



A4S
ACCOUNTING FOR
SUSTAINABILITY

NET ZERO

A PRACTICAL GUIDE
FOR FINANCE TEAMS

° CONTENTS

INTRODUCTION	2
WHAT DOES IT MEAN TO BE NET ZERO?	3
What does it mean to set a net zero target?	4
Why is achieving net zero important for an organization?	6
What role can finance play and how will this guide help?	7
LEAD THE WAY	8
Identifying the risks and opportunities of pursuing a net zero strategy	9
Developing the finance culture to support the transition	13
Engaging the board and executive management	14
Incentivizing action along the value chain	15
TRANSFORM YOUR DECISIONS	16
Developing a net zero pathway to bridge the emissions gap	17
Integrating net zero targets into strategic planning and budgeting	19
Developing integrated management information	23
MEASURE WHAT MATTERS	25
Integrating natural, social and human capital information	26
Measuring and tracking performance	27
Reporting progress against the net zero pathway	28
Embedding into business valuations	29
ACCESS FINANCE	30
Engaging with investors on net zero	31
Raising and allocating funds for transition and adaptation	32
Managing external reporting and disclosure	33
NET ZERO TOP TIPS FOR CFOS	35
ABOUT A4S	37
ACKNOWLEDGEMENTS AND CONTRIBUTORS	37

° 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 for finance teams within organizations that are operating in the real economy. A separate A4S guide is available for those in the financial economy.

> [Net Zero – A Practical Guide for Finance Teams of 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 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 finance system has a crucial role to play in achieving global net zero emissions. Chief Financial Officers (CFOs) and finance teams can support the efforts and plans of organizations to progress towards net zero emissions by providing information needed to drive decisions, allocating funds and leading interaction with the capital markets. 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 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.

1. World Economic Forum, **The Global Risks 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**

◦ 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.⁵

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.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 overshoot.⁸

2

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

5. Science Based Targets initiative (SBTi), [Foundations for science-based net-zero target setting in the corporate sector – executive summary](#)

6. Science Based Targets initiative (SBTi), [Foundations for science-based net-zero target setting in the corporate sector – full paper](#)

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 be fully developed and therefore the impact on removing emissions and limiting warming to 1.5°C is uncertain.

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 SBTi and a recent position paper by ClientEarth⁹ 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).

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

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

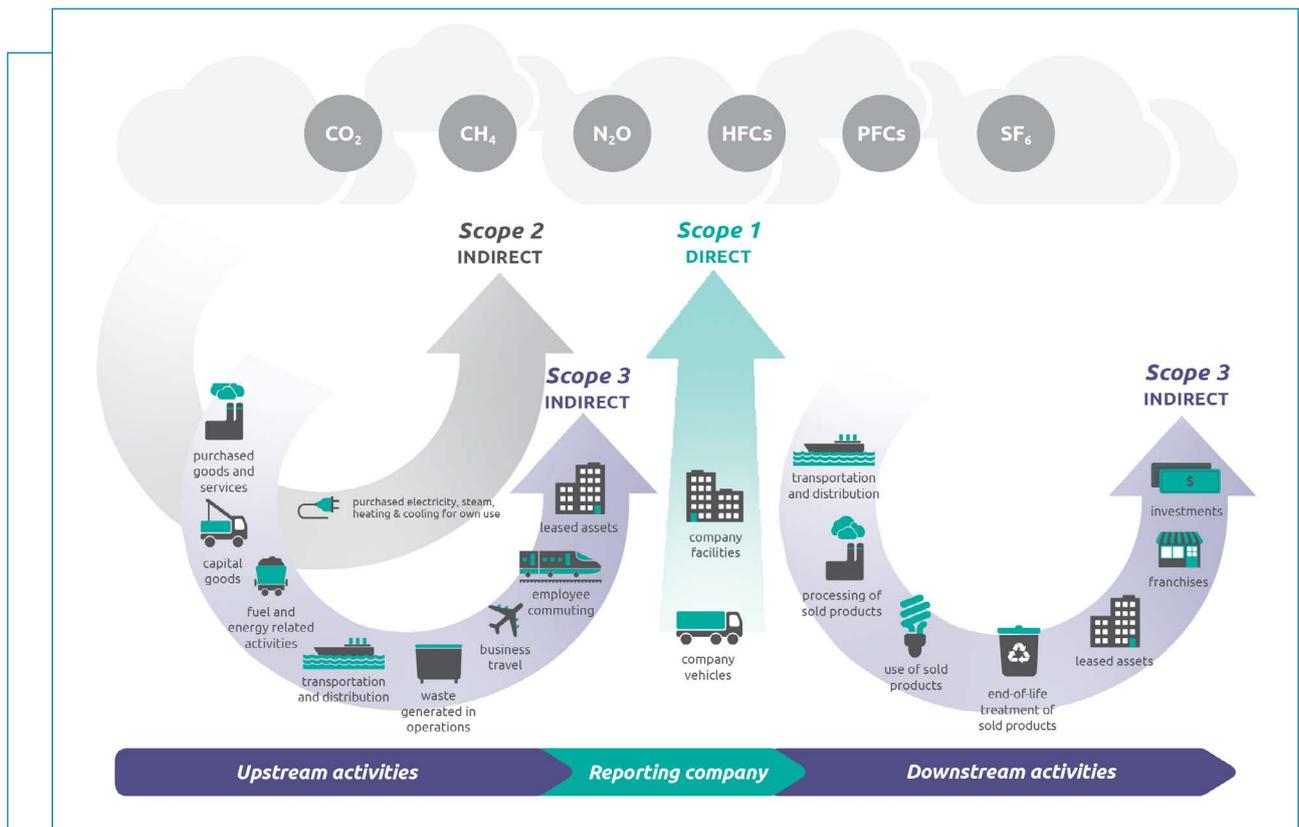
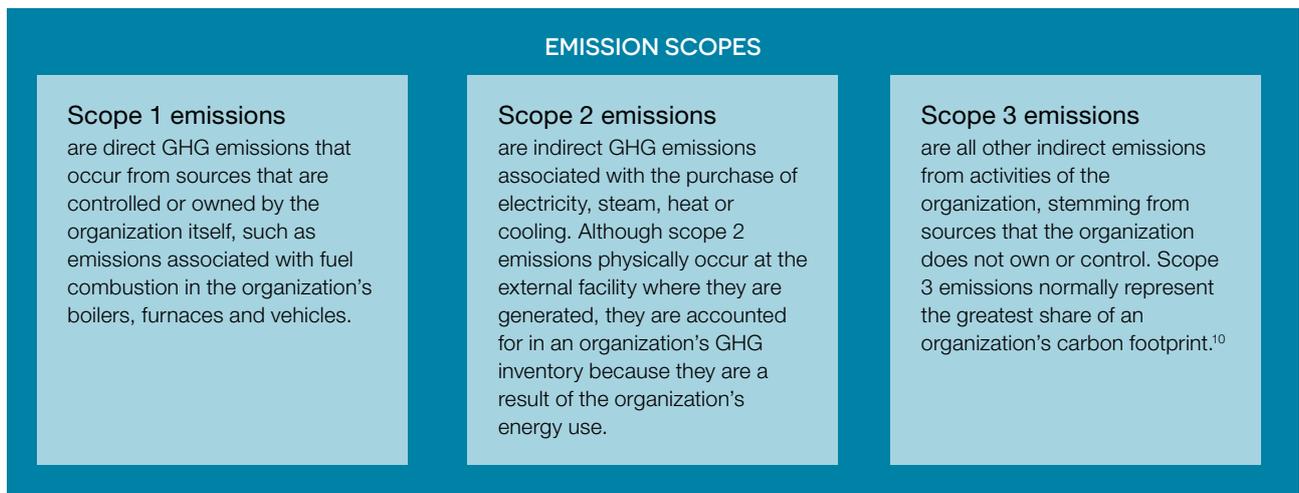


Figure 1: Scope 1, 2 and 3 emissions (Source: Greenhouse Gas Protocol)

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, 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 ROLE OF EMISSIONS REMOVALS 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 emissions from the atmosphere and storing them through various means, such as in soils, trees, underground reservoirs, and the ocean as well as products like concrete and carbon fibre.¹¹
- 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.”¹²

The SBTi states that “offsets are only considered to be an option for companies wanting to finance additional emission reductions beyond their science-based target (SBT) or net-zero target”.¹³ As organizations 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.

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

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

13. Science Based Targets initiative, [Criteria and Recommendations](#)

◦ WHY IS ACHIEVING NET ZERO IMPORTANT FOR AN ORGANIZATION?

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

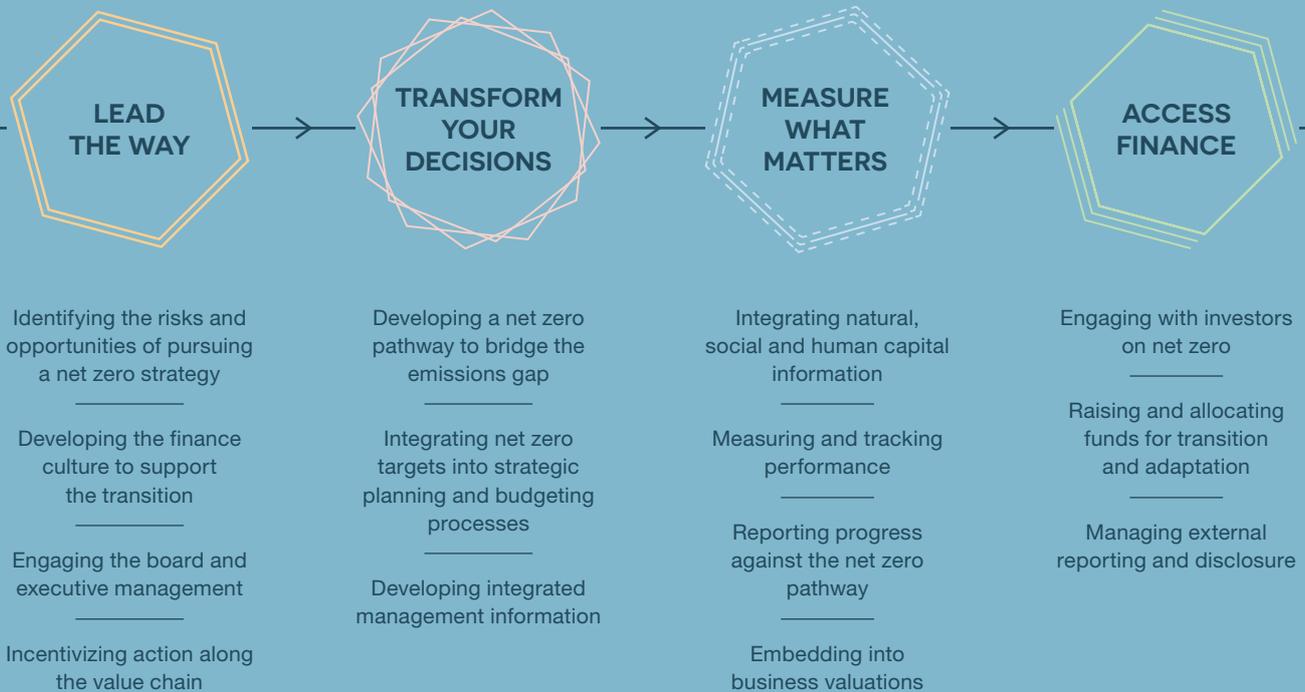
- 1 Governments and legislators are moving towards setting legally binding net zero targets which will have a significant impact on the corporate sector.
- 2 Providers of capital want to understand climate-related financial risks and the long-term viability of traditional business models.
- 3 Organizations themselves are beginning to appreciate the significant commercial opportunities from leading the transition to net zero and, conversely, the cost of failing to act.
- 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 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 an organization has made a net zero commitment, finance may be tasked with helping to develop pathways to achieve net zero, setting interim targets, allocating funds, reporting progress and integrating net zero into decision-making processes.

This guide explores the practical steps that finance teams can take to support their organizations to progress towards net zero emissions. 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:



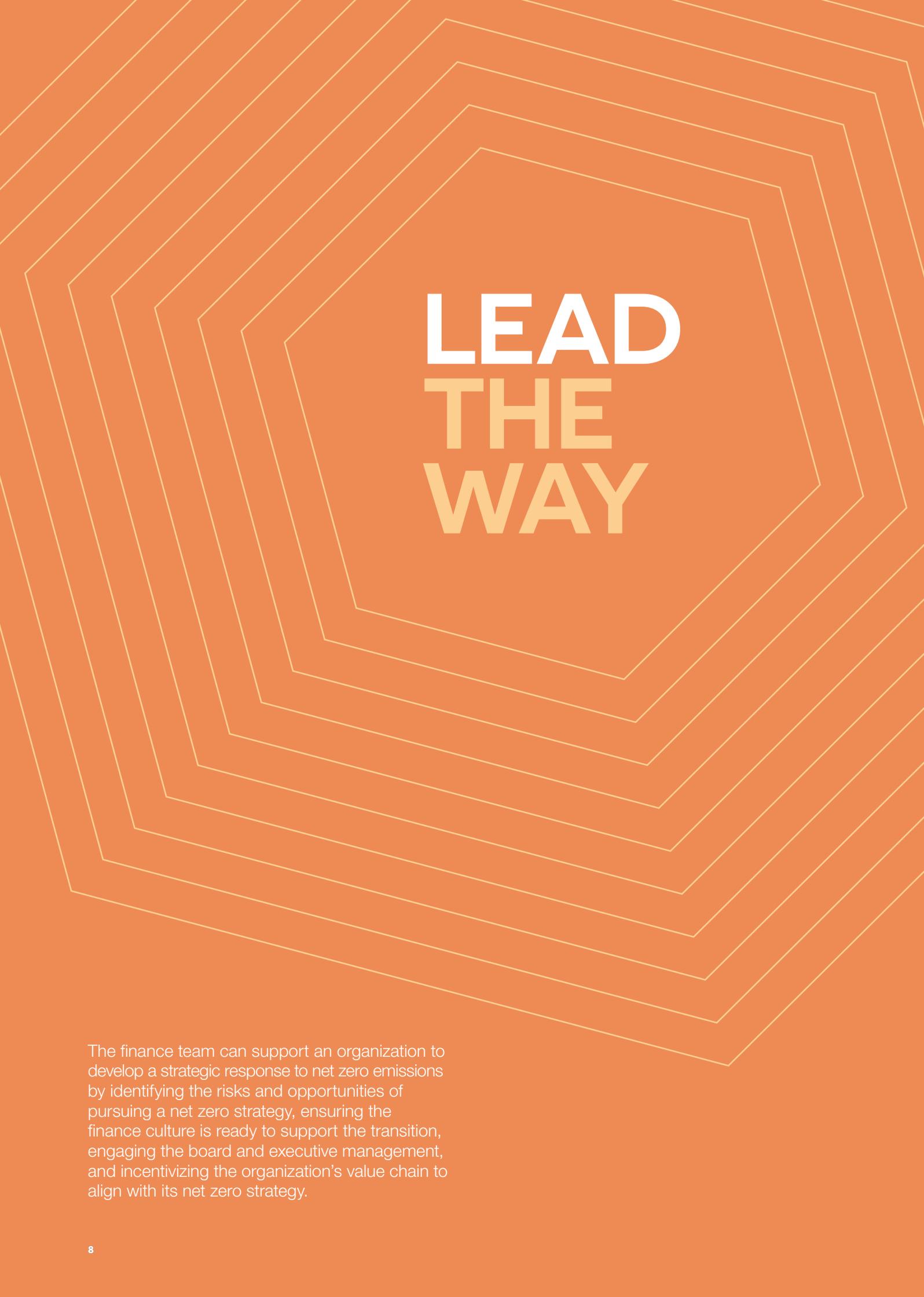
This guide will explore each of these topics in more detail.

See page 8

See page 16

See page 25

See page 30



LEAD THE WAY

The finance team can support an organization to develop a strategic response to net zero emissions by identifying the risks and opportunities of pursuing a net zero strategy, ensuring the finance culture is ready to support the transition, engaging the board and executive management, and incentivizing the organization'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 uncertainty surrounding macro sustainability trends, 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

Traditional approaches for identifying risks and considering their potential impacts can be applied relatively easily and quickly by an organization in the context of net zero. For example:

– Horizon scanning

Horizon scanning is a technique for analysing the future and considering how emerging trends and developments – such as national legislation that commits 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. The results of 'scanning the horizon' can provide context for risk management and a basis for preparing strategies that anticipate future developments. Scanning techniques include desk-based research, surveys, interviews and workshops.

This technique is particularly relevant when considering the macro level risks of transition to a net zero economy. Organizations must enhance existing risk identification and mitigation processes to encompass these broader risks, in particular how to assess and understand the value at risk. 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.¹⁴

– Common frameworks and tools

The sustainability SWOT (sSWOT) framework and BACLIAT vulnerability assessment can be used during a horizon scanning workshop.

The sSWOT is specifically designed to help organizations quickly consider the potential impacts of future climate risks. It analyses those impacts using a framework that takes into account impacts from past climate events, current events and future events where the potential climate effects are yet to be felt; this is useful as organizations can expect to experience such events as the climate and corresponding policy environment continues to change.

The BACLIAT framework is particularly helpful for considering 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.

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](#)



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

WHAT ARE TRANSITION RISKS AND PHYSICAL RISKS?^{15, 16}

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.

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

16. TCFD, **Recommendations of the Task Force on Climate-related Financial Disclosures – Final Report**

17. 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.¹⁷

OPPORTUNITY

Pursuing a net zero strategy can help organizations to identify business opportunities within their own operations or through supporting the activities being undertaken at a country or regional level. Organizations can make the most of these opportunities by:

- Developing solutions to facilitate the energy transition and electrification of society, such as energy generation from renewable sources, energy efficiency technologies or grid-balancing capabilities.
- Responding to global megatrends exacerbated by climate change, such as urbanization, mass-transit technology, smart buildings and security.
- Developing new technology in automation and digitalization to enable smarter ways of operating, reduced use of resources and greater transparency on sourcing.
- Redesigning their operations to move from a traditional linear model (extract, produce, use, dispose) to a model based on circularity, adopting the principles of reduce, reuse, repurpose and, finally, recycle – in imitation of nature, which has no landfill.
- Incorporating circular-economy thinking into product and service design, which will reduce embodied emissions and minimize or eliminate process/end-of-life waste.

The evaluation of potential business opportunities should support the internal business case for investing in transformational change. A ‘connectivity map’ can be helpful for gathering qualitative ideas, visualizing their interrelationship and communicating them across the organization.

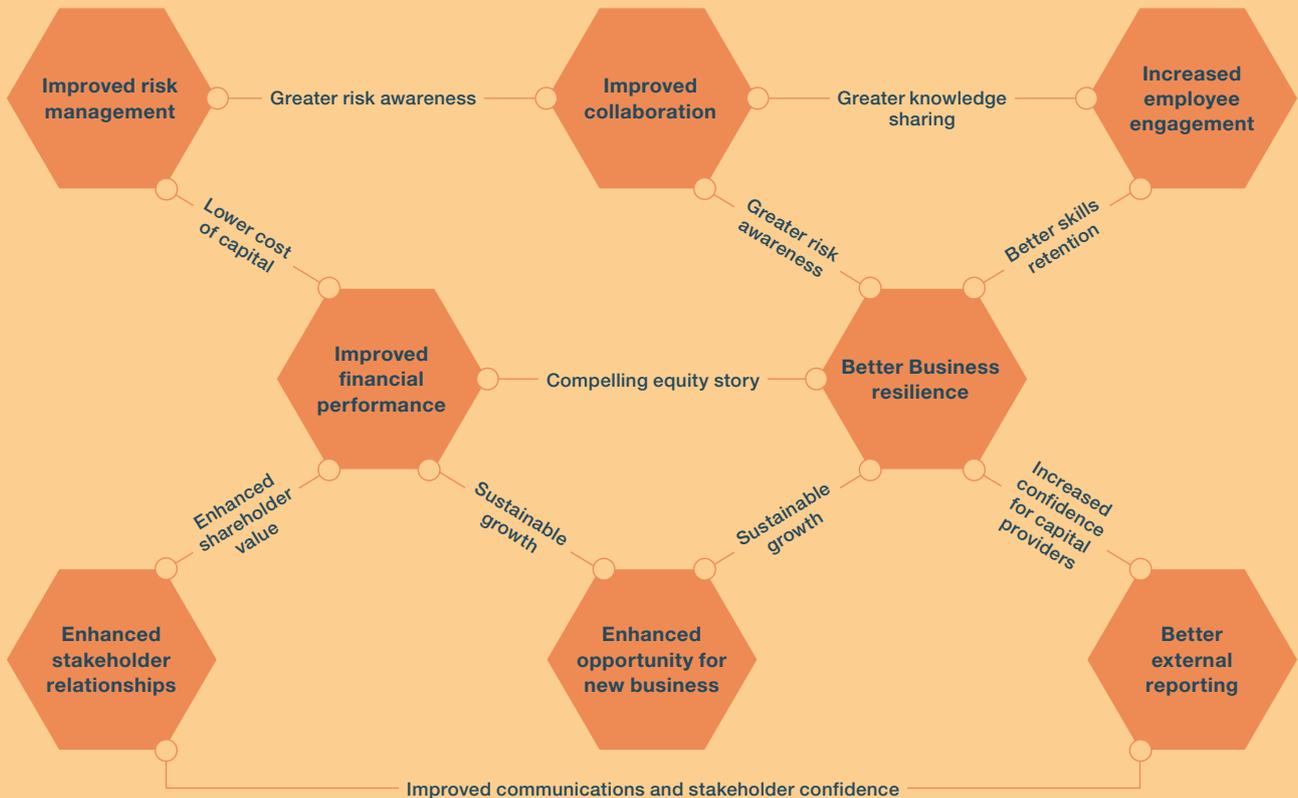


Figure 2: Connectivity map



CATERPILLAR'S REMANUFACTURING AND REBUILD BUSINESSES

Caterpillar Inc is the world's leading manufacturer of construction and mining equipment, engines, turbines, and locomotives. It strives to keep resources in its value chain through a circular flow of materials, energy and water. Its remanufacturing and rebuild businesses provide customers not only with immediate cost savings, but also help extend life cycles and improve material-use efficiency. Using remanufacturing technologies, products at the end of their serviceable lives are returned to same-as-new condition, at a fraction of the cost of a new part. Its rebuild programmes increase the lifespan of equipment by providing customers with product updates for a fraction of the cost of buying a new machine.

> [Find out more here](#)

NATIONAL GRID'S NET ZERO OPPORTUNITIES

National Grid is one of the world's largest publicly listed utilities focused on transmission and distribution of electricity and gas. It estimates that 400,000 new energy workers are needed to power the UK to net zero. Opportunities will be created to install low-carbon heating in millions of homes, develop new technologies and install around 60,000 charging points to power 11 million electric vehicles.

> [Find out more here](#)

SMURFIT KAPPA'S CARBON TOOLS

Smurfit Kappa is a world leader in paper-based packaging. The organization uses its suite of tools including [Paper to Box](#) and [Pack Expert](#) to help customers to determine the carbon footprint of their packaging and develop smart solutions that can significantly cut their emissions. This also helps them to avoid product waste, minimize over specified packaging and increase recycling.

> [Find out more here](#)

NOVO NORDISK'S CIRCULAR FOR ZERO STRATEGY

Novo Nordisk is a multinational pharmaceutical company. Its Circular for Zero strategy challenges the organization to find new ways to design products that can be recycled or reused and to work with suppliers who share its goal, reshaping its business to minimize consumption and waste.

> [Find out more here](#)

◦ DEVELOPING THE FINANCE CULTURE TO SUPPORT THE TRANSITION

The culture of the finance team needs to be aligned with the organization's net zero ambition such that it embraces the strategic vision and business case for change and can support the organization 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 **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 with internal communications – for example, by presenting the same information about the net zero pathway and interim targets along a timeline.
- Communicate at all levels and in language that resonates with the audience – for example, by translating the net zero commitment to what it means for different business lines or roles.
- Create 'champions' in the team and enable internal networks that cross hierarchies – for example, by setting up a net zero working group with representatives from across the business to drive change.
- Catch your future advocates early – for example, by including the company's commitment to net zero in the induction process.
- Celebrate success and promote the role of finance – for example, by tracking the achievement of interim targets, and using internal staff networks and platforms to communicate and celebrate success.

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](#)



° ENGAGING THE BOARD AND EXECUTIVE MANAGEMENT

The board and executive management (EM) are responsible for ensuring the organization'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 for implementation. A set of guiding principles and key questions for effective climate governance on corporate boards has been developed by the World Economic Forum and can be used to help practically assess and debate an organization's approach to climate governance.¹⁸

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 on the organization'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.

18. World Economic Forum, [How to Set Up Effective Climate Governance on Corporate Boards: Guiding principles and questions](#)

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.



BRITISH LAND'S NET ZERO COMMITMENT SUPPORTED BY THE BOARD

British Land is one of the largest property development and investment companies in the UK. Its 2030 Sustainability Strategy includes a commitment to achieve a net zero carbon portfolio by 2030. By demonstrating a strong business case for more sustainable buildings and close alignment with its corporate strategy, the board has been engaged and supportive from an early stage. The then CFO, now the CEO, played a key role in demonstrating the business case for sustainability and its relevance to a range of business areas.

> [See A4S case study on British Land: Engaging the board and executive management on sustainability.](#)

° INCENTIVIZING ACTION ALONG THE VALUE CHAIN

While organizations may be able to resolve scope 1 and 2 emissions internally, they will need to work with others along the value chain and co-create solutions to reduce scope 3 emissions substantially or remove them altogether.

Organizations need to understand and measure their scope 3 emissions, and finance is uniquely suited to provide support. The system-level action required to reduce or remove embodied 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. Working collaboratively with sustainability teams, they can assess their value chains to understand risks and seize opportunities and identify ways to incentivize the integration of net zero targets along that chain. The finance team can also lead on or support the analysis of options, the commercial viability of solutions, prioritizing investment and the sourcing of funds.

Tackling upstream emissions from purchased goods and services, including inbound logistics, requires supply chain cooperation or operational changes in-house to influence demand. For downstream activities, emissions from outbound logistics could be reduced by working with fleet managers and distribution partners, for example. Tackling emissions that are embodied into the product up to the point of sale and emissions generated through usage or end-of-life processing can be more challenging. Changing product design, offering take back schemes and consumer education are options to consider when tackling embodied product emissions. Finance can support the organization in estimating total product lifecycle emissions and calculating the potential emission reductions and the financial benefits of targeted investment in change.

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.



TESCO'S SUSTAINABILITY-LINKED SUPPLY CHAIN FINANCE

Tesco, a multinational retailer, has committed to reach its net zero climate target in the UK by 2035. It is set to offer its supply base sustainability-linked supply chain finance, in September 2021, to encourage more suppliers to sign up to science-based emissions reduction targets. The voluntary programme will offer Tesco's suppliers preferential financing rates via Santander's market-leading supply chain finance platform, which incentivizes suppliers to make positive changes to their business, while tracking performance and creating a culture of continuous improvement. The rates will be based on the suppliers' carbon data disclosure, emissions reduction targets and progress against sustainability goals.

> [Find out more here](#)



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 organization. The finance team can support this by integrating net zero considerations into financial processes and decisions, and ensuring alignment with overall business strategy. In more carbon intense organizations, it may require a redesign of the business strategy to make it net zero aligned. 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 and budgeting processes. Finance may also consider broadening the existing management information system to incorporate the extra information that will enable the organization 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. Organizations 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, organizations should develop a pathway to bridge the emissions gap from today’s position to net zero.

The graphic below (Figure 3) 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. It may include purchasing high-quality carbon credits and providing direct financial support to projects that generate positive impact.¹⁹

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.

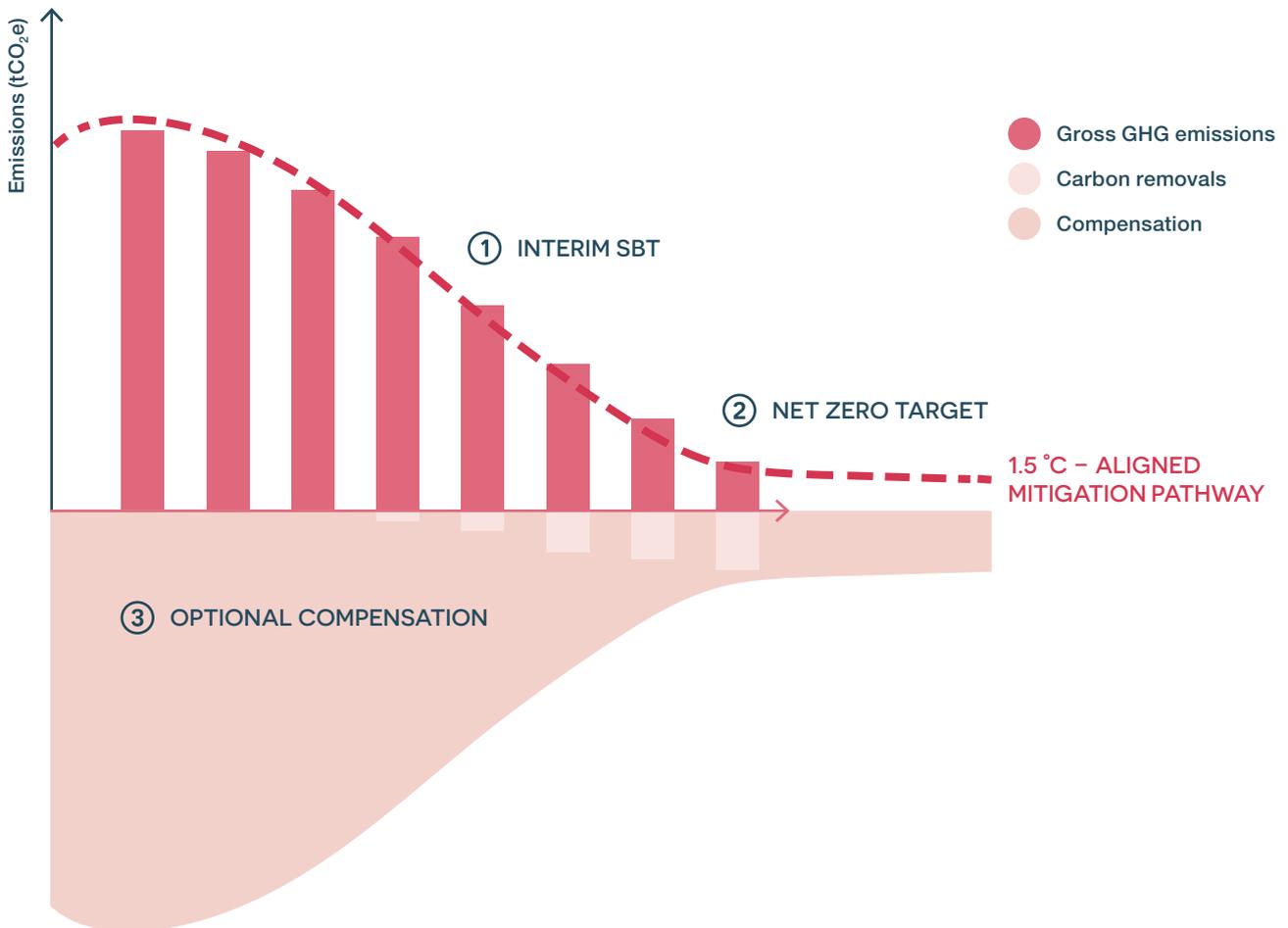


Figure 3: Graphical representation of a net zero target, interim SBT and optional compensation (Source: SBTi)

19. 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 possible pathways**
 For example, including representatives from finance, sustainability, strategy, risk and operations.
- 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 Consider transformation costs and include the necessary funding in future finance raising and capex budgeting and cash flow forecasting**
 For example, finance may build on existing financial processes to incorporate net zero commitments.
- 6 Appoint senior managers as 'pathway owners'**
 For example, senior managers in finance may be accountable for investment analysis along the process.



HEATHROW'S PATHWAY TO NET ZERO

In February 2020, Heathrow Airport in the UK published its roadmap for getting to net zero carbon emissions by 2050. The eight-step plan sets out the actions Heathrow will take to bring its own infrastructure to net zero and how it will work with partners, passengers and the government to reduce emissions throughout its value chain. Getting to net zero requires major investments in infrastructure and renewable energy, and Heathrow's finance team plays a major role in appraising investment and developing business cases. The finance team also works with the commercial teams to model financial incentives and charges to reduce carbon emissions at the airport. Finance also owns the climate-related disclosures in the annual report and handles questions from investors.

> See A4S case study on Heathrow: [Our pathway to net zero here](#)

° INTEGRATING NET ZERO TARGETS INTO STRATEGIC PLANNING AND BUDGETING

As the organization’s understanding of the GHG emissions gap improves, new strategic initiatives and capital investment projects will start to emerge to support the pathway to net zero. Finance has a key role to play in ensuring that these projects are included within the regular strategic planning and budgeting cycle and that adequate funding is available.



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 (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 timelines that can be easily communicated with stakeholders.

Ensuring that the organization future-proofs its investment decisions by considering all forms of capital that will impact the business case – taking an integrated capital approach to understand the wider impact of your net zero strategy, eg on the workforce and the local community.

Adopting a lifecycle costing and total cost of ownership approach, which supports the new business models required to achieve the net zero strategy.

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](#).

See [‘SSE’s Just Transition strategy’](#), which outlines how SSE will approach the social implications of delivering net zero, from jobs and training, to working with communities.

PEPSICO'S CLIMATE ACTION STRATEGY²⁰

PepsiCo is a leading multinational food and beverage company. Its climate action strategy demonstrates visually how PepsiCo is bringing its emissions challenge to life, breaking it down into actionable areas recognizable to its stakeholders.



Figure 4: PepsiCo's Climate Action Strategy (Source: PepsiCo)

UNILEVER'S CLIMATE TRANSITION ACTION PLAN²¹

Unilever is one of the world's largest consumer goods companies. Its climate transition action plan sets out the interim targets for Unilever's 2039 net zero goal across scope 1,2 and 3 emissions, and shows what that means for its operations, value chain and brands and products.



Figure 5: Unilever's Climate Transition Action Plan (Source: Unilever)

20. PepsiCo, **ESG Topics**

21. Unilever, **Climate Transition Action Plan**

BUDGETING

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.

RINGFENCING

Organizations can ringfence a financial budget to allow for the costs associated with meeting their net zero targets. British Land's 'Transition Vehicle' is a good example of this. It raises ringfenced funds via an internal carbon price per tonne of embodied emissions on future developments. The fund enables energy efficiency projects to be brought forward, delivering earlier environmental benefits and cost savings to customers. Ringfencing funds is a simple approach that can be used on its own or in conjunction with shadow pricing (as shown in the British Land example below).

BRITISH LAND'S TRANSITION VEHICLE

British Land is one of the largest property development and investment companies in the UK. Every tonne of embodied carbon British Land produces from 2020 until 2030 will trigger an additional £60 payment. A proportion of this will be used to purchase accredited offsets, with the balance being ring-fenced in the new Transition Vehicle to provide capital to retrofit the organization's standing assets.

> See A4S case study on British Land: [Setting our pathway to net zero here](#)

ALLOCATION

This method requires splitting a budget across different budget owners or operating units to meet relative needs. One recognized way of doing this is the marginal abatement cost method, which measures the cost of reducing one more unit of GHG emissions. By plotting the marginal cost associated with different carbon reduction options against the carbon reduction each method expects to achieve, the options can be ranked in order of implementation priority. Budget can then be allocated to the budget owners of the operating unit with the most cost-effective option. The savings generated are then invested in the next most cost-effective option, and so on. This frees up capital for implementing more expensive options later. See Figure 6 for an illustrative example of a marginal abatement cost curve.

- Reduce building temps by 1°C
- Behavioural change programme
- Fuel efficiency training
- LEDs
- Insulation
- Building controls
- Solar PV

Illustrative marginal abatement cost curve

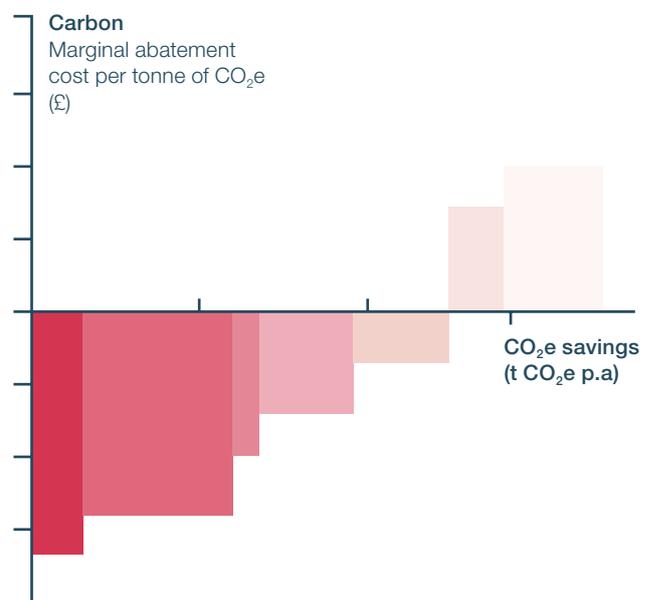


Figure 6: Marginal abatement cost curve (Source: A4S, [Essential Guide to Strategic Planning, Budgeting and Forecasting](#))



INVESTMENT DECISIONS

Whether it is capital investment or merger and acquisition decisions, finance plays a critical role in ensuring that net zero considerations are taken into account. For example, the appraisal method should assess whether, over the lifetime of the investment, GHG emissions will reduce to a level where the investment is consistent with the organization's net zero pathway. When evaluating and prioritizing investment projects, finance should build on traditional techniques, using net present value, internal rate of return and/or payback, and include monetization of nonfinancial factors in cost benefit analyses.

> Further details on integrated capex appraisal methodologies can be found in [A4S Capex Deep Dive](#)



CAPITALS BUDGETING

Capitals budgeting is a collective term for setting budgets for natural, human and social capitals in nonmonetary terms. Once a net zero pathway is set and the target amounts of GHG emissions to remove are agreed, consider setting 'carbon budgets' for discrete time periods or activities. This breaks the emissions removal target down into manageable amounts and facilitates progress reporting. The [A4S Essential Guide to Strategic Planning, Budgeting and Forecasting](#) (pages 36–38) provides guidance on this approach and a case study on Sainsbury's setting zero carbon, waste and water budgets for new retail stores.



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 organizations for carbon emissions. An internal (or 'shadow') carbon price can be used in different ways, for example:

- Simply incorporating it into project or investment budgets – monetizing the carbon impact – and thus creating the business case to invest in lower-carbon options
- Using the shadow price to drive an internal carbon market

In organizations where projects compete for funds made available by levying an internal carbon fee, the competition itself and the awareness it generates through formal and informal communications can increase support for a company-wide net zero strategy.

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.



NATIONAL GRID'S INTERNAL CARBON PRICE FOR INVESTMENT DECISIONS

National Grid is one of the world's largest publicly listed utilities focused on transmission and distribution of electricity and gas. It has set a target of net zero emissions for its own activities by 2050. Connecting low-carbon energy to the UK's transmission network – and keeping that network running smoothly – requires ongoing investment in its infrastructure to ensure its safe and reliable operation. Factoring in lifetime carbon emissions when making major investment decisions can help the organization achieve its net zero target. An internal carbon price is used to inform investment decision making, alongside other tools such as low-carbon policies and carbon weightings. Carbon data is embedded into existing cost estimation tool, which is used to cost proposed investments. National Grid started with a price of £45/US\$60 per tonne of carbon to try and represent the different markets, regulatory mechanisms, and geographies in which it operates. The finance and sustainability teams have collaborated closely to bring the carbon price into existing processes effectively.

> See [A4S case study on National Grid: Embedding a carbon price into investment](#) [here](#)

◦ 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. This discipline is core to the finance team, and finance's role in capturing and subsequently reporting this information is critical.

Achieving net zero will be a challenge for any organization, and when an organization decides to commit to achieving it, a leap of faith may be required – including uncertainties around the target or end state and what it will 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 organization, customers, climate outlook and scenarios, methodologies and frameworks change</p>	<p>The end state target needs a clearly defined 'target boundary', especially for scope 3 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.</p>
<p>Where the organization 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. • Whether the organization has already set science-based targets. • How well-prepared the organization is to follow the reporting requirements of the Task Force on Climate-related Financial Disclosures (TCFD). • The currently unknown quantum of emissions that will need to be considered to achieve net zero.
<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 organization about the potential amount of capital (human and financial) required to achieve net zero.</p>
<p>Knowing when net zero has been achieved</p>	<p>All reporting must remain dynamic as the organization achieves a greater understanding of its emissions over time. 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>

How to broaden 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 organization
- Providing decision makers with insight on emissions information 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 SBTi criteria require all companies to cover at least 95% of emissions in scope 1 and 2 and most companies to cover at least 66% of emissions in scope 3, as well as meeting sector-specific boundary coverage requirements.²² For a net zero target, the target boundary is likely to go beyond the SBTi criteria and incorporate a greater percentage of scope 3 emissions.



CORPORATE NET ZERO TARGETS

SBTi produced a paper, 'Foundations for science-based net-zero target-setting in the corporate sector', which lays out the conceptual foundations for credible, science-based net zero targets for the corporate sector. The aim is to ensure that companies' net zero targets translate into action that is consistent with achieving a net zero world by no later than 2050.

> [Read the SBTi paper here](#)

22. Science Based Targets initiative, [Net-Zero Criteria Draft for Public Consultation](#) (page 25)



MEASURE WHAT MATTERS

While the timescales for most organizations 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. It is also important to account for the different capitals and integrate environmental and social metrics into regular reporting to decision makers. The finance team has a key role to play in this.

° INTEGRATING NATURAL, SOCIAL AND HUMAN CAPITAL INFORMATION

Many organizations setting the goal of reaching net zero emissions are making commitments to address climate and nature crises and the corresponding social challenges.

For example, there are nature-based solutions such as preserving and restoring forests, and the just transition that considers environmentally and socially sustainable jobs and sectors in the face of the climate crisis. The finance team can help to evaluate the natural, social and human capitals through a financial lens.

To begin with, it is important to understand both the positive and negative impacts and dependencies of the different capitals, incorporate the views of key stakeholder groups along the value chain and from impacted communities and identify the information needs of key internal decision makers. The next step is to consider the most appropriate measurement timescale and data collection methods, taking into account other evaluations and reporting undertaken across the organization. The process of measuring the impacts and dependencies and understanding the value being created or destroyed will mature over time. You may start with qualitative valuations (eg a narrative describing the impact), which may be easier to communicate, and add quantitative non-monetary information (eg survey data, audit results, indicators), which may be easier to integrate into decision making. Quantitative monetary information (eg shareholder or societal values) is one approach to consider and may be useful for including in business cases but may involve unproven conversion factors and result in higher levels of uncertainty.

FURTHER INFORMATION

The A4S Essential Guide to Natural and Social Capital Accounting and A4S Essential Guide to Social and Human Capital Accounting provide tools and guidance to account for the different capitals.

> [A4S Essential Guide to Natural and Social Capital Accounting](#)

> [A4S Essential Guide to Social and Human Capital Accounting](#)



° MEASURING AND TRACKING EMISSIONS

When developing pathways, many organizations discover that they have incomplete emissions data. Scope 1 and 2 emissions may already be known and captured by existing reporting. If you lack this transparency, utilities providers and/or facilities and fleet management partners may be able to help. With scope 3, there is often a knowledge and data gap. Estimating scope 3 emissions based on clearly defined organizational boundaries, especially downstream, involves gathering new metrics and reviewing that data alongside other more recognizable data sets, both internal and external to the business.

Finance 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) calculations to ensure that all future reporting has the necessary integrity. Sustainability teams may find it useful to have the support of finance in explaining the three emission scopes to the wider organization, raising awareness of the challenge of tackling emissions across the value chain. Increased organizational awareness of scope 3 emissions will lead to more creative solutions being identified to reduce GHG emissions.

The Greenhouse Gas Protocol provides **a corporate accounting and reporting standard**, specific **guidance for scope 2**, and **a supplement standard** and **calculation guidance** for scope 3 to help organizations prepare a corporate-level GHG emissions inventory.

WHAT IS CO₂E?

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**.

REPORTING PROGRESS AGAINST THE NET ZERO PATHWAY

The pathway to net zero for different organizations may include a range of activities and initiatives. New metrics and targets would need to be developed to drive action along the pathway, and finance plays a key role in the measurement and reporting to facilitate informed decision making. These may include:

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

All of this information should be integrated into business as usual processes over time, such as:

- 1 Reporting to management, the board and external stakeholders
- 2 Informing the strategic planning process
- 3 Incentivizing management via remuneration schemes

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.

Data quality is the foundation for all good quality reporting. Where the data is subject to external audit, eg the emissions data and other data that may be used to calculate climate-based incentives, finance should ensure that appropriate internal controls on this data are in place in a systematic and integrated manner, and periodic data integrity checks and system reliability checks are done.

A4S ESSENTIAL GUIDE TO MANAGEMENT INFORMATION

The [A4S Essential Guide to Management Information](#) (page 38) 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 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.

The [A4S Essential Guide to Strategic Planning, Budgeting and Forecasting](#) (pages 142–157) provides tools and guidance on improving data quality and having the right technology and system capability.

See the '[Managing external reporting and disclosure](#)' section for more details on what finance can do to report progress, including TCFD reporting.

> [Find out more here](#)



◦ 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** provides practical guidance to help organizations embed climate risk into business valuations and was developed by members of the A4S CFO Leadership Network in Canada.

The guide, of relevance to any organization 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. It is therefore important for organizations to engage with their investors and other providers of capital on net zero; raise and allocate funds to support their plans; and manage external reporting, in particular on climate-related financial disclosures.

° ENGAGING WITH INVESTORS ON NET ZERO

Investors play a pivotal role in driving the future direction of most organizations. Increasingly, they require a broader base of information to inform capital allocation and other decisions, and there is an expectation that reported information is reliable.²³ In respect of achieving net zero emissions, investors can hold directors 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 seems 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 business, including the management of transitional 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 being a driver of long-term value
- Ensuring consistency between the narrative disclosures around climate risks and the financial statements and ensuring that the information can be relied upon
- Explaining how a 'just transition' approach to pursuing a net zero strategy balances the needs of the organization and its stakeholders and the wider community in an equitable manner

UNILEVER'S 'SAY ON CLIMATE' SHAREHOLDER VOTE

Unilever is one of the world's largest consumer goods companies. In December 2020, the company announced that it would be giving shareholders a non-binding advisory vote on its climate transition action plan. By putting the action plan to a vote at the annual general meeting, Unilever aims to strengthen the nature and the quality of the investor engagement and demonstrate its commitment to follow through on the plan and a willingness to be held accountable for delivery against the plan. The vote received over 99% shareholder support. Going forward, Unilever intends to report annually on its progress in the areas outlined under the plan and seek an advisory shareholder vote every three years.

> [Find out more here](#)

SSE'S JUST TRANSITION STRATEGY

SSE is a listed energy company that provides energy and related services in the UK and Ireland. In early 2020, SSE was approached by investors who wanted to know how the business was thinking about the 'just transition' and what its strategy was in this regard. At the annual general meeting that year, SSE provided a formal response, committing to producing a just transition strategy in time for the half-year results. SSE continued to engage with its investors in developing the strategy before publishing it in November 2020. In the strategy, SSE has set out the principles it will follow to ensure that the impacts of its decisions are fair and to maximize the opportunities for its local communities to benefit from net zero. The principles sit under five key themes: good green jobs, consumer fairness, building and operating new assets, looking after people in high-carbon jobs and supporting communities.

> [Find out more here](#)

FURTHER INFORMATION

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

> [A4S Essential Guide to Enhancing Investor Engagement](#)

23. International Auditing and Assurance Standards Board (IAASB), [Extended external reporting](#)

° RAISING AND ALLOCATING FUNDS FOR TRANSITION AND ADAPTATION

Mitigating climate-related transition risks and putting an organization on a pathway to net zero requires investment. Investment can be provided either internally or externally. The choice of route might depend on the nature of the initiative.

Often described interchangeably as 'green', 'climate' or 'sustainability' funding, several options for external funding are listed below. For lenders, the growth in this kind of finance reflects the clear link between sustainability performance and credit risk, and the realization that their reputation, and those of their borrowers, are linked. For borrowers, a more engaged relationship with lenders enhances their ESG credentials and may lead to a potentially lower cost of debt due to a more transparent risk profile and greater access to capital.

MAJID AL FUTTAIM'S GREEN FINANCE FRAMEWORK²⁴

Majid Al Futtaim owns and operates shopping malls, retail, and leisure establishments in the Middle East and North Africa. One of its sustainability goals is to be net positive in carbon and water by 2040, across all its operations, tenants, and developments. Under its Green Finance Framework, the organization may issue Green Bonds or Green Sukuk as part of its commitment to financing long-term sustainability projects required for achieving its net positive commitment.

GREEN FUNDING

Green loans or credit facilities: where interest rates are linked directly to predetermined sustainability KPIs.

Green bonds: where proceeds are invested into new or existing sustainability projects and governed by recognized international standards.

Green trade finance: where suppliers offer advantageous short-term credit in which interest rates are pegged to the improvement of sustainability performance within the customer's operations, reducing downstream scope 3 emissions.

For further information on sustainable finance and links to green/sustainability-linked bond examples, see the [A4S Essential Guide to Debt Finance](#) and [A4S's Implementing A Sustainable Finance Framework: Top Tips](#).

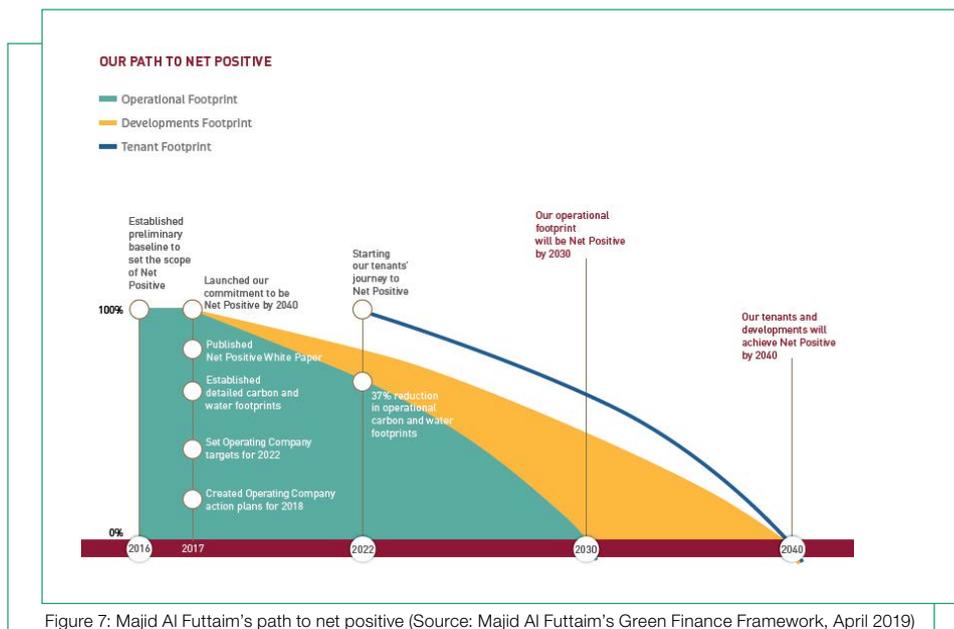


Figure 7: Majid Al Futtaim's path to net positive (Source: Majid Al Futtaim's Green Finance Framework, April 2019)

24. Majid Al Futtaim, [Green Finance Framework](#)

MANAGING EXTERNAL REPORTING AND DISCLOSURE

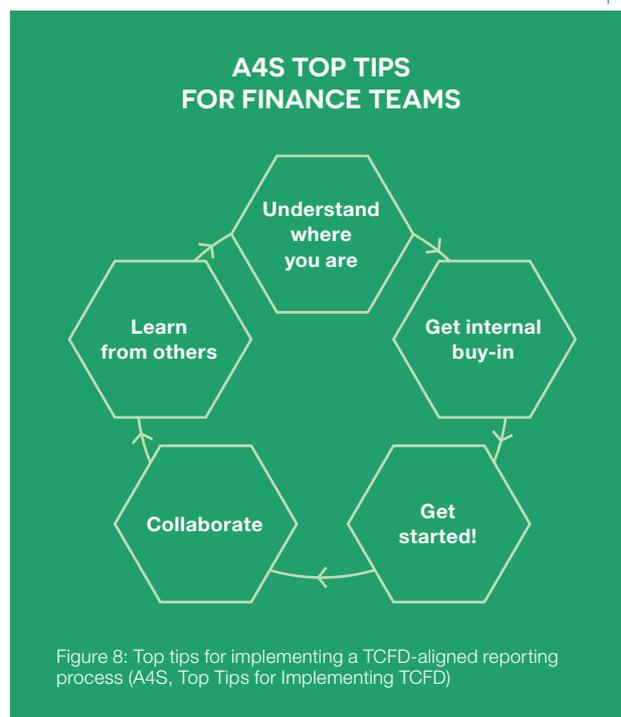
The expectation for organizations to manage and disclose the financial risks associated with climate change is growing, as evidenced by the growth in the number of organizations supporting the TCFD, as well as the investor demand for organizations to report information in line with the TCFD recommendations.²⁵ 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 organizations to satisfy the increasing demands for disclosure from external stakeholders, including the investor community.

Regulations and guidance on ensuring that material climate-related factors are properly reflected in financial statements already exists.²⁶ Failure to include such factors leads to misinformed stakeholders and potentially to inefficient resource allocation to address the emissions gap, alongside increased reputational and litigation risk.

We suggest that establishing a reporting process aligned to the TCFD recommendations is a good option for future-proofing reporting requirements.²⁷ The TCFD recommendations aim to support reporting that:

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

You can use the **A4S TCFD Top Tips for Finance Teams** and **Maturity Map** to help you get started on implementing the TCFD recommendations.



25. Task Force on Climate-Related Financial Disclosures, [2020 Status Report](#)

26. The Institutional Investors Group on Climate Change (IIGCC), [Investor Expectations for Paris-aligned Accounts](#)

27. Task Force on Climate-Related Financial Disclosures, [Recommendations of the Task Force on Climate-related Financial Disclosures](#)

As the TCFD recommendations have, or are likely to, become mandatory in several jurisdictions – especially following the 2021 G7 Summit’s backing of mandatory climate risk disclosure for market participants²⁸ – finance teams should get ready for external assurance on climate-related disclosures and make recommendations to the audit committee on the approach 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 IAASB²⁹). Given their unique role in corporate governance and clear professional duties, auditors are increasingly required to understand the implications of climate risk and consider how it affects their own work and advice. Adding to that, investors who are concerned about how robustly the organizations they invest in are considering and disclosing climate risk, may target the organizations’ auditors.³⁰ In addition to risk, the emerging trend is that auditors may also consider:

- Paris-alignment – the resilience of the organization’s strategy to different climate-related scenarios, including a 2°C scenario or lower
- Consistency – between the narrative disclosures around climate risks and the financial statements
- Dividend resilience – whether capital/solvency ratios reflect climate risk and dividends are appropriately funded³¹

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.

28. G7, **G7 Ministers Agree Historic Global Tax Agreement**

29. International Auditing and Assurance Standards Board (IAASB), **The consideration of climate-related risks in an audit of financial statement**

30. ClientEarth, **Risky Business: Climate change and professional liability risks for auditors**

31. Task Force on Climate-Related Financial Disclosures, **Recommendations of the Task Force on Climate-related Financial Disclosures**

° 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.

ACKNOWLEDGEMENTS AND CONTRIBUTORS

WITH THANKS TO

- British Land
- Heathrow
- SSE
- Unilever

A4S

- Brad Sparks
- Elizabeth To
- Helen Slinger
- Jamie Stewart
- Jessica Fries
- Kathryn Jackson
- Kerry Perkins
- Lucy Nicholls
- Mark Carlin
- Tilia Astell
- Zoë Hollingum

BLACK SUN

- Sallie Pilot
- Rebecca Lennon
- Gerald Deterville-Barrow
- Myrto Mantika

We would like to thank the following for providing their time and expertise to review this guide in its development:

- Chris Tuppen, Advancing Sustainability
- Tom Beagent, PwC