, these emissions are minuscule in global terms, and considering only these activities ignores the critical role the financial sector plays in enabling and growing activities which either increase emissions or help reduce them.

Banks help industries finance their activities, either by direct lending or connecting them with investors. Hence, they can play a critical role as agents for change by helping direct financing towards activities aligned with the Paris Agreement, and away from activities that are not. Banks will need to match the growing supply of those willing to finance the 'green transition' to the demand for developing and growing clean sources of energy across the economy. It is estimated[2] that between $1.6 - $3.8tn in green financing will be required annually through to 2050 for the net zero transition to succeed, the bulk of which will need to be facilitated by banks.

This idea has been recognised by the seventy-five central banks and financial regulators that have currently joined together to form the Network for Greening the Financial System (NGFS), and over 180 banks that have joined Barclays in ratifying the UNEP Finance Initiative's Principles for Responsible Banking, the first of which states that banks must align not just their operations, but also their business and strategy, with the Paris Agreement and relevant regional and national frameworks.

For this reason, we have set an ambition to reduce both our operational and financed emissions to net zero by 2050 and committed to doing so in a manner that aligns our near- and medium-term emissions with the Paris Agreement goal of limiting total warming to well-below 2°C.

[1] IPCC, 2018: Global warming of 1.5°C. [V. Masson-Delmotte, P. Zhai, H. O. Pörtner, D. Roberts, J. Skea, P.R. Shukla, A. Pirani, W. Moufouma-Okia, C. Péan, R. Pidcock, S. Connors, J. B. R. Matthews, Y. Chen, X. Zhou, M. I. Gomis, E. Lonnoy, T. Maycock, M. Tignor, T. Waterfield (eds.)]. In Press.

[2] https://www.climatepolicyinitiative.org/publication/global-landscape-of-climate-finance-2019/

Designing an approach to Paris alignment

The complex and indirect nature of financed emissions results in three design questions for banks aiming to support the goals of the Paris Agreement and become net zero organisations.

Question One: Which financial services to include?

The first question is determining which financial services should be considered part of the measurement. For example, corporate loans are often provided directly by banks. As a result, banks should consider whether the activities supported by these loans help further the goals of the Paris Agreement. However, what about debt- and equity-capital markets activity (issuing stocks and bonds on behalf of companies) for which banks only play an intermediary role? How do we assess the contribution of the bank's intermediary role to the company's emissions? Likewise, do we assess the emissions impact of mortgage loans extended to individual customers by the energy use of the borrower?

In the absence of commonly accepted standards, banks must make their own determination, considering not only the level of emissions resulting from any given financial service, but also whether they have both sufficient data and agency to measure and influence those emissions. Indeed, we hope that our own methodology may be a helpful step in establishing such common standards.

We have decided to focus the measurement of our net zero ambition on activities which we believe directly affect the emission of GHGs, and for which we can reasonably assess their impact. This will comprise the bulk of our financing services by volume and revenue, including all corporate lending, debt- and equity-capital markets activity, and will, over time, also include mortgage lending.

Remaining activities comprise services which do not lead to material emissions in the real economy (e.g. research services), or which do but for which we have insufficient means to influence or measure their impact on GHG emissions. The latter group includes, for example, credit card lending where we cannot directly affect the purchase of products or easily measure their emissions impact.

Question Two: How to measure financed emissions?

The second question is how to appropriately quantify financed emissions from a given service. Specifically, when financial services are extended to a counterparty, should the bank measure that counterparty's Scope 1, Scope 2, or Scope 3 emissions? Scope 1 emissions are defined as the emissions that result from a company's immediate operations. Scope 2 emissions are those that result from the electricity and heating purchased by a company. Scope 3 emissions are defined as the emissions that result from that company's value chain. Scope 3 can be defined as including both upstream and downstream emissions, or only downstream emissions.

The GHG Protocol suggests that financed emissions should be defined as the fair share of the counterparty's Scope 1 and 2 emissions, and where significant their Scope 3 emissions. The Partnership for Carbon Accounting Financials (PCAF), suggests that Scope 1, 2, and 3 emissions should be measured, following the lead of the EU Technical Expert Group on Sustainable Finance, to ensure that counterparties are held responsible for what they consume and what they produce, not just how they operate.

This choice has important implications for how net zero is defined for banks. Specifically, including Scope 3 emissions is likely to result in over-inflated emissions estimates due to double- and triple-counting of emissions from companies in the same value chain, making it difficult to determine how close a bank is to achieving net zero in absolute terms at any given time. For example, considering downstream emissions, if a bank finances a natural gas producer and an electrical utility that purchases natural gas from that producer, the Scope 1 emissions of the utility are part of the Scope 3 emissions of the natural gas producer. Considering upstream emissions, an electric vehicle producer that purchases steel from a high-emissions plant would then be responsible for the emissions produced in the production of that steel.

We have chosen to measure financed emissions as Scope 1, 2, and 3 for each of our counterparties, defining Scope 3 as downstream emissions only. This is done to ensure that we are considering how our clients operate (Scope 1), what energy inputs they use (Scope 2) and what they produce (Scope 3), while reducing the issues posed by double-counting from upstream material inputs.

The second aspect of this question is whether to measure financed emissions in absolute or intensity terms (e.g. as emissions per unit output). We will measure our financed emissions in both absolute and intensity terms when determining Paris alignment, as the alignment of different sectors is best measured in different ways. For the fossil fuel extraction sector, alignment is best measured in absolute terms because reducing emissions intensity below a given level is not possible (you can't decarbonise a barrel of oil), and so constructing a meaningful path to net zero using an intensity metric is difficult. For other sectors, using an intensity metric is preferable, as it allows us to focus on helping our clients transition instead divesting from them, and minimises volatility in measured emissions from changes in market structure or company valuation. When evaluating distance from net zero, we will measure financed emissions in absolute terms.

Question Three: How do we define alignment to Paris?

- The third and final question, having measured financed emissions, is determining how financed emissions must be reduced between today and net zero in order to align with the Paris Agreement goal of limiting warming to below 2°C. Unfortunately, the answer is not as simple as "reduce financed emissions in line with a global 2°C emissions pathway". One complication is that there is not a single agreed upon 2°C emissions pathway. In other words, it is difficult to determine Paris-alignment of a given portfolio of companies because Paris-alignment must be measured at the global level (incorporating the behaviour of all actors) and can occur given a wide range of different assumptions regarding economic growth and technology.
- Different actors have taken different approaches to solving this problem, nearly all of which revolve around the idea of selecting a reference scenario or set of reference scenarios against which to measure alignment. We have developed our own methodology, which we call BlueTrack™ to measure the alignment of our financed emissions based on this same principle. In the immediate term, our method will determine the alignment of financed Scope 1, 2, and 3 emissions from key emitting sector portfolios (upstream energy extraction and power generation) with the IEA SDS scenario. We have chosen the IEA SDS scenario because it is Paris-compliant, reputable, open-sourced, and contains sufficient data to allow us to calculate targets for our financing portfolio.

Over time, we will continue expanding and evolving this methodology:

- We will work to expand BlueTrack™ to encompass all sectors, being thoughtful and transparent about where Scope 3 emissions should be included, and where they should not.
- We will update BlueTrack™ over time to track new benchmark scenarios as they are developed
- We will develop an approach to resolving the double-counting challenge associated with measuring absolute financed emissions such that, as we get closer to the net zero target date, we can not only accurately quantify and report our distance to net zero in absolute terms, but also use this information to inform our negative emissions strategy. As a first step, we have joined the Partnership for Carbon Accounting Financials (PCAF), in the hope that we can contribute to the Global Carbon Accounting Standard to address this issue.

Principles guided by our purpose

We aim to work with our clients to facilitate their own approach to Paris alignment. It is important to recognise that the business of a net zero bank will look different from the business of banks of today.

As our clients make the transition to a low-carbon world, we expect any reduction in revenue earned from financing fossil fuel extraction or combustion to be replaced by financing the transition of the installed asset base to new or emerging technologies, including renewable energy, at-scale hydrogen production, electric vehicles, and carbon capture and storage.

We will work with our clients as agents of change, helping them make their own transitions quickly and effectively.

We recognise that achieving net zero financed emissions by 2050 is a challenge. The faster the real economy decarbonises, the easier it will be for us to focus purely on helping our clients with their own transitions. But if the real economy does not transition rapidly, we will have to rely more heavily on other options, including re-structuring our portfolio to finance fewer high-emissions activities and more low-/zero-/negative-emission activities, and enabling negative emissions to compensate for what we cannot mitigate.

Our journey to becoming a net zero bank by 2050 will be guided by six principles.

1. Transparent disclosure
   From today, we will publicly track our progress in aligning our financed emissions with the Paris Agreement, starting with Energy and Power. As we get closer to 2050, we will also measure and disclose our gap-to-net-zero in absolute terms.
2. Working with clients to accelerate the transition
   We will work with our clients to help facilitate their own zero-carbon transition wherever possible. There may be companies or particular activities which cannot adjust to transition over time, and in such cases we believe that they will find it increasingly difficult to access the capital markets for financing, including through Barclays.
3. Evolving our approach
   Our approach to becoming a net zero bank will evolve over time, as the world around us changes. For example, our sector reference pathways will be updated as the world diverges from a given reference scenario, or as the decarbonisation pathways for currently hard-to-abate sectors become clearer.
4. Recognising the commercial opportunity
   We recognise that the transition to a zero-carbon economy creates commercial opportunities across our business.
5. Supporting negative emissions technologies
   We will take steps in the short, medium, and long term to facilitate the development of negative emissions technology and markets. This could include investing in early-stage innovation and research in the near term, providing capex lending to project development in the medium term, and helping to sell generated credits on voluntary markets in the long term.
6. We expect to need negative emissions technologies to offset any residual gap-to-net-zero
   We expect to use some level of negative emissions to offset any residual gap-to-net-zero, although our approach is principally focused on emissions reduction.

Finally, it is important to note that as we transition to being a net zero bank we are committed to delivering financial performance for our shareholders. We will do so by applying our climate strategy thoughtfully, capturing the opportunities associated with the zero-carbon transition. We expect the opportunity posed by this transition to be substantial given that the investment required for the world to meet the goals of the Paris Agreement is estimated to be between $1.6 - $3.8tn annually until 2050[3].

[3] https://www.climatepolicyinitiative.org/publication/global-landscape-of-climate-finance-2019/

Transparency

We have published a detailed overview of how BlueTrack™ is helping us to measure our financed emissions, and track them at a portfolio level against the goals of the Paris Agreement. We will update that overview over time as our methodology evolves.

The aim of doing so is threefold: firstly, to ensure that stakeholders who are interested in understanding how we measure progress against our climate goals can do so. Secondly, to open our methodology to review by peers, experts, and other interested stakeholders, so that we can leverage the collective knowledge of the climate finance community and use it to continue to improve our approach over time. Thirdly, and finally, we want to ensure that the details of our methodology are made available for use by our peers, in hopes that it will become a useful tool for other institutions that want to set and achieve their own climate goals.

Continuing our journey to net zero

We are actively involved in industry-wide initiatives to build consensus on carbon accounting and portfolio alignment, including through our work on the Paris Agreement Capital Transition Assessment (PACTA), and our membership of the Partnership for Carbon Accounting Financials (PCAF), among others.

We will continue to evolve our approach to net zero, working closely with our peers across the financial services industry.