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Tackling the challenges of the net-zero transition

How the financial services industry can boost credibility through measurement

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Contents

Executive summary

According to a September 2021 UN analysis the world is on track for 2.7°C of global warming, instead of the 1.5°C target that would avoid the worst effects of climate change.[1]

By aligning the emissions of their portfolios to the 1.5°C Paris Accord target, financial institutions could play a vital role in driving the rapid, system-wide changes needed over the next decade to limit global warming and reach net-zero by 2050. Demonstrating credible progress toward net-zero and translating their strategic commitments into sustainable capital flows starts with measuring their financed emissions and meeting measurable near-term milestones. However, measuring financed emissions is a data-intensive and technologically demanding activity for financial institutions. It has been hindered by the absence of a single global measuring standard, common databases to source data, and agreement on crucial portfolio warming metrics. Despite these challenges, financial institutions need to make significant strides in the first half of this decade to remain credible on their net-zero targets. Speed is essential.

There are emerging solutions and measurement standards available to get firms started. Data collection, assessing its integrity, and identifying gaps can appear time-consuming. But financial institutions making strategic pledges and faced with regulatory obligations need to progress their own emissions data collection and work together to converge on industry-led frameworks.

Today, financial institutions can boost the credibility of their progress to net-zero by adopting a robust approach for measuring their financed emissions in five practical steps:

01 Align their strategies and business models with their climate change goals

02 Recognize that measuring financed emissions and temperature alignment is a new and essential area of their fiduciary responsibility

03 Determine the range of carbon-intensive assets their portfolio contains and boldly widen the sectors and exposures that they include in their net-zero commitment

04 Determine data sources and overcome gaps in their data by using qualitative workarounds like approximations

05 Finally, calculate their emissions using the most prevalent science-based methodologies as a guide and then agree as an industry to converge on a single methodology

Introduction

The world must limit global warming to 1.5°C above pre-industrial levels to avoid the worst effects of climate change, which will require global greenhouse gas (GHG) emissions to decline by nearly half (from 2010 levels) by 2030.[2]

Financial institutions provide the "plumbing" of the real economy and have a significant role in addressing climate change. Like all organizations, financial institutions produce GHG emissions directly through their activities. Critically, their indirect emissions–emissions generated through transactions and asset ownership in their banking and trading books and their investment portfolios–*can be many multiples*[3] of the emissions from their business operations. By aligning the emissions of their portfolios to the 1.5°C global warming limit set by the Paris Accord, financial institutions could play a vital role in driving the rapid, system-wide changes needed over the next decade to limit global warming and reach net-zero. The sector is already showing an appetite for this challenge and an undertaking to help green the global economy.

Numerous financial institutions have joined important industry initiatives, such as the Glasgow Financial Alliance for Net Zero coalition, the Task Force on Climate-related Financial Disclosures (TCFD) and the Partnership for Carbon Accounting Financials (PCAF).

A growing number[4] of financial institutions have pledged to make their portfolios net-zero by 2050 or sooner, and a minority have already started measuring their financed emissions. However, measuring emissions and net-zero pledges lack credibility unless they are underpinned by measurable interim targets temperature aligned to the Paris Accord that go beyond the current state of pledges, partial portfolio commitments or longer-term commitments. Achieving their net-zero pledges will require progress on multiple fronts: coordinated government and regulatory intervention, functioning carbon markets that boost carbon trading, and robust methodologies for measuring their GHG emissions and temperature alignment.

In the meantime, financial institutions are under increasing pressure to demonstrate credible progress toward net-zero and translate their strategic commitments into sustainable capital flows, highlighting four critical challenges:

- The world needs much stronger, long-term national and international policy coordination for financial services to contribute to the net-zero ambition at the required pace and scale;
- It is unclear to financial market participants how abatement technologies and carbon trading and offsetting markets will develop and how rapidly and extensively they will impact carbon-intensive and hard-to-abate sectors;
- All organizations will need to coherently upgrade their environmental, social, and governance (ESG) strategies to ensure their lending and investing progresses their net-zero commitments in a way that supports a fair climate transition, minimizing social and economic disruption, especially but not only in the developing world;
- All financial services firms need to commit to a single global standard for measuring financed emissions, a common database where to source the data, and a robust reporting framework for what data to measure.

This paper focuses on the last of these four challenges. Measuring financed emissions and the implied carbon footprint of their trading, lending and investment portfolios, presents financial institutions with a difficult challenge.

Science-based targets for conforming to net-zero are emerging. Methodologies that help manage "portfolio warming," such as Paris Agreement Capital Transition Assessment (PACTA) and the Science Based Targets Initiative (SBTi), are gradually being adopted. Yet, these are not widely understood or embedded. Part of the difficulty facing financial institutions is they cannot measure emissions and meet interim targets without first sourcing large amounts of varied, current and forward-looking data across sectors and counterparties to measure emissions and meet interim targets.

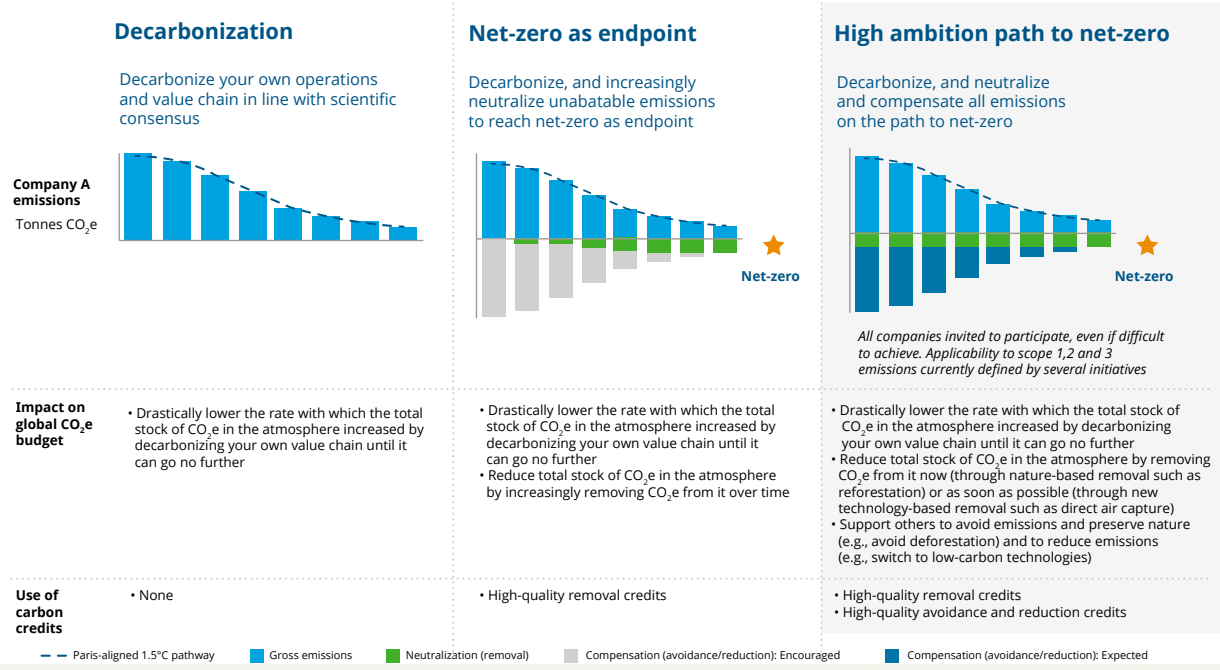
Without greater industry-wide clarity and convergence, financial services as a sector will struggle to contribute vigorously and promptly to the world's net-zero ambition, despite ambitious pledges already made.

Yet far from being a reason to watch and wait for the emergence of these standards, financial institutions should start preparing their data on emissions across their value chain, tackling the measurement of their financed emissions, and converting long-term net-zero pledges into measurable near-term milestones.

> There is a deficit of credibility and a surplus of confusion over emissions reductions and net-zero targets, with different meanings and different metrics.
>
> **António Guterres**, UN Secretary-General[5]

Part 1 examines the why and what of measuring the carbon footprint of their trading, lending and investment portfolios and considers industry initiatives to develop a uniform standard of measurement. Part 2 explores how progress can nevertheless be made on financed emissions even before convergence on a global standard and how participants can lead the market by setting self-imposed interim targets.

High ambition path to net-zero*



* Source: Calling for a High Ambition Path to Net-Zero," IIF. https://www.iif.com/Portals/1/Files/High_Ambition_Path_to_Net_Zero.pdf

Part 1: The why and what of measuring financed emissions

Achieving net-zero GHG emissions by 2050 is the world's attempt to reduce the negative impacts of climate change by maintaining the global temperature increase below 1.5°C above pre-industrial levels. To achieve the 1.5°C target, net GHG emissions need to decline by about 45% from 2010 levels by 2030, reaching net-zero around 2050.[6]

The world is nowhere near on track to achieve net-zero by 2050. According to a UN analysis, far from nearly halving (from 2010 levels) global emissions by 2030, emissions are likely to be 16% above their 2010 levels.[7] In the absence of legally binding emissions targets at the national level, emissions trajectories continue to move in the opposite direction of where they need to head, putting the world on track for 2.7°C of global warming above pre-industrial levels.[8]

This highlights the enormity of the challenge. Hitting targets requires rapid and far-reaching transitions across all sectors of society as they work to decarbonize.

Society at large and a growing number of stakeholders, including employees, investors, policymakers, and customers, expect financial institutions to play their part in tackling climate change by mobilizing and then redirecting capital to support the net-zero transition, ideally in a way that is just to all segments of society.

This process starts with financial institutions measuring their financed emissions to understand the climate impact of their existing trading, lending and investment activities.

Every financial institution's total GHG footprint comprises three types of carbon emissions:

- **Scope 1**–emissions that a company makes directly through its operations
- **Scope 2**–emissions it makes indirectly, such as their energy use
- **Scope 3**–emissions up and down its value chain, for which it is indirectly responsible, of which emissions from its trading, lending and investment activities are typically the most significant component.

In most cases, a financial institution's Scope 3 emissions will dwarf emissions from other sources. This makes the commitment to including all Scope 3 financed emissions an integral element of its net-zero plan.

Currently, only very few institutions are measuring the carbon footprint of their entire portfolio, much less reporting on it. But pressure from stakeholders to address this shortfall and make their net-zero plans credible is reaching a tipping point.

> "We have to be clear though that there are likely to be a variety of approaches across jurisdictions and so what we are aiming to do is to create interoperability. We use that term because we are focused on outcomes rather than harmonization or convergence of rule sets in particular, so we're not aiming to have precisely the same rule set but we are aiming to move in the same direction and create that interoperability.
>
> **Matt Swinehart,** Acting Deputy Assistant Secretary for International Financial Markets, US Department of Treasury[9]

Solving emissions measurement and disclosure challenges

To meet stakeholder expectations and regulatory requirements for measuring and disclosing the emissions of their portfolios, financial institutions need to learn how to:

- collect specific sustainability data from external sources, including their customers
- accurately measure the carbon footprint of their entire portfolio under a range of climate scenarios
- report on their portfolio's temperature alignment using a methodology that enables comparison with other financial institutions.

However, in the absence of a single data governance framework for gathering emissions data and with no single globally accepted methodology for measuring and reporting the temperature alignment of their portfolios, financial institutions face significant data gathering and benchmarking challenges. Consequently, they have either slowly embraced this new task or shied away from it altogether.

The search for a single measurement standard

Alongside regulatory developments, industry-led initiatives have made good progress in promoting greater disclosure of climate-related risks and opportunities. For example, the efforts of the TCFD a GHG Protocol have seen significant adoption since its release in 2017.

Using the TCFD's disclosure recommendations, organizations can provide greater transparency about their climate-related risk exposures to their stakeholders while understanding their long-term climate-related risks and opportunities.

> Finance is a key enabler in the drive towards net-zero emissions. Banks can only reduce our collective financed emissions if we work together on a common, science-based approach to understanding and addressing the problem.
>
> **Alison Rose,** Group Chief Executive Officer, NatWest[10]

Although the TCFD's recommendations are voluntary, they are gaining traction with policymakers, with the UK government proposing[11] to become the first G20 country to make the TCFD-aligned disclosures mandatory in 2022.

Some industry initiatives that are gathering momentum as industry standards for helping financial institutions quantify and measure temperature alignment or just the carbon footprint of their portfolios include:

- Science Based Targets Initiative (SBTi)
- The PACTA Methodology[12]
- The European Banking Authority (EBA) 's Pillar 3 disclosures on ESG risks, and
- PCAF Global GHG Accounting and Reporting Standard.[13]

SBTi

SBTi is a collaboration between the Carbon Disclosure Project, the UN Global Compact, the World Resources Institute and the World Wild Life Fund for Nature. It is one of the commitments of the We Mean Business Coalition of non-profits centred on action for net-zero. SBTi promotes best practices on emissions reductions and net-zero targets aligned with climate science. It provides a pathway for companies to reduce GHG emissions by providing independent assessment and validation of targets.

PACTA

PACTA is a free-of-charge methodology that enables financial institutions to measure the alignment of their corporate lending portfolios with climate scenarios across a set of key climate-relevant sectors and technologies. PACTA is developed by the non-profit think tank 2° Investing Initiative, in partnership with and funding from a range of stakeholders across the banking, academic, and NGO sectors.

The EBA Pillar 3 disclosures

The EBA plans to publish Pillar 3 disclosure requirements on ESG risks, transition risks, and physical risks in 2021, following its public consultation in March 2022 on draft implementing technical standards (ITS) on Pillar 3 disclosures. The draft ITS proposes comparable quantitative disclosures on climate change-related transition and physical risks, including exposure to carbon-related assets and assets subject to climate change.

In this context, the EBA cites[14] PCAF's Global GHG Accounting and Reporting Standard as an appropriate standard for financial intermediaries to manage and monitor their climate risks, by measuring financed emissions.

> "In the real world of capital flows, if the investors are seeking this information, they need to make investments, they are not going to accept that there are some jurisdictions that haven't developed the disclosure infrastructure, and therefore they will give them a pass. It is important to establish that minimum baseline and to help with technical assistance with other forms of sharing experiences to help all jurisdictions get to a common baseline."
>
> **Rupert Thorne,** Deputy Secretary General, Financial Stability Board[15]

PCAF Global GHG Accounting and Reporting Standard

Alongside recognition from the EBA, the PCAF Global GHG Accounting and Reporting Standard is gaining traction globally among financial institutions. The PCAF Standard calculates financed emissions using two variables: the attribution factor (i.e., the financial weight an institution has through lending or investing) and the emission factor of the company or asset being measured.

Part 2: How to begin measuring your financed emissions

Financial institutions under pressure to measure and report on their carbon emissions face a difficult challenge. Even using one of the emerging measurement standards, like SBTi, PACTA or PCAF, estimating the emissions associated with their entire trading, lending, and investment portfolios can be fiendishly complex. The emerging methodologies are relatively new and in development, and it is unclear which will become the globally recognized standard.

> A particular challenge for target setting is the quality of data for private companies. The lack of publicly available information and the granularity of that information ....This could be an area where standardization could be very useful. Not through regulation, but through guidance.
>
> **Geneviève Piché,** Managing Director and Head of ESG Solutions, Corporate & Investment Bank, Wells Fargo[16]

Nevertheless, even without a single global standard of measurement, financial institutions should start preparing their emissions data because:

- There are emerging solutions and developing measurement standards financial institutions can start using today (such as SBTi, PACTA or PCAF)
- Irrespective of when and which single standard is agreed upon, each financial institution's data collection is critical, as is evaluating its integrity and the gap assessment–all time-consuming but necessary
- Financial institutions will struggle to demonstrate tangible interim progress on their net-zero targets without this effort. By preparing this data, financial institutions can strengthen their own ESG actionable strategies, identify harder-to-abate sectors and their carbon trading strategies and therefore get their entire portfolio on the pathway to net-zero by 2050 or sooner.

Building a robust approach for measuring financed emissions can start with five practical steps.

Step 1: Align your firm's strategy and business model with your climate change goals

Financial institutions need to consider their business models' short, medium and long-term resilience and set strategic objectives concerning climate change and the shift to a low-carbon, clean-technology world.

Financing priorities need to include financial returns and managing climate-related financial risks, decarbonizing existing portfolios (by divesting from high-carbon sectors but also by steering those sectors toward becoming greener), and mobilizing the capital required to accelerate the climate transition.

Step 2: Recognize that measuring financed emissions and temperature alignment is a new and important area of your fiduciary responsibility

Financial institutions, who previously never needed to measure and report on the carbon footprint of their portfolios, should recognize it is a new area of responsibility performing an essential new function for several key stakeholders.

Core competencies for the new function will include collecting, managing, analyzing, and reporting on vast amounts of data, working with stakeholders across different departments and numerous external client organizations within their portfolio, and developing new tools and technology to enhance data aggregation accuracy and granularity.

Step 3: Determine the range of carbon-intensive assets in your portfolio and boldly widen the sectors and exposures it includes to give credibility to your net-zero commitment

Consider what kind of assets your portfolio contains, ensure all the more carbon-intensive assets and exposures are included and then select an appropriate methodology to measure the emissions of each particular asset class.

Next, your firm needs to reflect on which metrics to adopt and report on for its temperature alignment.

Step 4: Determine data sources and overcome gaps in your data by calculating an approximation

Determine data availability for the full scope of your emissions. Initial sources for the data will typically be the financial institution itself plus its borrower or investee organizations. However, many portfolios will contain thousands of issuers and small-medium enterprises, making data coverage and especially data quality challenging. Not all counterparties will generate or retain information about their emissions or even fully understand their climate risks.

Where data quality is low or patchy, financial institutions should overcome those gaps by making clear assumptions, using proxies and rating data quality while committing to improving this over time.

Step 5: Calculate your emissions using the most prevalent science-based methodologies as a guide and then converge, as an industry, on a single methodology

Using one of the emerging GHG accounting methodologies today that is science-based to guide your first steps toward preparing emissions data is a positive step and a strong signal to your firm's stakeholders. It is vital that financial institutions get started now.

For many, the volumes of data needed to be gathered and analyzed will be immense.

Yet, financial institutions that do not adopt one of the prevailing established science-based frameworks or opt to delay measuring their carbon footprint run multiple risks, including:

- the reputational risk of lacking a credible net-zero pledge or being regarded as a laggard
- the risk of having a specific standard or regulatory estimate imposed further down the road
- the risk of double counting emissions, where an institution might hold both equity and debt positions within the same companies or projects.

While there are multiple prevalent methodologies, most attempt to measure financed emissions coherently, with financial institutions only expected to account for the proportion of emissions from the counterparty or investment related to its actual financial exposure (using a concept called the attribution factor).

With the above steps completed, the institution can begin calculating the financed emissions of each exposure or asset in its portfolio by multiplying the attribution factor by the emissions of the respective project or transaction.

Outlook

Financial institutions can start to build a robust approach for measuring their financed emissions using the five practical steps outlined in this report. To contribute fully to the world's net-zero ambition and meet regulatory requirements, the industry needs to come together to develop solutions for measuring, managing and mitigating financed emissions and climate-related risk within the financial system.

Deloitte can help drive this discussion in the industry and mobilize a common standard.

> We are starting to see some international convergence in the overarching principles. But when looking into the details, we do not see, nor expect, complete comparability. The sense of urgency and readiness differs across the globe, but this is not an impediment to success in my view. I believe the most important factor is that internationally we see continued convergence around the fundamental issues.
>
> **Holger Schulte,** Head of Strategy, Transformation & Sustainability, Commerzbank AG[17]

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End notes

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