



ACCOUNTING FOR
SUSTAINABILITY

NET ZERO

A PRACTICAL GUIDE
FOR FINANCE TEAMS OF BANKS

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° INTRODUCTION

FAILURE TO ACT ON CLIMATE CHANGE REPRESENTS AN EXISTENTIAL RISK TO SOCIETY AND THE GLOBAL ECONOMY.

The World Economic Forum's Global Risks Report 2021 places climate action failure in the top two risks by likelihood and by impact over the next 10 years, with extreme weather the top risk by likelihood.

ABOUT THIS GUIDE

This guide is written for finance teams within banks to understand better the pivotal role they can play in helping their bank to achieve a net zero ambition. It outlines the net zero landscape, the business case for action and the practical steps that finance teams can take, along with links to further resources. While this guide focuses on the banking sector, much of the content is applicable to other financial institutions. A separate A4S guide is available for those finance teams in other sectors.

> [Net Zero – A Practical Guide for Finance Teams](#)

1. World Economic Forum, [Global Risk Report 2021](#)
2. Intergovernmental Panel on Climate Change (IPCC), [Global Warming of 1.5°C](#)
3. Guidehouse Insights, [How Financial institutions Can Plan for Net Zero by 2050](#)
4. [Larry Fink's 2021 letter to CEOs](#)
5. UN Environment Programme Finance Initiative, [Guidelines for Climate Target Setting for Banks](#)

Failure to act on climate change represents an existential risk to society and the global economy. The World Economic Forum's Global Risks Report 2021¹ places climate action failure in the top two risks by likelihood and by impact over the next 10 years, with extreme weather the top risk by likelihood. The Paris Agreement, adopted by world leaders in 2015, aims to keep global heating to well below 2°C above pre-industrial levels by 2100 and to strive for a maximum 1.5°C rise in global average temperatures. Most climate scientists now agree that, to avoid the worst effects of climate change, any rise needs to be limited to 1.5°C. The urgency is clear: to limit global warming to these levels, global greenhouse gas (GHG) emissions need to halve by 2030, reach net zero around mid-century and be negative during the second half of the century.² The scale and speed of the transition needed is unprecedented and will require rapid and far-reaching transitions across the whole economy. Further, even if temperature increases are limited to 1.5°C, significant investment to adapt to the physical impacts of climate change will be needed.

Net zero will be achieved when global emissions of GHGs to the atmosphere are balanced with removals of GHGs from the atmosphere. Key components to achieving this include the deep decarbonization of the economy in energy, urban, infrastructure, industrial and land use systems as well as permanently removing the residual GHG emissions that are unfeasible to reduce or avoid.³ As global awareness of the need to reach net zero GHG emissions ('net zero emissions') has grown, so has the need for a common understanding on what net zero emissions means and how to achieve net zero goals. Investors are also putting pressure on companies to lay out their plans for reaching net zero emissions and to demonstrate how net zero pathways are integrated into their long-term strategy.⁴

The whole financial system, including the banking sector, has a crucial role to play in reaching global net zero emissions. Banks represent a large proportion of the world's available capital and are in an influential position, through their lending and financing activities, to support the transition to a net zero economy.⁵ By supporting their clients' transition activities and by directing capital away from carbon intensive activities and towards technologies, companies and projects that are aligned with a net zero emissions economy, banks can have a real impact on a global trajectory to limit global warming to no more than 1.5°C.

Chief Financial Officers (CFOs) and finance teams within banks can support the efforts and plans of their organizations to progress towards net zero emissions by: sourcing, analysing and providing the information needed to drive decisions, developing and setting interim targets, measuring, monitoring and reporting progress over time and incentivizing action within the bank. A4S published [Net Zero Top Tips for CFOs](#) in April 2021, based on insights from our global CFO Leadership Network. Building on these top tips and the [A4S CFO Net Zero Statement of Support](#), this guide explores the steps that finance teams of banks can take to help their organizations progress towards net zero emissions. It draws on practical guidance, knowledge and case studies from the [A4S Essential Guide series](#) to help finance teams address the practical issues of setting credible net zero targets and embedding them into finance processes and decisions.

◦ WHAT DOES IT MEAN TO BE NET ZERO?

Creating a bridge from global climate science to targets actionable by companies, the Science Based Targets initiative (SBTi) has defined what it means to reach net zero emissions at the corporate level: achieving a state in which the activities in an organization's value chain result in no net accumulation of carbon dioxide (CO₂) and other GHG emissions in the atmosphere.⁶

This is reached by:

1

Achieving emission reductions along the full value chain that are consistent with the depth of abatement⁷ achieved in pathways that limit warming to 1.5°C with no or limited overshoot⁸.

2

Neutralizing the impact of any residual emissions that the organization cannot feasibly eliminate, by permanently removing an equivalent amount of atmospheric CO₂.

The SBTi has launched a process to develop the first science-based global standard for corporate net zero targets. The process is marked with the publication of a new paper that lays out the conceptual foundations for credible, science-based net zero targets for the corporate sector.⁹ In the meantime, the SBTi has a framework for financial institutions to support this sector set science-based targets and align their lending and investment activities with the Paris Agreement. The framework¹⁰ includes guidance and target validation criteria (piloted versions at time of this publication) and tools for target setting, temperature scoring and portfolio coverage.

6. Science Based Targets initiative, [Foundations for Science-Based Net-Zero Target Setting in the Corporate Sector: Executive Summary](#)

7. The reduction of the amount of carbon dioxide that is produced when coal and oil are burned.

8. It is important that there is no or limited overshoot of the carbon budget during the transition to net zero to avoid the over-dependence on negative emissions technologies or carbon dioxide removal strategies for which the technologies are not yet fully developed and therefore the impact on removing emissions and limiting warming to 1.5°C is uncertain.

9. Science Based Targets initiative, [Foundations for Science-Based Net-Zero Target Setting in the Corporate Sector](#)

10. Science Based Targets initiative, [Financial institutions](#)

WHAT DOES IT MEAN TO SET A NET ZERO TARGET?

A definition of a net zero target that is becoming widely accepted is one in which the target aligns with the Paris Agreement and is consistent with a 1.5°C pathway. A new paper by SBTi¹¹ and a recent position paper by ClientEarth¹² support this definition, which requires every organization to achieve significant absolute reductions in GHG emissions both within their own operations (scope 1 and 2 emissions) and along their value chain (scope 3 emissions).

11. Science Based Targets initiative, [Foundations for Science-Based Net-Zero Target Setting in the Corporate Sector](#)

12. ClientEarth, [Principles for Paris-alignment: Position Paper](#)

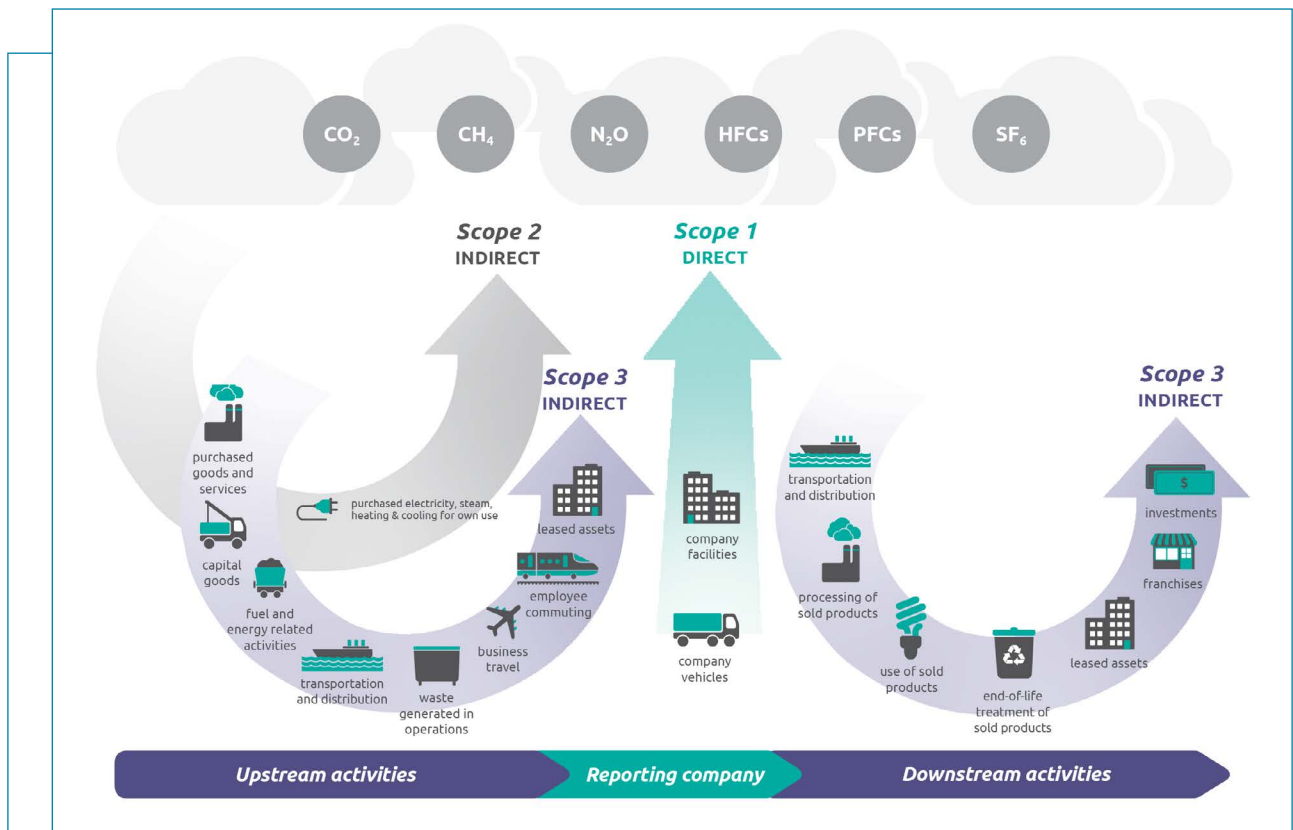
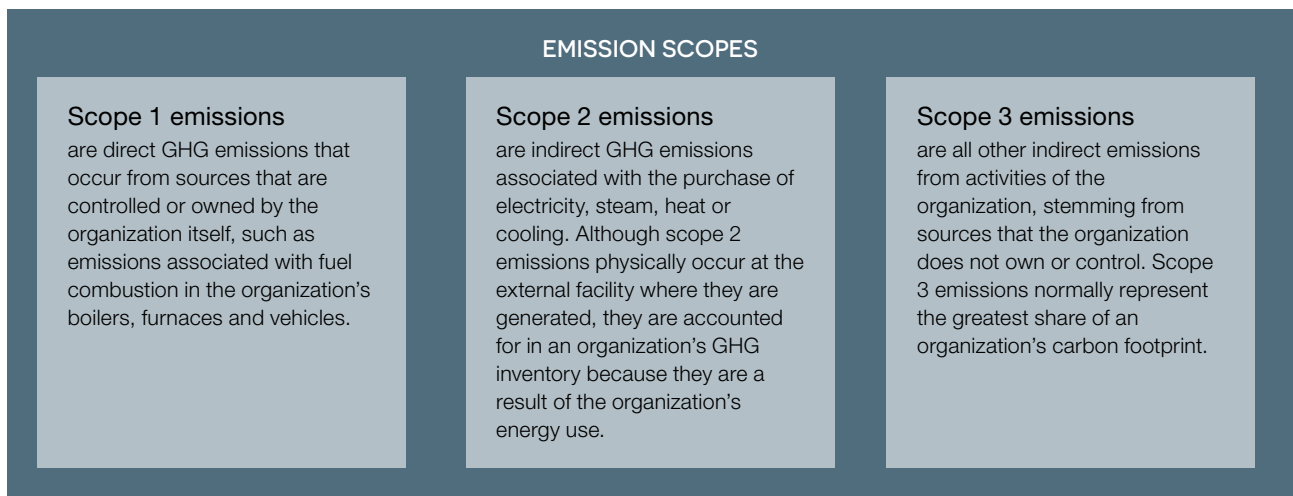


Figure 1: Scope 1, 2 and 3 emissions (Source: Greenhouse Gas Protocol, [Corporate Value Chain \(Scope 3\) Accounting and Reporting Standard](#))

In setting targets and developing plans, organizations need to take into consideration emissions along their full value chain. For heavy emitters, their priority will be to reduce their scope 1 and 2 emissions. For other organizations, including banks and other financial services, where emissions within their customer or supplier base may significantly exceed their scope 1 and 2 emissions, finding ways to reduce scope 3 emissions will be a more significant area of focus and challenge. The SBTi underlines this point, noting that the most significant focus for financial institutions is to align their lending and investment portfolios with the Paris Agreement, and in particular, in a manner consistent with limiting warming to 1.5°C.¹³

While banks should set operational net zero targets for their scope 1 and 2 emissions, the focus will be predominantly on achieving net zero in their 'financed emissions' (scope 3) ie emissions that banks and investors finance through their loans and investments (Category 15 as defined by the GHG Protocol Corporate Value Chain¹⁴). These represent the largest share of the bank's GHG footprint (and arguably are the most challenging category to address) and cover equity investments, debt investments, project finance, managed investments and client services, and other investments or financial services.

It is also important for banks to recognize the impact of financed emissions that are either:

- Issued off-balance sheet eg via the underwriting and issuing of capital markets debt.
- Emissions financed via other financial intermediaries ie encouraging a full 'look through' of any layers of intermediation to capture the ultimate economic activities and the associated emissions.

The below diagram by James Vaccaro, Executive Director at Climate Safe Lending, outlines the potential scope 3 coverage of a bank.

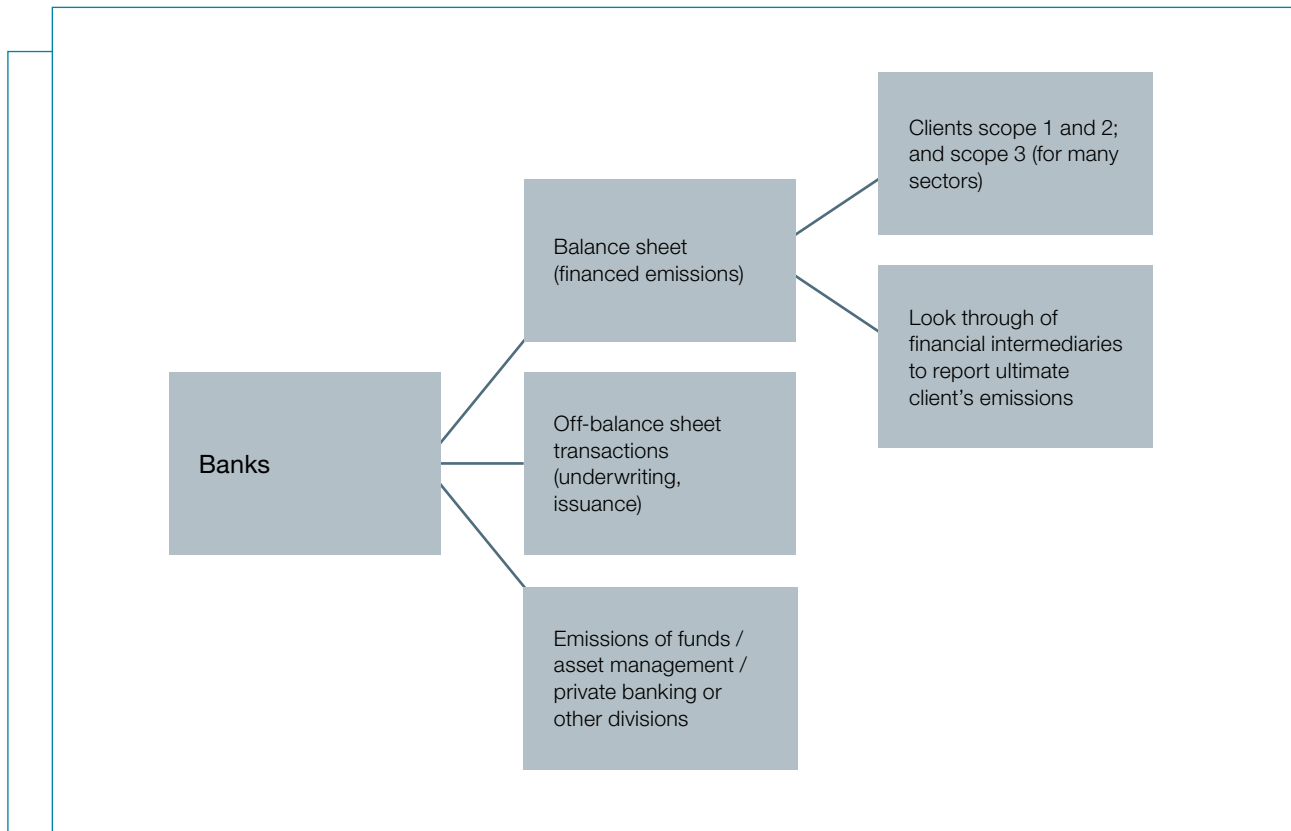


Figure 2: Scope 3 coverage of a bank (Source: James Vaccaro, Climate Safe Lending)

13. Science Based Targets, **Financial Sector Science-Based Targets Guidance**

14. Greenhouse Gas Protocol, **Technical Guidance for Calculating Scope 3 Emissions – Category 15: Investments**

THE ROLE OF EMISSIONS REMOVAL AND OFFSETS

The position of both emissions removals and offsets in achieving a net zero target is a complicated area that needs careful consideration.

- Emission removal is the action of removing GHG emission from the atmosphere and storing it through various means, such as in soils, trees, underground reservoirs, rocks and the ocean, as well as products like concrete and carbon fibre.¹⁵
- Offsets are discrete GHG reductions used to compensate for GHG emissions elsewhere. This can include purchasing high-quality carbon credits.

The SBTi currently states that “companies must aim to eliminate sources of emissions within its value chain at a pace and scale consistent with mitigation pathways that limit warming to 1.5°C with no or limited overshoot. During a company’s transition to net zero, compensation and neutralization measures may supplement, but not substitute, reducing value chain emissions in line with science. At the time that net zero is reached, emissions that are not feasible for society to abate may be neutralized with equivalent measure of CO₂ removals.”¹⁶

The SBTi states that, for financial institutions, net zero targets should be “based on emission reductions through direct action within their own operations or their investment and lending portfolios. Offsets are only considered to be an option for financial institutions seeking to support additional emission reductions beyond their science-based targets.”¹⁷ As banks develop their net zero strategy, consideration of the cost and role of emissions removals and offsets should be addressed in the short and medium term.

To the extent that offsets are used, the SBTi encourages wider sustainability considerations to be taken into account when selecting carbon offset projects, in particular, being attentive to biodiversity and societal concerns (such as habitat restoration and renewable energy projects). A thorough due diligence exercise is always advised to understand the direct and indirect impacts of offset projects.

15. Science Based Targets, [Financial Sector Science-Based Targets Guidance](#)

16. Science Based Targets, [Foundations for Science-Based Net-Zero Target Setting in the Corporate Sector](#)

17. Science Based Targets, [Financial Sector Science-Based Targets Guidance](#)

THE GLOBAL REGULATORY LANDSCAPE OF CLIMATE-RELATED INITIATIVES

The recent backing by the G7 Nations of mandatory climate risk disclosure for market participants is another example of the rapidly evolving regulatory landscape addressing climate change.

On both a global and regional level, regulatory bodies are starting to align their activities and expectations of the financial sector with the net zero commitments made by governments. With a flurry of green finance strategies, roadmaps and regulations emerging around the world, any summary would rapidly become dated. One useful source to gain an insight into work being undertaken by central banks and supervisors is the **Network for Greening the Financial System (NGFS)**. As of 14th June 2021, this group of central banks and supervisors consists of 92 members and 14 observers from around the world willing, on a voluntary basis, to exchange experiences, share best practices, contribute to the development of environment and climate risk management in the financial sector, and to mobilize mainstream finance to support the transition toward a sustainable economy. Its purpose is to define and promote best practices to be implemented within and outside of the membership of the NGFS and to conduct or commission analytical work on green finance.

° WHY IS ACHIEVING NET ZERO IMPORTANT FOR BANKS?

With science now clearly demonstrating that urgent action is necessary to tackle climate change, stakeholders of all organizations, including banks, are demanding to know when and how they will respond. Some other key drivers are:

1

Governments and legislators are moving towards setting legally binding net zero targets. As part of this shift, the regulatory landscape is rapidly evolving with countries introducing green finance strategies and roadmaps that will present unique opportunities for banks.

2

Anticipated policy changes, eg reducing emissions from the built environment and encouraging electric vehicle usage, will impact a number of sectors both directly and indirectly. The products and services that banks offer may need to change to support this transition. Changes in national and international policies will be critical in order for banks, and society in general, to meet net zero targets.

3

Investors are increasingly focused on climate-related financial risks and the implications of these for the long-term viability of current business models.

4

Employees, present and future, are increasingly attracted to organizations that can demonstrate their sustainable business credentials and how they are part of the solution to global issues such as climate change.

5

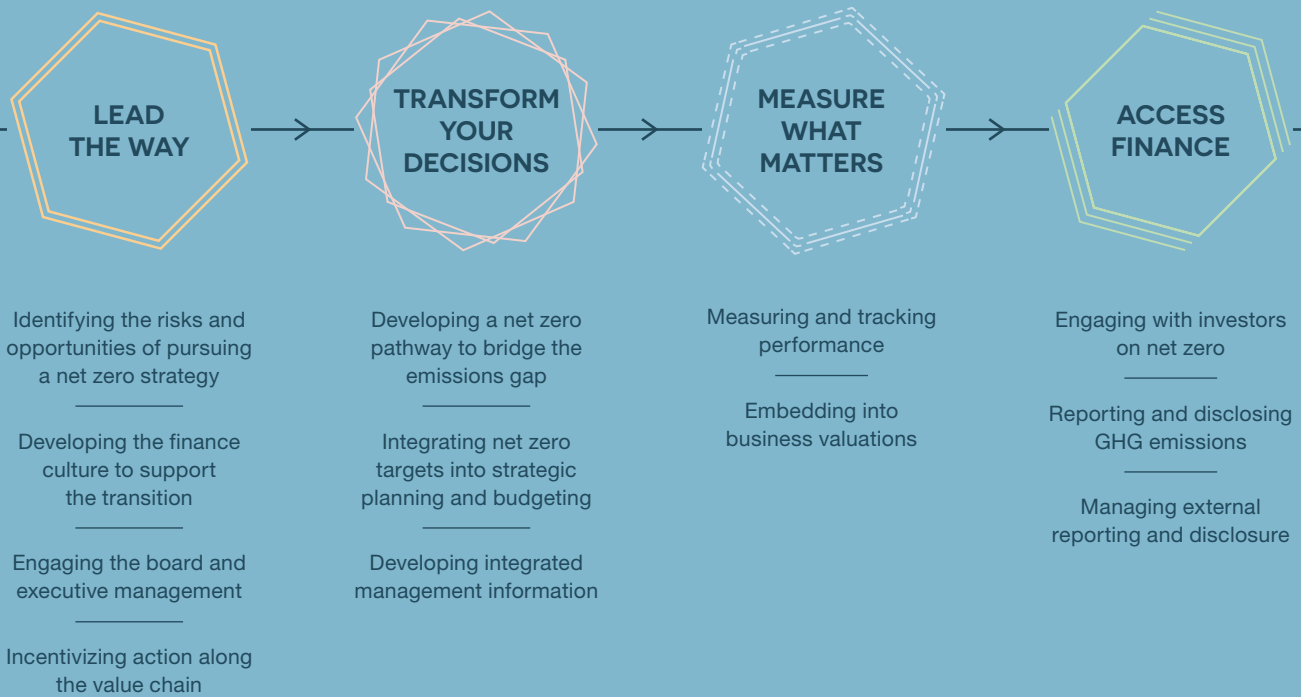
Customers and consumers are increasingly seeking environmentally and socially acceptable alternatives to traditional banking products and service offerings.

◦ WHAT ROLE CAN FINANCE PLAY AND HOW WILL THIS GUIDE HELP?

Achieving net zero emissions will rely on the knowledge, skills and processes inherent within the finance function. Where a bank has made a net zero commitment, finance teams may be tasked with providing information to help develop pathways to achieve net zero, setting interim targets, influencing strategic direction, measuring, monitoring and reporting progress and integrating net zero into decision making processes. The approach to achieving net zero, and the function within a bank that leads on it and owns the data that drives it, varies from bank to bank as target operating models change and evolve. Where net zero activities are driven by a dedicated sustainability team, finance is likely to play a key role in delivery through collaboration and data sharing with other teams including risk, operations and strategy.

This guide explores the practical steps that finance teams can take to support their organizations to progress to net zero emissions. It provides an overview of net zero targets and the resources, methodologies and frameworks banks can use to set and measure progress against targets. In line with the **A4S Essential Guide series**, the steps are set out under four categories: lead the way, transform your decisions, measure what matters and access finance, which are essential steps for integrating sustainability into business and financial decision making.

THE FINANCE TEAM CAN PLAY A PIVOTAL ROLE IN ACHIEVING NET ZERO THROUGH THE FOLLOWING ACTIVITIES:



This guide will explore each of these topics in more detail.

See page 9

See page 20

See page 30

See page 34



LEAD THE WAY

The finance team can support its bank to develop a strategic response to net zero emissions by working with the risk, sustainability and strategy teams to identify and manage the risks and opportunities of pursuing a net zero strategy, ensuring the culture in the finance team is framed to support the transition, engaging the board and executive management, and incentivizing the bank's value chain to align with its net zero strategy.

° IDENTIFYING THE RISKS AND OPPORTUNITIES OF PURSUING A NET ZERO STRATEGY

Risk and opportunity, specifically relating to macro trends associated with environmental and social issues, was explored in the **A4S Essential Guide to Managing Future Uncertainty**. Many of the techniques described in the guide are useful for identifying the risks and opportunities of pursuing a net zero strategy and understanding their impact.

RISK

WHAT ARE TRANSITION RISKS AND PHYSICAL RISKS?^{18, 19}

Transition risks arise from the global shift towards a net zero economy. This may entail extensive policy, legal, technology, and market changes to address mitigation and adaptation requirements related to climate change. Depending on the nature, speed, and focus of these changes, transition risks may pose varying levels of financial and reputational risk to organizations. Examples include:

- Climate-related developments in policy and regulation, such as tightened energy efficiency standards and increased pricing of GHG emissions.
- The emergence of disruptive technology or business models that affect asset values.
- Shifting sentiment and societal preferences, or evolving evidence, frameworks and legal interpretations, which increase exposure to climate-related litigation or higher costs for insurance cover.

Physical risks resulting from climate change can be event driven (acute) or longer-term shifts in climate patterns (chronic). Physical risks may have financial implications for organizations, such as direct damage to assets and indirect impacts from supply chain disruption. Organizations' financial performance may also be affected by changes in water availability, sourcing, and quality; food security; and extreme temperature changes affecting organizations' premises, operations, supply chain, transport needs, and employee safety.

18. Chapter Zero, **Physical and Transition Risk**

19. TCFD, **Recommendations of the Task Force on Climate-related Financial Disclosures**

20. Ibid

TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES (TCFD)

The TCFD was created to improve and increase reporting of climate-related financial information. A key component of this is the risks and opportunities presented by rising temperatures, climate-related policy, and emerging technologies. The TCFD recommendations can be used as a starting point to identify examples of climate-related risks and opportunities and their potential financial impacts, such as asset impairment and increased operating costs.²⁰

The CDP's recent global Financial Services Questionnaire²¹ highlighted that almost all of a financial service's exposure to climate-related risks comes from its exposure to the activities that it finances through its loans, investments and insurance underwriting, rather than its own operations. Understanding and addressing these risks is therefore an important element in assessing banks and the wider economy's adoption of a Paris-aligned pathway and should be monitored by banks alongside setting net zero targets.

The diagram overleaf outlines different examples of climate-related risks for financial institutions and how these risks will impact on other traditional risk types, for example:

Credit risk

More losses due to customers affected by droughts or floods

Market risk

Macroeconomic impacts related to extreme weather events or changes in supply and demand of particular financial instruments that may affect their value

Conduct and legal risk

Ineffective stewardship or customer litigation

Operational risk

Disruption to services, damage to physical assets

Reputational risk

Lending used for activities damaging the environment

THE LINK BETWEEN RISK AND SETTING A NET ZERO STRATEGY

Establishment of a net zero strategy is an essential component in mitigating the risks associated with climate change summarized above. For banks – and other financial services – establishment of a net zero target is also connected with redefining their risk appetite for financing carbon emissions. In setting the strategy, banks will need to consider the risks associated with the strategy itself. Where the strategy is not sufficiently ambitious, this might include reputational risks as well as greater exposure to transition risks. In addition, the bank may need to navigate political and business risks associated with withdrawal of funding from high carbon sectors or high carbon-risk markets. Consideration should also be given to growing legal risks, for example, associated with concerns around mis-selling and greenwashing.

21. CDP, [The Time to Green Finance](#)

APPROACHES TO RISK IDENTIFICATION

Given its complexity, pervasiveness, and long-term nature, it is challenging for banks to tackle climate risk. Traditional approaches for identifying risks and considering their potential impacts can be applied relatively easily and quickly in the context of net zero. For example:

– Horizon scanning

A technique for analysing the future and considering how emerging trends and developments – such as national legislation committing a government to achieving net zero by a given date – might affect an organization's success through a systematic examination of potential threats and opportunities. This technique is particularly relevant when considering the macro-level risks of transition to a net zero economy, and existing risk identification and mitigation processes should be enhanced to include these broader risks. The TCFD has published guidance on risk management integration and disclosure, which sets out the unique characteristics of climate-related risks and practical guidance on integration.²²

– Common frameworks and tools

The sustainability SWOT (sSWOT) framework and the Business Areas Climate Assessment Tool (BACLIAT) can be used during a horizon scanning workshop. The sSWOT framework takes into account impacts from past climate events, current events and future events where the potential climate effects are yet to be felt. The BACLIAT framework considers common climate impacts in the following six generic business functions that can be applied to any type of business or sector: markets, process, logistics, people, premises and finance.

A key consideration that these frameworks help to explore is the identification and determination of interrelated impacts. For example, considering the potential for climate-related impacts on the bank and the impact of the bank's activities on the climate to be linked, as well as the interaction between these risks and wider environmental, social and economic factors. As part of this analysis, consideration should be given to any unintended consequences of criteria applied and steps to mitigate those impacts, for example, the adoption of 'green' criteria reducing access to banking products by marginalized communities, which may trigger an increase in social risks.

22. TCFD, [Guidance on Risk Management Integration and Disclosure](#)

TOP TIPS ON HORIZON SCANNING

For top tips on delivering an effective horizon scanning workshop and further details of common frameworks such as sSWOT and BACLIAT, see the A4S Essential Guide to Managing Future Uncertainty (pages 11–12).

> [Read more here](#)



Examples of climate-related risks for financial institutions

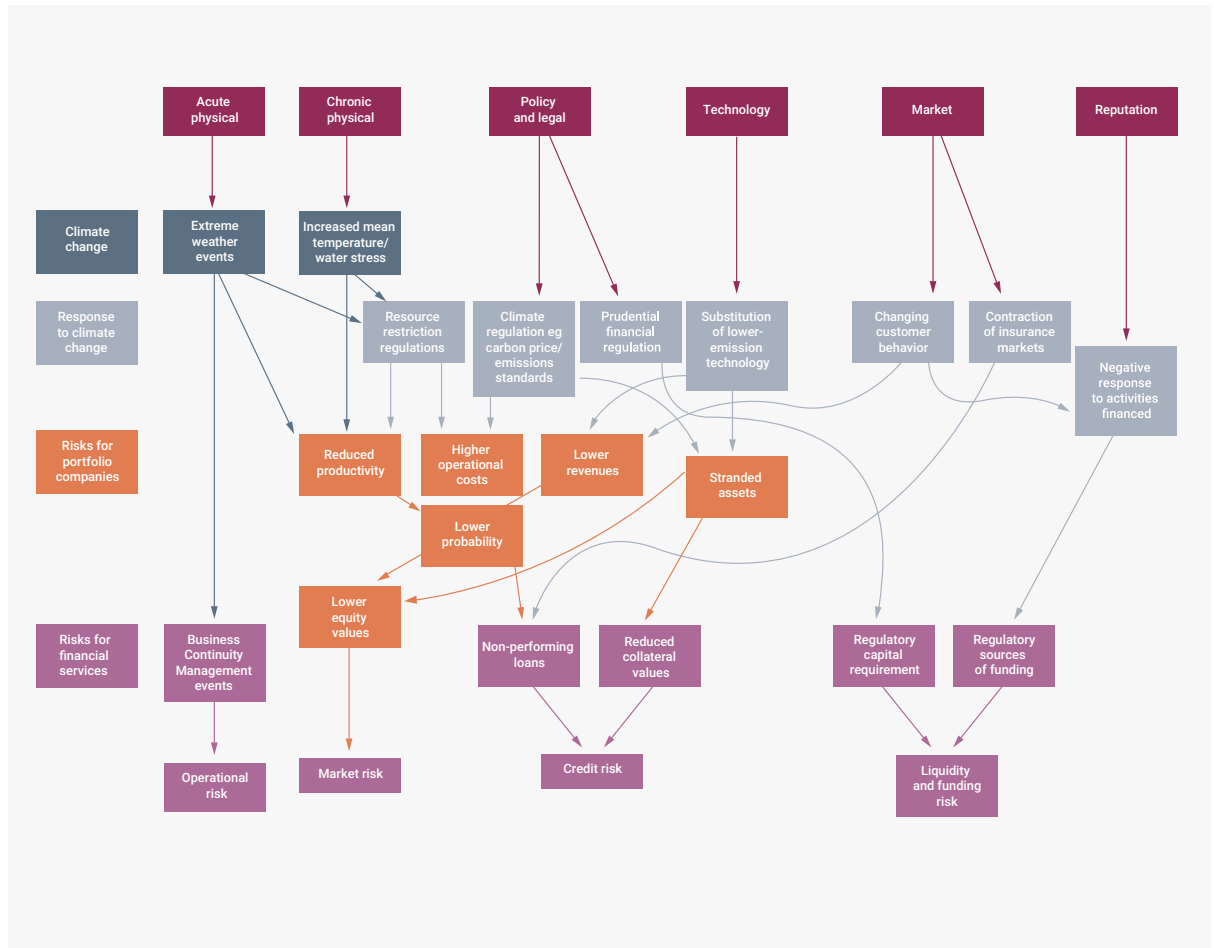


Figure 3: Examples of climate-related risks for financial institutions and the areas on which they impact (Source: CDP)

OPPORTUNITY

Pursuing a net zero strategy can help banks to identify opportunities within their own operations or through supporting the activities being undertaken at a country or regional level. This includes the development of financing products that meet the growing need for public and private investment in technologies, industries and companies to support a net zero transition. The diagram below shows some of the ways in which banks can channel capital into a net zero economy through their capital markets activities, lending activities, securitization and/or equity stakes and sponsorship.

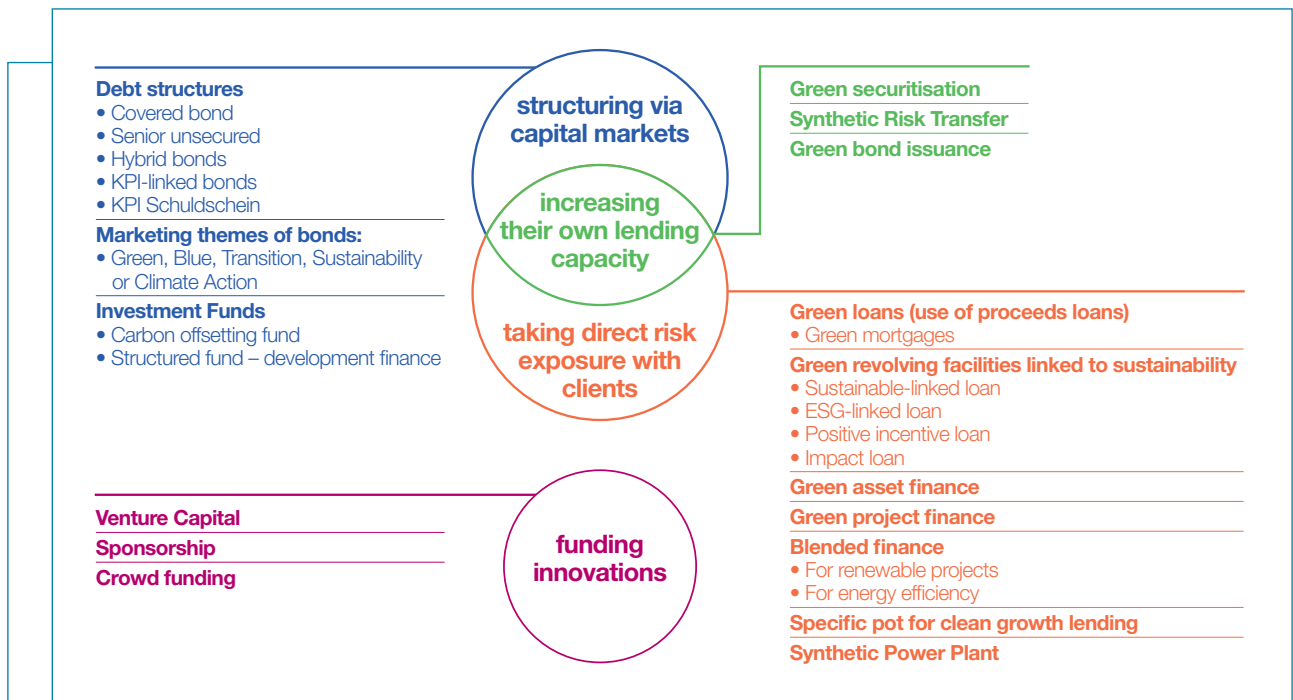


Figure 4: How banks channel capital into the low carbon economy
 (Source: [University of Cambridge Institute for Sustainability Leadership – Banking Environment Initiative](#))

Function	Example
Retail (eg residential mortgages, customer lending, credit cards, vehicle finance)	<ul style="list-style-type: none"> – For its residential mortgage customers, ABN AMRO creates a personal online roadmap that indicates costs, savings potentials and subsidies as well as offering advice and solutions to finance energy-saving measures.²³ The bank offers a sustainability discount on mortgages, integrates the sustainability of houses into advisory reports and has trained most of its mortgage advisors as 'sustainable living advisors'. – NatWest, in partnership with CoGo, is piloting, for current account and credit card customers, a real-time carbon footprint tracker based on customer spending habits. It shows customers their climate impact and suggests actions for users to reduce their carbon footprints. NatWest has partnered with Octopus Energy to help make it simpler for its customers and colleagues to move to electric vehicles.²⁵
Commercial (eg commercial real estate, project financing, business loans, transition finance loans)	<ul style="list-style-type: none"> – HSBC has a dedicated unit and tailored proposition to support CleanTech innovation companies, targeting US\$100 million of investment in CleanTech within its technology venture debt fund.²⁶ – Lloyds Banking Group has partnered with sustainability consultants CFP Green Buildings to create a free-to-use tool for commercial banking real estate clients that generates tailored recommendations of measures to improve the green credentials of a property, lower the running costs or reduce the carbon footprint. It shows the potential impact on the Energy Performance Certificate (EPC) rating, investment required, estimated payback period and potential financial and CO₂ savings.²⁷
Investment and Advisory (eg listed and non-listed equity and debt, underwriting activities, new product innovations)	<ul style="list-style-type: none"> – Goldman Sachs Investment Banking Franchise has underwritten nearly US\$59 billion in green, social and sustainability bonds since 2014, deployed more than US\$115 billion toward clean energy financing and investing since 2006 and provided advice to clients on low-carbon transition and sustainable growth strategies.²⁸ In September 2020, Goldman Sachs worked with Suzano, a Brazilian paper and pulp firm, on its issuance of a US\$1.25 billion sustainability-linked bond — the first to conform with Sustainability-Linked Bond Principles (SLBPs). As per the structure of the issuance, the coupon will rise by 25 basis points if the company is unable to hit a target of reducing by 10.9% the carbon intensity of its products by 31st December 2025, compared with a baseline of 2015.²⁹ – Bank of America's activities have included expanding its asset-based lending, tax equity investment and capital raising activities across current and emerging clean energy and power, transportation and other industry sectors important for environmental transition. It has committed US\$1 trillion by 2030 under this initiative.³⁰ It provides carbon neutrality and net zero advisory services to all corporate and institutional clients as well as financing, capital markets and M&A services to help drive environmental and social sustainability globally.

23. ABN AMRO, [Guiding a Bank's portfolio to Paris](#)

24. ABN AMRO, [Annual Report 2020](#)

25. NatWest Group plc, [Climate-related disclosures report 2020](#)

26. HSBC, [Q1 2021 Earnings Release](#)

27. Lloyds Banking Group, [Environmental, Social and Governance Report 2020](#)

28. Goldman Sachs, [Climate-Related Risks and Opportunities](#)

29. Goldman Sachs, [The Future Now – Integrating Sustainability with Purpose across Our Business](#)

30. Bank of America, Press release: [Bank of America Increases Environmental Business Initiative Target to \\$1 Trillion by 2030](#)

° THE ROLE OF FINANCE IN SUPPORTING THE MANAGEMENT OF RISK AND OPPORTUNITY

In some banks, the risk team leads on the identification, assessment, quantification, monitoring and management of risks, including climate-related risks. In others, sustainability teams may take the lead on climate-related initiatives, or a multi-disciplinary team, which includes members of risk, sustainability and finance, may be created. Regardless of the specific structure, the finance team has an important role to play in supporting risk.

1

Ensuring data quality and associated reporting process and controls

Climate risk data that is relevant to finance processes and reporting requirements should be reviewed, reconciled, and challenged, with finance teams validating the reasonableness of the inputs and outputs of the risk analyses.

2

Providing effective disclosure and external reporting

As disclosure and external reporting are driven by finance teams, collaboration with risk is necessary to ensure the data, information and assumptions are in line with disclosure expectations, corporate governance codes and regulatory, stakeholder and investor requirements. Consistency should be maintained with both financial and non-financial reporting, while ensuring that disclosures are fair and balanced to avoid any risks of litigation. Finance teams should also assess whether any of the information provided has material impact on financial metrics and disclosures and therefore needs to be reflected in financial reporting too.

3

Supporting stress testing and climate scenario analysis work

Finance teams may provide data that feeds into processes to determine how the bank may be impacted by physical and transition risks.

4

Engaging with key stakeholders

Finance is the first point of contact for external stakeholders using the reports, in particular auditors and investors. As a result, finance teams need to show understanding of the data and assumptions used in the risk processes and their implications across the business.

5

Driving incentives through transfer pricing

Finance teams can apply differentiated pricing rates to intragroup transactions for different asset classes based on their exposure to climate risks and emissions, effectively incentivizing the use of certain financial products and directing capital use.

6

Assisting product and risk teams

In analysing the financial implications of various strategic choices based on net zero pathways that have been chosen and identifying relative costs and benefits of pursuing specific product and financing opportunities.

◦ DEVELOPING THE FINANCE CULTURE TO SUPPORT THE TRANSITION



The culture of a finance team needs to be aligned with the bank's net zero ambition such that it embraces the strategic vision and business case for change and can support the bank to meet its goals. Finance teams should start to think and operate in an integrated way, which will require a significant shift not just in their processes but also in their culture. The finance function within banks is comprised of many teams, often located across multiple locations and countries. As the finance team is embedded within business units across the whole organization, a finance team that understands the bank's role in delivering a net zero strategy will go far in helping the bank to embed the knowledge and culture necessary for action across the various areas of a bank.

The **A4S Essential Guide to Finance Culture** contains tools, case studies and tips to help develop a culture within the finance team that supports sustainable business and these techniques can be applied in the context of enabling a net zero strategy. Examples include:

- Communicate internally first and make sure that future external communications are aligned, eg by presenting the same information about the net zero pathway and interim targets.
- Communicate at all levels and in language that resonates, respecting cultural differences and modes of learning, eg by translating what a net zero commitment means for different business functions.
- Create champions in the team and enable internal networks that cross hierarchies, eg by setting up a net zero working group with representatives from across all areas of the bank.
- Catch your future advocates early, eg by including the bank's commitment to net zero in the induction process.
- Celebrate success and promote the role of finance, eg by tracking the achievement of interim targets, and using internal staff networks and platforms to communicate this progress.

A useful starting point for many finance teams is to update or develop induction and training syllabuses to incorporate the knowledge and tools that will be needed to support a net zero strategy over the long term.

TOOLS FOR SHIFTING FINANCE CULTURE

Consider using A4S tools, especially the [maturity map \(Tool 2\)](#) and the [stakeholder analysis \(Tool 6\)](#), to review your finance culture and your stakeholders' level of commitment to change.

MATURITY MAP TOOL

To help understand, at a point in time, the extent to which sustainability is integrated into the finance function and its culture, and therefore to what degree finance can enable the integration of a net zero strategy into decision making. Progress across the maturity map can be measured and monitored over time.

STAKEHOLDER ANALYSIS TOOL

To help understand your stakeholders and ensure that communication activities related to net zero are targeted appropriately. For example, the change commitment curve within the tool can help you to understand:

- The engagement needed to get support for the change
- The influence of stakeholders on the finance function
- The communication effort needed for each stakeholder group

This analysis can be performed at either an individual or a team level.

> [Find out more here](#)

Finance teams should start to think and operate in an integrated way, which will require a significant shift not just in their processes but also in their culture.

NATWEST'S APPROACH TO EMBEDDING CLIMATE KNOWLEDGE INTO ITS CULTURE

The finance team in NatWest has established a Climate Technical Forum, which brings together staff from multiple areas involved in the carbon emissions calculation process to understand the methodologies and assumptions involved in developing their climate impact, providing also a platform to discuss the practical actions needed. The bank has also created local climate champions across multiple business areas.³¹ "By explaining methodologies and data flows, including application in measurement and reporting processes, our colleagues are better placed to analyse the emissions data and apply it practically in decision making." Supriya Sobti, Climate Reporting, NatWest.

A4S's case study on NatWest has more details on the practical steps that NatWest is taking to further develop carbon emission measurement capabilities and the finance function plays a key role in this.

[> Find out more here](#)

31. NatWest Group, [Climate-related disclosures report 2020](#)

◦ ENGAGING THE BOARD AND EXECUTIVE MANAGEMENT

The board and executive management (EM) are responsible for ensuring the bank's long-term viability and that the interests of its shareholders and key stakeholders are being met. In response to the risks and opportunities arising from climate change, the board and EM should set the tone and define a clear strategy.

Finance is a trusted business partner and adviser to the board and EM. As custodians of value, the CFO and finance team have a decisive influence over financial, strategic, risk management and other business decisions. By understanding the business case for change, finance can actively support and challenge the board and EM to adopt a sustainable business model that is aligned with a net zero commitment. They can help integrate net zero targets into the organization's strategy and operations and report progress to the board and EM on a regular basis. They can also support the board and EM in responding to questions from investors, customers or other stakeholders on the bank's net zero strategy and targets. By performing financial analysis and risk assessment, finance can add credibility to business practices and new initiatives proposed to the board and EM for achieving net zero.

COMING SOON

The **A4S Essential Guide to Engaging the Board and Executive Management** provides guidance and practical examples to prepare CFOs and finance teams to engage their board and EM team on sustainability as a driver of value. Sign up to **A4S's monthly newsletter** to receive this guide once published.

° INCENTIVIZING ACTION ALONG THE VALUE CHAIN

While banks may be able to address their scope 1 and 2 emissions internally, they will need to work with others along the value chain to reduce scope 3 emissions (particularly financed emissions) substantially or remove them altogether.

Banks need to understand and measure their financed emissions and finance teams are uniquely suited to provide support. The system-level action required to reduce or remove emissions along a value chain will rely on confidence in the integrity of data and the accuracy of joint reporting. Finance teams have the experience to generate reliable, actionable data and to manage the sharing of potentially market-sensitive information in an appropriate manner. Other support the finance team can give includes:

- Helping to price products offered to incentivize customers to take action to reduce their own emissions, as well as evaluating the cost of offering these incentives relative to the climate and business benefits achieved.
- Engaging with their peer banks, other actors in the investment chain and regulators around areas such as data gathering, skills development and sharing of best practices.
- Raising awareness among front office/client facing staff of the importance of collecting emissions data from their customers to be used in financed emissions calculations.
- Creating insights from customer emission data to support front office staff in identifying clients who are leading and lagging on climate action within each sector, which in turn helps to identify strategies and solutions for improvements.

DIFFERENT WAYS OF GETTING TO NET ZERO – REALLOCATION OF CAPITAL

Banks have adopted different approaches to meeting their net zero targets and commitments. Banks may take a sectoral approach, engaging with clients to agree timeframes and circumstances to reduce support to certain sectors, industries or companies that are responsible for high GHG emissions, thereby reducing the bank's financed emissions and minimizing the reputational risks and pressure from external and internal sources. Additional approaches include: engaging with clients to allocate capital and services to technologies and industries that are supporting the transition to a net zero economy and, developing products and services to help clients reduce their own emissions. Banks that have set net zero targets will need to consider how best to achieve these targets both from a financial perspective and in the context of their own broader strategies. Finance teams can assist their business areas in analysing the financial implications of these strategic choices, and supporting the bank in the development of relevant metrics and tracking.

COMING SOON

The Canadian Chapter of the CFO Leadership is developing guidance and case studies to help organizations in the real economy and the finance sector to incentivize action. Sign up to [A4S's monthly newsletter](#) to receive this guide once published.



TRANSFORM YOUR DECISIONS

A net zero strategy needs to align with and support the overall business strategy. Delivering a successful net zero strategy requires a shift in mindset and operations for the entire bank. The finance team can support this by integrating net zero considerations into financial processes and decisions and ensuring alignment with overall business strategy. To begin with, finance may be involved in developing pathways aligned with 1.5°C. It is important then to integrate the pathways into strategic planning, budgeting and forecasting processes. Finance teams may also consider broadening the existing management information system to incorporate the extra climate and emissions information that will enable the bank to make decisions about net zero along the entire value chain.

DEVELOPING A NET ZERO PATHWAY TO BRIDGE THE EMISSIONS GAP

Making a public commitment to achieve net zero shifts the discussion on net zero from ‘whether’ to ‘how’ and kick-starts essential conversations. Banks should set an ambitious goal guided by the science even when the specific steps to getting there are not yet fully understood. Once a commitment is made, banks should develop a pathway to bridge the emissions gap from today’s position to net zero.

It may include purchasing high-quality carbon credits and providing direct financial support to projects that generate positive impact.³² Neutralization measures (action taken to remove carbon from the atmosphere) for residual emissions from hard to abate activities will rely on realistic assumptions in terms of the effectiveness of the technologies that may be available in the future.

The graphic below (Figure 5) from SBTi shows a broad mitigation hierarchy approach when designing the overall pathway, prioritizing short-term absolute GHG reductions before engaging in neutralization activities and subsequent compensation. Optional compensation refers to actions or investments by an organization that mitigate GHG emissions beyond their value chain.

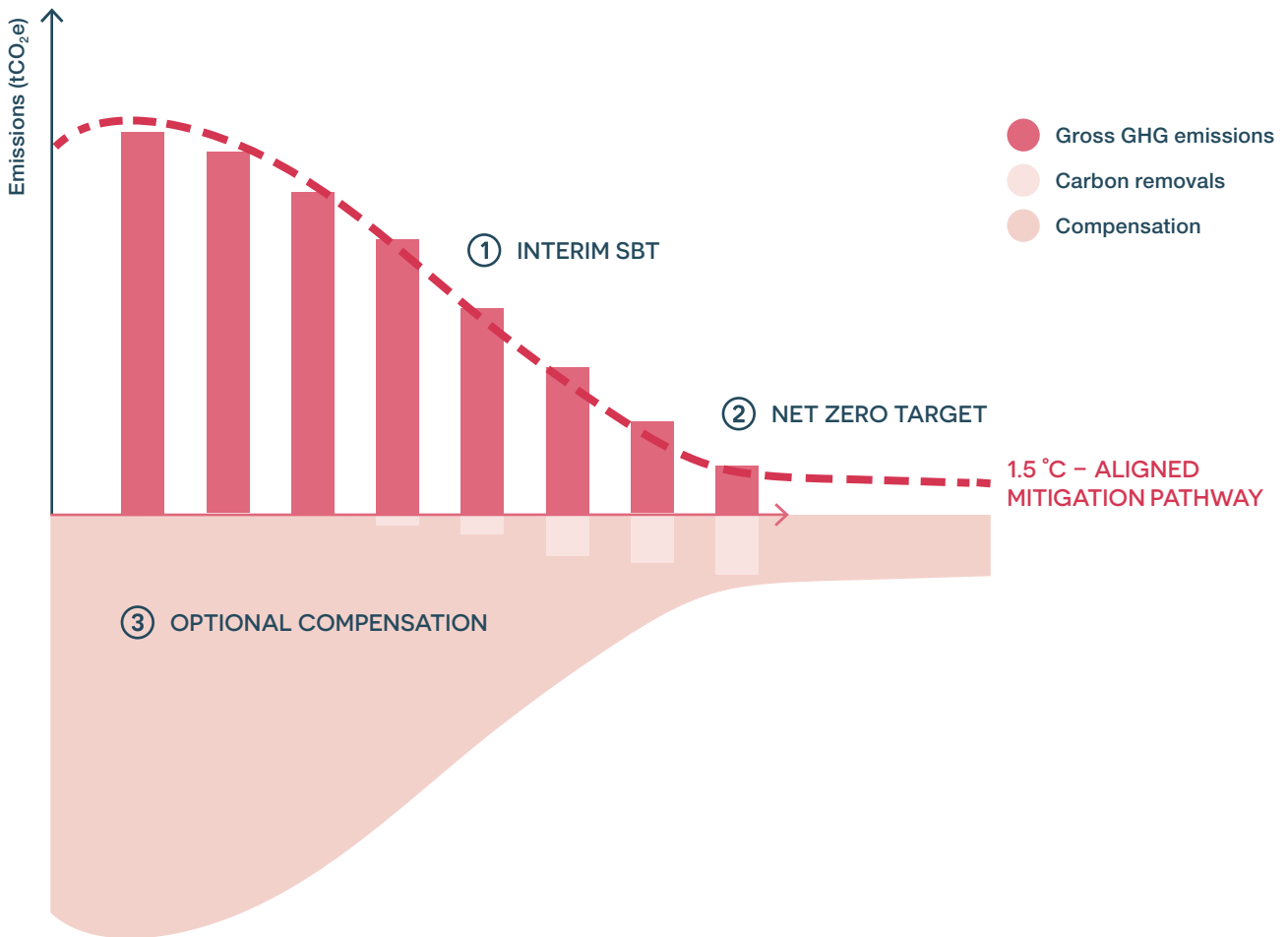


Figure 5: Graphical representation of a net zero target, interim SBT and optional compensation (Source: SBTi)

32. Science Based Targets, [Net-Zero Criteria Draft for Public Consultation](#)

TOP TIPS FOR IDENTIFYING SUITABLE PATHWAYS

- 1 Analyse the emissions gap into manageable parts**

For example, finance can work with the sustainability team and other business units to define the boundaries (upstream, downstream, sales channel, business function), identify and calculate emissions, and track progress.
- 2 Create cross-departmental teams to brainstorm actions and options for aligning to possible pathways**

For example, including representatives from finance, sustainability, strategy, risk, and operations to ensure that pathways rely on suitable climate scenarios and benchmarks that align with the bank's net zero ambition. Pathways may be identified on a sectoral/ regional level and regularly reviewed to include the most up to date, scientific scenarios.
- 3 Set interim targets that are linked to the remuneration for the board and senior executives**

For example, finance can support performance management and provide accurate and timely performance data.
- 4 Consider timescales for resolving specific issues**

For example, finance can provide the strategic and financial perspectives on the timescale required, whether it's short, medium or long term.
- 5 Appoint senior managers as 'pathway owners'**

For example, senior managers (or equivalent) in finance may be accountable for finance-related activities along the process.

Finance should work with other departments to ensure that the pathway aligns with the overall objective of net zero and is consistent with the target end date. The interim targets set and the initiatives and projects planned should be integrated into finance processes and decision making. Finance should monitor the progress made against the interim targets and report accurate and timely information to decision makers. Where interim targets are linked to remuneration, finance could add value by ensuring that the right performance metrics are used to measure and monitor employee performance and organizational performance, and that these are aligned.

OVERVIEW OF FRAMEWORKS, METHODOLOGIES AND TOOLS AVAILABLE

There is currently no single, universal standard for setting targets, aligning pathways and reporting on financed emissions. Banks have multiple initiatives, standards, methodologies, frameworks and tools to assist them with these efforts. The Partnership for Carbon Accounting Financials (PCAF)'s **Strategic Framework for Paris Alignment** gives an overview of the resources available to financial institutions for a range of activities from measuring financed emissions, to target setting and scenario analysis (see figure below).

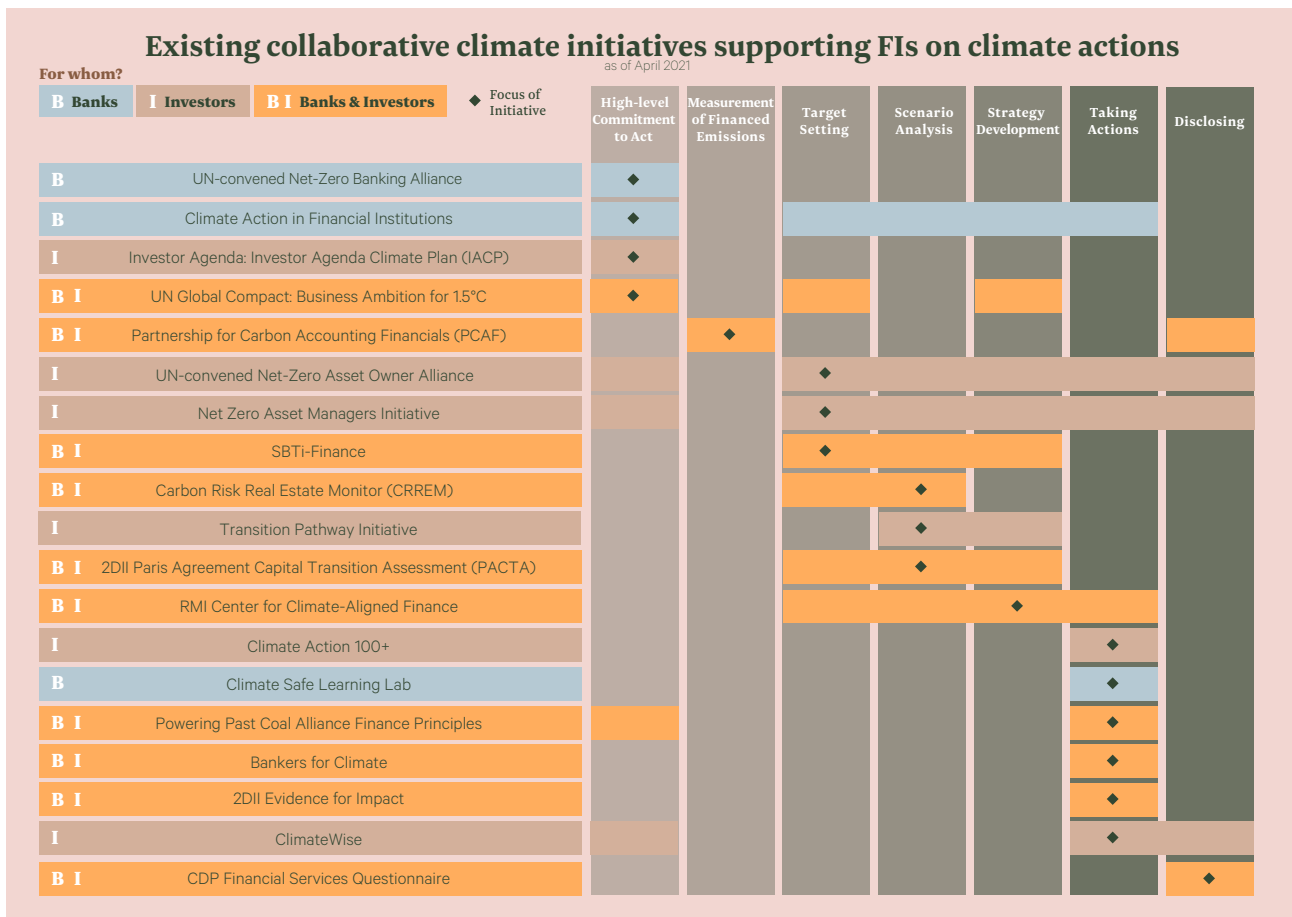


Figure 6: Existing collaborative climate initiatives supporting FIs on climate actions (Source: p11 **Strategic Framework for Paris Alignment**)

KEY STEPS TO DEVELOPING A NET ZERO PATHWAY

This guide does not attempt to provide a comprehensive list, but the table below highlights some of the key steps in developing a net zero pathway, the contribution that finance teams can make in relation to these activities and some of the initiatives, frameworks and third-party resources that can assist with each step. In addition, ShareAction recently published an in-depth analysis of some of the current methodologies that banks can use to set targets and align portfolios with the Paris Agreement.³³



SETTING NET ZERO COMMITMENTS

Finance's contribution

- Helping to identify data sources that may be owned by other functions of the bank, assessing quality of data and conducting analysis for setting commitments.
- Monitoring progress and compliance to commitments made by the bank.

Some examples of the initiatives, frameworks and resources available

- UN-convened **Net-Zero Banking Alliance (NZBA)**³⁴ – industry-led collaboration of 45 banks with US\$29 trillion in assets³⁵ that have committed to align their lending and investment portfolios with net-zero emissions by 2050. The NZBA was co-launched with the Financial Services Taskforce (FSTF) of The Prince of Wales's **Sustainable Markets Initiative (SMI)**, and the commitment statement details what the net zero commitment should look like, the guidance to use and how they should meet this commitment.
- **Collective Commitment to Climate Action (CCCA)** – a leadership group under the UNEP FI Principles for Responsible Banking. Provides guidelines for climate target setting for banks, which underpins the commitment statement of the NZBA.



MEASUREMENT OF FINANCED EMISSIONS

Finance's contribution

- Interpreting disclosure requirements, helping to provide portfolio and counterparty information, manipulating data and assessing data quality

Some examples of the initiatives, frameworks and resources available

- Partnership for Carbon Accounting Financials (PCAF) have developed the Global GHG Accounting and Reporting Standard for the Financial Industry. See '**Measure what matters**' section for further details.



SETTING TARGETS

Finance's contribution

- Helping to identify data sources and assessing quality of data for the analysis of lending and investment portfolios against a chosen target-setting framework, such as SBTi
- Monitoring and tracking progress against these targets set

Some examples of the initiatives, frameworks and resources available

- Science Based Targets for Financial Institutions – provides resources for target setting methods, criteria, a target setting **tool**, and a **guidance document**. SBTi has also developed an asset-class specific approach that so far includes: real estate; mortgages; electricity generation project finance; and corporate and consumer loans, bonds and equity.³⁶

33. ShareAction, **Paris-alignment methodologies for banks: reality or illusion?**

34. Co-launched by The Prince of Wales's **Sustainable Market Initiative's Financial Services Taskforce**

35. At time of publication

36. **Science Based Targets, Financial Sector Science-Based Targets Guidance**



DEVISING PATHWAYS

Finance's contribution

- Helping to provide financial information to input into decision making
- Helping to review and revise best practice according to evolving standards, data and regulations

Some examples of the initiatives, frameworks and resources available

- The **Network for Greening the Financial System** (NGFS) climate scenarios have been developed to provide a common starting point for analysing climate risks to the economy and financial system. Developed primarily for use by central banks and supervisors, they may also be useful to banks and the wider economy. The Net Zero 2050 scenario limits global warming to 1.5°C, reaching net zero by around 2050.³⁷



CLIMATE SCENARIO ANALYSIS TOOLS

Finance's contribution

- Identifying and providing relevant data, and developing systems and processes

Some examples of the initiatives, frameworks and resources available

- The **Paris Agreement Capital Transition Assessment** (PACTA) – an open-source climate scenario analysis tool developed by the 2° Investing Initiative ("2DII") and backed by the UN Principles for Responsible Investment. The additional **PACTA for Banks** enables users to measure the alignment of their corporate lending portfolios with climate scenarios across key climate-relevant sectors and technologies (currently Power, Fossil Fuels, Automotive, Steel and Cement).

37. Network for Greening the Financial System, [NGFS Climate Scenarios for central banks and supervisors](#)

Finance should work with other departments to ensure that the pathway aligns with the overall objective of net zero and is consistent with the target end date.

° INTEGRATING NET ZERO TARGETS INTO STRATEGIC PLANNING AND BUDGETING

As the bank’s understanding of the GHG emissions gap improves within their portfolios, new strategic initiatives and products will start to emerge to support the pathway to net zero. The finance team has a key role to play in ensuring that these initiatives, new rates, maturities and cash flows are included within the regular strategic planning and budgeting cycle, and that adequate funding is available.

WHAT IS AN INTEGRATED CAPITAL APPROACH?

As the impacts of climate change become more evident, affecting resource availability, population demographics and biodiversity, finance teams are increasingly recognizing the commercial value of broadening the information and criteria upon which decisions are made.

This topic is explained further in the [A4S Essential Guide to Natural and Social Capital Accounting](#).



STRATEGIC PLANNING

Some of the key tasks that finance will be involved with to integrate the net zero pathway into strategic planning are:

Assessing the current and future business horizon to identify the risks of failing to act, and evaluating the opportunities arising from adopting a net zero strategy within each key sector in their portfolios (see ‘Identifying the risks and opportunities of pursuing a net zero strategy’ section).



Integrating the net zero strategy into the overall strategic planning process, with clear actions and timeline that can be easily communicated with stakeholders, recognizing the short-term investments and long-term impacts that need to be balanced within a corporate strategy.



Ensuring that the organization future-proofs its investment decisions by considering all forms of capital that will impact the performance of the bank – taking an integrated capital approach to understand the wider impact of your net zero strategy eg costing relevant externalities.



Ensuring effective asset and liquidity management. Insights from the risk analysis will support the treasury team in liquidity planning and management, forecasting, reviewing and updating their portfolio and strategy, both in terms of products and time horizon. In doing so, the treasury team will have to work closely with risk to fully understand the assumptions used, as well as the reliability and limits of models and data. These aspects will have to be inevitably considered in the Internal Liquidity Adequacy Assessment Process (ILAAP).

BUDGETING – FOCUS ON SHADOW PRICING

There are several approaches to budgeting that can support a net zero strategy. The approach needed will depend on how the net zero strategy has been aligned to the overall organizational strategy and associated processes. For this guide for banks, we have focused specifically on shadow pricing. For general budgeting approaches that will be useful as part of integration into your operational activities (including embedding within capex appraisal methodologies and marketing spend), please see the cross-sectoral [Net Zero – A Practical Guide for Finance Teams](#).

SHADOW PRICING

Shadow pricing provides a framework for an organization notionally to ‘cost’ an item into their business operations where it does not have a current, defined market price, or where current prices are deemed too low to factor in future risks or societal impacts. This is increasingly being used by financial institutions for carbon emissions.

Effective shadow carbon prices should:

- Be sourced from credible, reputable scientific research on the carbon price necessary to meet climate goals
- Be consistent with prices implied by the bank’s climate-related targets
- Increase over time to reflect diminishing carbon budget
- Be recalculated frequently
- Incorporate geographic or sectoral granularity, where appropriate³⁸

Finance can apply differentiated pricing rates to intragroup transactions for different asset classes based on their exposure to climate risks and emissions, effectively incentivizing the use of certain financial products and directing capital use. In addition, sensitivity analysis around future implementation of external carbon taxes can be conducted to highlight how this may impact the business.

38. TCFD, [Proposed Guidance on Climate-related Metrics, Targets, and Transition Plans](#)



BNP PARIBAS INTERNAL CARBON PRICE

BNP Paribas has pilot tested the impact of an internal carbon price on the gross operating margin of a sample of customers in its loan portfolio operating in eight high emitting industries in order to evaluate the resilience of their clients to the energy transition and to measure and steer carbon risks in the group’s loan book.³⁹

The A4S Essential Guide to Strategic Planning, Budgeting and Forecasting (pages 39-40) features a spotlight on the topic of internal carbon pricing with case studies.

> [See A4S Essential Guide to Strategic Planning, Budgeting and Forecasting here](#)

39. BNP Paribas, [2019 Climate Change Information Request – Carbon Disclosure Project](#)

DEVELOPING INTEGRATED MANAGEMENT INFORMATION

Where a new data set is required to produce management information and drive action for change, it is especially important to provide robust and meaningful information to decision makers and, where possible, integrate the data into existing processes. This discipline is core to the finance team, and finance’s role in capturing and subsequently reporting this information is critical. Finance teams are also uniquely positioned to integrate existing financial reporting metrics with climate metrics to provide information useful for decision makers.

Achieving net zero will be a challenge for any organization including banks, and when a bank decides to commit to achieving it, the pathway and solutions available may not be fully known, including uncertainties around the target or end state and what it would take to get to net zero. When setting up the tracking and reporting system for emissions and other KPIs for achieving net zero, finance should consider how best to bring clarity to these uncertainties. The table below provides some suggestions.

What are the common uncertainties?

What should finance consider?

<p>The target or end state, which is dynamic as the bank, customers, climate outlook and scenarios, methodologies and frameworks change</p>	<p>The end state target needs a clearly defined ‘target boundary’, especially for financed emissions. Providing accurate and consistent information over the long term requires that the finance team has absolute clarity on what is ‘in’ or ‘out’ of scope. Set a scope that is too broad and the ‘end state’ becomes unachievable; too narrow and the target risks being undermined. Interim and short-term targets should also be considered and reviewed when circumstances change such as when scenarios compatible with a 1.5°C pathway are updated.</p>
<p>Where the bank is today in relation to net zero, which is linked to data availability and integrity</p>	<p>Establishing a clear baseline of known data allows the initial emissions gap to be estimated and interim reduction target amounts and dates to be set. When setting interim targets, consider these factors:</p> <ul style="list-style-type: none"> • The confidence level you have in your estimations. • How interim targets may be impacted through mergers, acquisitions, divestments, changes in the value chain or commercial availability of new technologies. • The level of maturity of existing plans to reduce GHGs across all lending and investment portfolios. • Current out of scope investment, lending and underwriting activities that may be integrated into future financed emissions calculations and net zero targets as methodologies evolve. This may involve a materiality assessment. For example a bank with a strong capital markets franchise may include underwriting/advisory activities for high carbon sectors from the initial stages of target setting, even though it may be out of scope of current frameworks. • Under which circumstances financed emissions of a base year may be recalculated to ensure consistency, comparability and relevance over time.⁴⁰ • How well-prepared the bank is to follow the reporting requirements of the Task Force on Climate-related Financial Disclosures (TCFD).
<p>What it would take to get to net zero, together with the associated risks and opportunities</p>	<p>The size of the emissions gap informs the bank about the potential amount of capital (human and financial) required to achieve net zero.</p>
<p>Updating interim targets, as the breadth and scope of financed emissions calculations evolves.</p>	<p>All reporting must remain dynamic as the bank achieves a greater understanding of its emissions over time and climate scenarios used to set targets are updated. Change-control procedures and ‘best estimate’ comparable data need to be managed to cope with any future changes in the scope 3 target boundary.</p>
<p>Impact of policy changes, on factors that impact financed emissions reductions targets eg national energy policies.</p>	<p>The potential impact of changes to national policies should be considered when setting targets and analysing progress towards achieving targets. Analysis of the trajectory of financed emissions calculations in relation to progress towards achieving targets may highlight additional policy changes necessary to be able to achieve net zero.</p>

40. PCAF, [The Global GHG Accounting & Reporting Standard for the Financial Industry](#)

Broadening the scope of the finance team’s traditional reporting remit to integrate other metrics has been examined extensively within the **A4S Essential Guide to Management Information**.

Key recommendations from this guide that relate to the development and implementation of a net zero strategy include:

- Understanding the motivations, needs and goals of the end users of reports.
- Using finance skills and expertise to devise and offer a menu of reports and reporting services that are fit for this new purpose.
- Developing insight that drives the right actions from the business – collaboration is key, both within and, potentially, beyond the boundaries of the bank.
- Providing decision makers with insight on emissions information and financial impacts of climate risk that comprises a combination of internal and external data sets.

TARGET BOUNDARY

The term 'target boundary' refers to the range of emissions sources covered by a target. The current pilot version (at time of publication) of the **SBTi Criteria and Recommendations for Financial Institutions** requires all financial institutions to cover at least 95% of emissions in scopes 1 and 2 and a variable coverage of financed emissions from investment and lending activities, depending on asset class and sector. For each asset class, financial products fall under three categories: required, optional and out-of-scope activities. For example, targets for long-term corporate loans are required to cover 95% of long-term lending to fossil fuel companies. Residential mortgage loans fall under optional activities, leaving banks to determine the target boundary themselves due to the challenges in setting targets including data availability. Out-of-scope activities include derivatives and government bonds, which are not yet covered by available methods. The criteria are likely to vary for net zero target boundaries.



MEASURE WHAT MATTERS

While the timescales for most banks to achieve a Paris-aligned net zero operating model will be lengthy, the need to start measuring and reporting on progress regularly and on a timely basis is immediate. The finance team has a key role to play in this.

MEASURING AND TRACKING PERFORMANCE

When developing pathways, many banks will discover that they have incomplete data, especially around scope 3 financed emissions. Measuring scope 3 emissions based on clearly defined organizational boundaries involves gathering new metrics and reviewing that data alongside other more recognizable data sets.

For banks, this will include:

- Financial information including climate-related risk, opportunities and investments targeting net zero
- Technical information, such as emissions reduction data across scope 1, 2 and 3
- Financed emissions data
- Non-technical information such as resource levels or cultural and behavioural metrics

All of this information must become integrated into business-as-usual processes such as: reporting to management, the board and external stakeholders; informing the strategic planning process; and incentivizing management via remuneration schemes.

Finance teams can help with measuring and tracking all three emission scopes, ensuring that data is complete and consistent over time. Finance should also check any CO₂ equivalent (CO₂e)⁴¹ calculations to ensure that all future reporting has the necessary integrity. Finance teams will be expected to provide the financial data relating to specific asset classes in order to calculate financed emissions, interpret and apply the calculations to the data, and assist in sourcing and processing the necessary counterparty emissions data to input into the calculations. By analysing financed emissions data at a granular level – for example by desk/portfolio/business activity – finance teams will be in a position to question and challenge the business areas that they support to ensure that they are taking sufficient and effective actions to reduce their emissions in line with their net zero targets. In addition, sustainability and risk teams may find it useful to have the support of finance in explaining the company’s pathway to net zero to the wider bank, raising awareness of the challenge of tackling financed emissions accounting.

Using the finance team’s experience to monitor actions along the net zero pathway ensures the necessary focus, alignment across all functions and prioritization of activity and resource allocation.

The **A4S Essential Guide to Management Information** gives the example of a measurement ‘handbook’ as a good way to ensure consistency of measuring performance through time, business divisions and regions. The handbook should lay out: how the KPI or metric is measured; any assumptions that have been made; and the scope of the measure. This information is invaluable when the metrics being measured are nonfinancial.

While it is critical that banks start setting their net zero targets and defining how they will achieve them, and measuring and disclosing their financed emissions, it is important for finance teams to note that the tools and methodologies are still evolving and various limitations in scope and application have been identified and are being addressed. This needs to be taken into consideration when evaluating which methodologies and tools to use, as well as when analysing results and using the information to drive business decisions. Finance teams within banks are well placed to apply their analytical skills to identify limitations and suggest solutions.

NatWest’s Climate and Purpose team

There is a dedicated team within finance that leads climate and ESG disclosures.

“At NatWest, the finance function leads work on the control framework around climate and ESG reporting, working alongside other functions in the bank. This supports the external disclosure process so our disclosures include appropriate information. Tackling climate change and the race to zero as one bank is particularly important – never before have functions including risk, finance and sustainability had to work so closely together. Making climate a core part of our purpose is also fundamental and something you will hear us talking a lot about.”

Katie Murray, Chief Financial Officer, NatWest Group.

41. When calculating complex GHG emissions, it is important that all GHGs are calculated in a ‘common currency’; CO₂e (sometimes called CO₂eq) is often used as a standard measure. This compares the warming effect of different greenhouse gases compared to the amount of CO₂ that would have the same impact. A widely recognized calculation tool is referenced here: <https://weee-forum.org/co2eqcalculation/>



THE GLOBAL GHG ACCOUNTING AND REPORTING STANDARD FOR THE FINANCIAL INDUSTRY

Developed by the Partnership for Carbon Accounting Financials (PCAF), the Global GHG Accounting and Reporting Standard for the Financial Industry provides detailed methodological guidance to measure and disclose GHG emissions within lending and investment portfolios. The standard was developed in response to industry demand for a global, standardized GHG accounting and reporting approach to measure and disclose financed emissions. It currently covers six asset classes (listed equity and corporate bonds; business loans and unlisted equity; project finance; commercial real estate; mortgages; and motor vehicle loans) but as the landscape evolves, additional asset classes will be included.

Calculation of financed emissions

In accordance with PCAF guidelines, financed emissions are calculated by multiplying an attribution factor (the borrower or investee’s share of total emissions allocated to the loan or investment, specific to that asset class) by the emissions of the borrower or investee, as shown in the formulae below:

$$\text{Financed emissions} = \sum_i \text{Attribution factor}_i \times \text{Emissions}_i \text{ (with } i \text{ = borrower or investee)}$$

↓

$$\frac{\text{Outstanding amount}}{\text{Total equity + debt}}$$

Figure 7: The Global GHG Accounting and Reporting Standard for the Financial Industry

This is broken down further for the six asset classes currently covered by the standard.⁴²

42. PCAF, [The Global GHG Accounting & Reporting Standard for the Financial Industry](#)

Data quality

A data quality score for each asset class is assigned based on the availability and quality of each data source. This standard gives guidance on scoring data quality from one to five (one being the highest quality, most certain; five being the lowest quality, uncertain). Measuring data quality enables banks to develop a strategy to improve data over time.

Metrics

Measuring financed emissions in absolute terms provides a necessary baseline for measuring progress against emissions reductions targets that have been set in order to align with Paris Agreement goals. For comparison purposes, the absolute data can be translated into emission intensity metrics, which may be useful for managing climate transition risks, setting targets and creating new products. Finance may need to support management’s oversight of financed emissions to ensure that this leads to reductions in absolute terms.

Reporting

The standard details the recommendations and requirements for disclosure of the GHG emissions associated with a bank’s loans and investments. They have been developed to complement existing frameworks such as TCFD, the Global Reporting Initiative (GRI), the Sustainability Accounting Standards Board (SASB), the US Generally Accepted Accounting Practice (GAAP) and the International Financial Reporting Standards (IFRS). The requirements also comply with the requirements set out by the GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard.⁴³ More on disclosing and reporting can be found under the “Access finance” section of this guide, below.

43. Greenhouse Gas Protocol, [Corporate Value Chain \(Scope 3\) Accounting and Reporting Standard](#)

◦ EMBEDDING INTO BUSINESS VALUATIONS

The impact of climate change is an increasingly important consideration when making investment underwriting decisions and determining the value of businesses. Climate change and business valuations are inextricably linked. When determining the value of a business, one must consider all the risks and opportunities, of which climate change is one. The **A4S Essential Guide to Valuations and Climate Change**, which provides practical guidance to help organizations embed climate risk into business valuations, was developed by members of the A4S CFO Leadership Network in Canada.

The guide, of relevance to banks needing to perform business valuations, provides a framework, series of case studies and excel-based tool following five key steps:

1. Identify the company's key value drivers.
2. Assess source of climate change risks and opportunities.
3. Filter the identified climate change risks and opportunities for those more significant and more likely to occur.
4. Integrate the key risks and opportunities into the chosen valuation approach.
5. Triangulate the identified risks and opportunities to the market and iterate as required.

The framework and steps are not meant to be prescriptive, but to act as an aid in how to incorporate these very real but often ignored factors into valuations. Climate change is just one factor among many that need to be considered in valuations but an increasingly important one that can no longer be ignored.

FURTHER INFORMATION

The A4S Essential Guide to Valuations and Climate Change provides a five-step framework that enables investment and valuation communities to apply climate change risks and opportunities consistently to their valuations and decision making.

> [A4S Essential Guide to Valuations and Climate Change](#)



Climate change and business valuations are inextricably linked.



ACCESS FINANCE

The global investment community plays a significant role in the transition to a net zero economy. Investors are increasingly recognizing and driving capital towards organizations that have made net zero commitments and have clear plans for achieving those ambitions. The banking sector is no exception, with investors pushing for more transparency of the risks to which banks are exposed and the action they are taking to address these risks. It is therefore important for banks to engage with their investors and stakeholders on net zero, and ensure that financed emissions are measured and reported externally on a regular basis.

° ENGAGING WITH INVESTORS ON NET ZERO

Early in 2021, a group of global investors with US\$11 trillion in assets under management publicly called on banks to set enhanced net zero targets. Led by the **Institutional Investors Group on Climate Change (IIGCC)**, the investors have asked banks to align financing with net zero emissions, scale up green finance, set explicit criteria for the withdrawal of financing of activities not Paris-aligned, disclose in accordance with TCFD recommendations and implement variable remuneration aligned with a net zero trajectory.

Increasingly, investors are therefore requiring a broader base of information to inform capital allocation and other decisions, and there is an expectation that reported information is reliable.⁴⁴ In respect of achieving net zero emissions, investors can hold banks accountable by:

ENGAGING

Driving the dialogue with the board to press for change.

VOTING

Opposing resolutions or reappointments where progress is too slow or efforts and plans seem ineffective to achieve the net zero goals.

DIVESTING

A public display of diminishing confidence in the organization's future.

Finance teams can help prepare the CFO and other executives for engaging with their investors by:

- Articulating the financial impact of climate-related risks and opportunities that are material to the bank including the management of transition and physical risks.
- Providing insights to help the board formulate the right approach to mitigating the risks and realizing the opportunities.
- Making the business case for a net zero strategy as a driver of long-term value.
- Ensuring consistency between the narrative disclosures around climate risks and the financial statements and ensuring that information is reliable.

44. IAASB, [Extended External Reporting](#)

A4S ESSENTIAL GUIDE TO ENHANCING INVESTOR ENGAGEMENT

For general tips and guidance on engagement of investors around sustainability, please refer to the A4S Essential Guide to Enhancing Investor Engagement.

> [Download it here](#)



Investors require a broader base of information to inform capital allocation and other decisions, and there is an expectation that reported information is reliable.

REPORTING AND DISCLOSURE OF GHG EMISSIONS – PRACTICAL EXAMPLES

Many banks have been reporting on their scope 1, 2 and 3 GHG emissions related to operational activities for a number of years. More recently a small but increasing number of banks are also disclosing their calculated financed emissions. The scope, asset class/sectoral coverage and level of detail that is disclosed varies widely from bank to bank. While the location of the disclosure varies, an increasing number of banks are including this into dedicated TCFD reports.

ABN AMRO

- In 2015, partnered with 13 other Dutch financial institutions to launch PCAF, which then expanded into North America in 2018 and launched globally in 2019. Used the PCAF standard to disclose its financed emissions across all asset classes that currently have a methodology available.
- Published scope 1, 2 and 3 emissions, breaking down scope 3 into emissions from air travel, lending portfolio and client assets for 'the Netherlands' and 'Rest of the World'.
- Reported lending portfolio emissions for mortgages and corporate loans, with a sectoral break down for corporate loans and non-listed equity.
- Disclosed its PCAF Data Quality scores.

> [Find out more here](#)

AMALGAMATED BANK

- Founding member of PCAF, and led its expansion into North America in 2018, adapting the PCAF GHG accounting methodologies to the North American context.
- Made first disclosure of financed emissions in 2020 using PCAF methodology, covering results for both 2019 and 2020.⁴⁵ Further standardization of the disclosure process is taking place in addition to working to set science based and net zero targets for financed emissions.
- The disclosure includes the scope 1, 2 and 3 emissions of lending activities (including mortgages, multifamily, commercial real estate and business loans), as well as emission intensities of these portfolios. Also disclosed avoided emissions for its project finance activities.
- Disclosed data quality scores in line with PCAF methodology. Working on improving data quality through the use of actual emissions data rather than estimates and sectoral averages in order to improve the score, as well as the overall precision and accuracy of reported data for use by stakeholders.

NATWEST

- Published preliminary estimates of its financed emissions from its loans and investments across residential mortgage, agriculture (primary farming), automotive manufacturing and oil and gas extraction using the PCAF standard.⁴⁶
- Published both an absolute emissions figure as well as physical emissions intensity (financed emissions divided by an output or activity value) and economic emissions intensity (financed emissions divided by the loan and investment amount).⁴⁷ These metrics help users to understand how the emissions intensity of different portfolios compare per activity or monetary unit.
- Disclosed its PCAF Data Quality score as well as challenges faced in gaining access to detailed, accurate and high-quality climate data. Current emissions estimates have limitations due to reliance on assumptions, quality of estimated historical emissions data, as well as the unpredictability of forward-looking climate projections. Looking ahead, climate data granularity is expected to improve as more direct customer climate data becomes available, coupled with on-going work to incorporate climate into financial planning and increased education of staff.

> [Find out more here](#)

45. Amalgamated Financial Corp., [2020 Corporate Social Responsibility Report](#)

46. NatWest Group plc, [Climate-related disclosures report 2020](#)

47. Ibid.

MANAGING EXTERNAL REPORTING AND DISCLOSURE

Finance teams have extensive experience of reporting market-sensitive information to external stakeholders in regulated environments. Furthermore, they operate within a culture that expects its reporting to be subject to external review or audit. Both of these attributes can help banks to satisfy the increasing demands for disclosure from external stakeholders including the investor community. As mentioned, finance teams should work with risk and other relevant teams in the bank to ensure consistency of data and assumptions, and compliance with regulatory expectations, accounting standard developments and disclosure requirements. In particular, for sustainability linked instruments, IFRS9 classification implications might be significant and therefore the development of robust accounting policies might become crucial to avoid unintended volatility for such assets. As accounting standards are developed, finance teams are encouraged to interact with standard setters around the application and implementation of reporting requirements.

Finance teams should also assess whether any of the information used internally has a material impact on financial metrics and disclosures and therefore should be included within the financial reporting. Regulation and guidance on ensuring that material climate-related factors are properly reflected in financial statements already exists.⁴⁸ Failure to include such factors leads to misinformed stakeholders, and potentially to inefficient resource allocation to address the emissions gap.

We suggest that establishing a reporting process aligned to the TCFD recommendations is a good option for future-proofing reporting requirements. For example, as part of their reporting, banks should describe where they have significant credit exposure to carbon-related assets and disclose the relevant transition and physical climate risks that they are exposed to in their lending and other activities.

Guidance by the TCFD, (currently under public consultation with final publication expected in October 2021), on climate-related metrics, targets and transition plans⁴⁹ and measuring portfolio alignment⁵⁰ includes specific guidance on the disclosure of financed emissions.

The TCFD recommendations – which includes supplemental guidance for banks⁵¹ – aim to support reporting that:

- Is adoptable by all organizations, including financial sector organizations
- Can be included in financial filings
- Is designed to solicit decision-useful, forward-looking information on financial impacts
- Is focused on risks and opportunities related to transitioning to a zero carbon economy

48. IIGCC, [Investor Expectations for Paris-aligned Accounts](#)

49. TCFD, [Proposed Guidance on Climate-related Metrics, Targets, and Transition Plans](#)

50. TCFD, [Measuring Portfolio Alignment: Technical Supplement](#)

51. TCFD, [Implementing the Recommendations of the Task Force on Climate-related Financial Disclosures](#)



You can follow A4S's [TCFD Top Tips For Finance Teams](#) and [TCFD Maturity Map](#) to help you get started

As the TCFD recommendations have, or are likely to, become part of mandatory listing requirements in several jurisdictions – especially following the 2021 G7 Summit’s backing of mandatory climate risk disclosure for market participants⁵² – finance teams should get ready for increased scrutiny on climate-related disclosures and make recommendations to the audit committee on the approach to external assurance that is most appropriate to take. In some jurisdictions, regulators, such as the SEC, are seeking public comment on whether potential climate-related disclosures should be subject to assurance. In relation to the relevance of climate risk for financial reporting, guidance for auditors has already been issued, eg by IAASB.⁵³

52. G7, '[G7 Ministers Agree Historic Global Tax Agreement](#)'

53. IAASB, '[The Consideration of Climate-Related Risks in an Audit of Financial Statement](#)'

THE SUSTAINABILITY REPORTING LANDSCAPE

ESG and sustainability reporting is at a critical inflection point. Discussions among sustainability standard-setters and framework providers offer the potential for convergence to simplify the landscape (albeit the pathway is still uncertain). Recent announcements from the European Financial Reporting Advisory Group (EFRAG), International Financial Reporting Standards (IFRS) Foundation and the U.S. Securities and Exchange Commission (SEC) are elevating the importance of sustainability reporting. The potential emergence of a comprehensive corporate reporting system, inclusive of environmental and social factors, may become a realistic possibility.

As ESG reporting progresses, the finance and accounting community will play a critical role in improving data and reporting quality, as well as enabling sustainability to be embedded within the corporate reporting process. A4S and its **Accounting Bodies Network** are publishing a 'Reporting 101' guide to help accountants to navigate the reporting landscape. Sign up to **A4S's monthly newsletter** to receive this guide once published.

° NET ZERO TOP TIPS FOR CFOS

CFOs have a vital role to play in achieving net zero GHG emissions. In April 2021, A4S published the following top 10 tips, based on insights from the A4S CFO Leadership Network, to help CFOs get started.

1

SIGN THE A4S CFO NET ZERO STATEMENT OF SUPPORT

Join your peers and commit to playing your part in the transition towards a net zero emissions world.

2

GAIN THE BUY IN OF THE REST OF YOUR BOARD AND EXECUTIVE MANAGEMENT TEAM

Demonstrate the business case for change. Finance can actively support executive management to adopt a sustainable business model that delivers sustainable outcomes.

3

COMMIT TO A SCIENCE-BASED TARGET

Set and validate a science-based target to reduce your GHG emissions in alignment with limiting global average temperature increases to 1.5°C.

5

EQUIP YOUR FINANCE TEAM WITH THE SKILLS TO RESPOND

Ensure finance professionals have the skills and competencies to support the business in delivering financial returns in the short and long term, while generating positive value for society and operating within environmental constraints.

4

LINK INCENTIVES TO YOUR TARGETS

Integrate your climate targets into your organizational goals and incentive schemes to promote sustainable value creation.

6

EMBED YOUR NET ZERO TARGETS INTO YOUR DECISION MAKING PROCESSES, INCLUDING BUDGETING AND CAPITAL INVESTMENT

Recognize the commercial value that sustainability delivers in capital projects and decision making.

7

INCORPORATE SUSTAINABILITY INTO YOUR FINANCING STRATEGY AND INVESTOR COMMUNICATIONS

Explore how treasury and investor relations activities can support the organization's strategic sustainability goals, responding to growing interest from debt and equity providers on climate and other ESG risks and opportunities.

8

PUBLISH YOUR NET ZERO EMISSIONS TRANSITION PATHWAY

Outline your trajectory towards net zero emissions, including interim targets and a clear roadmap.

9

ENGAGE WITH YOUR PENSION FUND CHAIR

Work with your organization's pension fund and other retirement plans to identify the practical steps to protect your employees' pension assets from climate risk.

10

REPORT ANNUALLY AGAINST THE TCFD RECOMMENDATIONS

Commit to implementing the TCFD recommendations by signing the A4S TCFD Statement of Support and incorporate the recommendations into your annual report and investor communications.

° ABOUT A4S

The Prince's Accounting for Sustainability Project (A4S) was established by HRH The Prince of Wales in 2004. Our aim is to make sustainable business business as usual.

We work with the finance and accounting community to:

- Inspire finance leaders to adopt sustainable and resilient business models
- Transform financial decision making to enable an integrated approach, reflective of the opportunities and risks posed by environmental and social issues
- Scale up action across the global finance and accounting community

A4S has three global networks: the Chief Financial Officers Leadership Network, a group of CFOs from leading organizations seeking to transform finance and accounting; the Accounting Bodies Network, whose members comprise approximately two thirds of the world's accountants; and the Asset Owners Network, which brings together Pension Fund Chairs to integrate sustainability into investment.

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