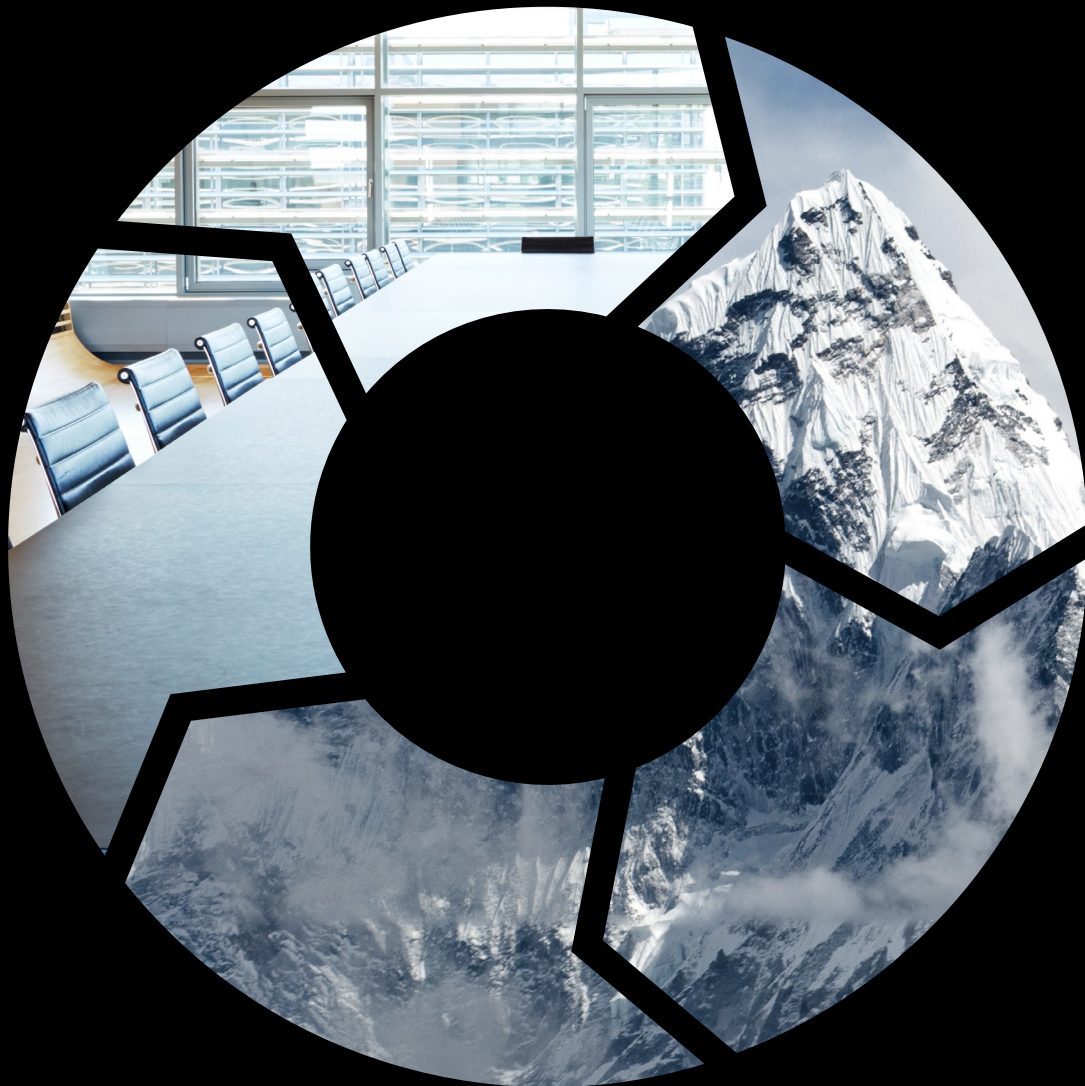


# Deloitte.



Overview

## The journey of transformation begins with a single step

Discover the five steps to design and execute a successful climate-led transformation

Deloitte's five-step climate-led transformation series—beginning with this overview—aims to support organizations to practically move from ambition to action, with more confidence and clarity.

## Contents

Foreword

# A practical guide to accelerate to zero

*The five-step climate-led transformation framework provides the basis to help design and execute your organization's climate change response.*

## The business case for climate action is clear, but what now?

Climate change is one of the defining issues of our time. While often thought of as a risk, it actually presents significant opportunity for growth and value creation for businesses, communities, and economies.

The business case for action is clear - without significant and meaningful action from business and government alike, the devastating impacts will be felt worldwide. The increasing number of net-zero commitments and the greater international scrutiny of climate action demonstrates that the case for action is widely acknowledged.

Beyond acknowledgement, there is now a greater urgency to act—driven by regulators, investors, consumers and communities. This urgency from external drivers is now being reinforced as organizations experience increasing costs and losses due to more frequent and intense extreme weather events.

A fundamental and systemic transformation is underway. Every organization should understand the financial costs and benefits of acting to identify and accelerate their role in this new industrial revolution. Those who understand the importance of this transformation, integrate decarbonization into their corporate strategy and move at pace will benefit the most.

The need to act is clear, but for many organizations, the steps required to address risks and capture opportunities may not be. Some have set net-zero targets but are struggling to demonstrate the link between climate action and value creation. Others have started to act but lack a consistent strategic framework to identify gaps, integrate strategy into operating models and decide what to do next.

Deloitte's five-step climate-led transformation series—beginning with this overview—aims to support organizations to practically move from ambition to action, with more confidence and clarity. It can help you to understand the fundamentals, design and execute a climate strategy, build leadership confidence and disclose performance.


The implications of not acting at pace and scale to decarbonize could be catastrophic, while the benefits for those that transform how they create value to align with this agenda are enormous. We need to move from ambition to action, there is no time to waste.



**Will Symons**  
Sustainability & Climate Leader  
Deloitte Asia Pacific

Introduction

# The decisive decade for climate action



*Without rapid decarbonization, our communities and organizations face increasing disruption and loss.*

Global action is accelerating to combat climate change and reduce its impacts—many organizations are now recognizing the enormous opportunities for those who act fast.

The business case for accelerated climate action is clear. Deloitte Economics Institute's [Asia Pacific's Turning Point](#) report highlights that Asia Pacific has the most to gain from climate action and the most to lose from inaction—US\$47 trillion in economic gains by 2070 compared to the devastating impacts that are being predicted. The choices made today and over the next decade will determine our future, whether we alter the current alarming trajectory of climate change for the better or not.

Recognizing the urgency of action, the sustainability and climate agenda has been elevated to become a strategic issue for C-suites and boards, and conversations are increasingly being framed as one of transformation.

*For many organizations, the need to act is now clear, but the pathway forward may not be.*

To help your organization accelerate to net-zero emissions and build adaptive capacity, this series of publications have been developed to guide you through the five steps to reduce climate-induced losses and capture value from the climate transition.

***This publication provides a brief overview and introduction to the five steps and key concepts.***

Dive deeper into the practical guides for each step to move from ambition to action



These five steps should be reinforced through regular reflection and adjustment with key stakeholders, using an adaptive, flexible approach.

Market forces, regulations and policies, technological solutions and societal expectations are changing rapidly—this means your organization will need to regularly monitor and adjust its approach to ensure it remains fit for purpose.

*Case study*

**BHP**

*Many organizations have already begun to embark on ambitious climate-led transformation journeys.*

The five-step climate-led transformation framework is illustrated in this publication by sharing the journey BHP has taken in creating and implementing its Climate Transition Action Plan (summarized in Five steps in action). BHP aims to position itself to thrive in a low carbon world by minimizing emissions from existing products while providing commodities the world needs to achieve a net-zero future.

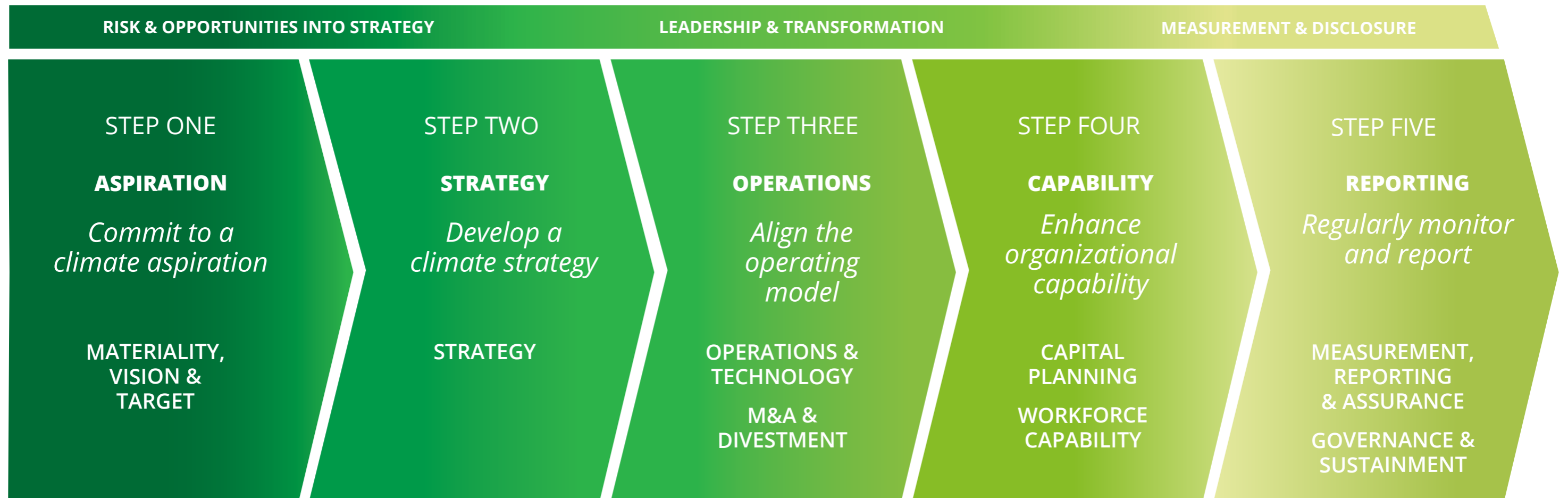


Figure 1: Five-step climate-led transformation framework

Introduction

# The guiding principles

## Principle one

The five-step framework is non-linear and transformation will be an iterative and ongoing process.

Evolving global and national regulations and policy, the advent of new technologies and forecasted changes in economic conditions may require you to pivot your climate strategies and roadmaps.

Applying the five steps framework flexibly and revisiting it regularly can allow you to tailor activities to your organization's needs, strategic ambitions and changing context.

*Case study*

### BHP

*In BHP's case, the integration of climate considerations into strategy and planning has evolved over time.*

Starting with internal emissions targets in 1996, through to public disclosure in 1998, it has been a decades-long project to integrate carbon price assessments into operational and project planning. In 2015, BHP began disclosing the potential impacts of a low carbon transition on demand for its products and profitability, demonstrating the impact of climate on its strategic planning. BHP has consistently taken a business-led approach where all five steps were tied to an understanding of long-term risks and benefits as well as emerging trends in the global market.

This commercially grounded approach remains the defining feature of its climate strategy and planning and has allowed BHP to proactively respond to changing market demands.

## Principle two

Connection with your organization's broader ecosystems is crucial to meeting climate targets.




Tackling the climate challenge at pace and scale will require unprecedented collaboration between business, government and the community. Decarbonization requires collaboration across organizational value chains - coordinating upstream and downstream to help ensure that capital investments are well timed, risks are appropriately allocated, and regulatory arrangements are clear and supported.

Understanding the ecosystems your organization relies upon and other participants' climate strategies is essential as it can impact the pace, risk profile and cost of your organization's climate transition. Engaging and seeking to coordinate with other ecosystem participants should form part of your climate roadmap.

*Case study*

### BHP

*Some tangible examples of how BHP has harnessed its role within ecosystems to drive change include:*

-  Partnering with steel mills to accelerate the development and commercialisation of low-emission steel production.
-  Participating in the first marine biofuel trial in collaboration with private companies and the Singapore Government.
-  Collaborating with shipping partners and customers to reduce value chain emissions.

## Principle three

Innovation and new technology are imperative in tackling the climate crisis.

To address the various challenges posed by climate change, your organization should look to invest in and embrace new technology and continuously focus on innovation.

Scoping the challenges your organization may face into the future and keeping a watch on others that are experimenting with potential solutions will provide you with increased confidence to execute your climate roadmap and meet future emissions targets.

*Case study*

### BHP

*To better understand, manage and drive positive change in their supply chain*

BHP has embraced artificial intelligence (AI) technology to help provide real time insights and better inform organization-wide decision making. While this project has been successfully implemented, there is recognition that not all ideas and pilots will provide the necessary solution or work at scale. Thus in parallel, BHP has invested in incubator programs to support engineers, scientists and climate specialists to accelerate testing and the route to market for new ideas and technological applications.

The risks and opportunities

# Minimize climate impacts and strengthen resilience



As the world decarbonizes, new commercial opportunities emerge, associated with the technologies and services needed for a net-zero economy.

*Understanding these early could allow your organization to proactively position itself to benefit.*

The changing climate is causing increasingly volatile and extreme weather patterns. To minimize disruption to your organization and its value chains, organizations need to understand their climate risks and build their adaptive capacity. Working collaboratively with your organization's ecosystem stakeholders can help you to collectively minimize these climate impacts, strengthening the resilience of your organization.

Recognizing the importance of the transparent disclosure of climate risks and opportunities, the Financial Stability Board established the [Task Force on Climate-related Financial Disclosures \(TCFD\)](#).

The [2017 TCFD recommendations](#) report outlines several categories of core climate-related risks and opportunities that your organization should incorporate into its risk management and strategic planning processes, better informing strategic decision making on climate action.

Climate change poses multiple complex risks to most organizations. To aid in consistently identifying and communicating these risks, the TCFD categorizes them as either physical or transition risks.

Proactively identifying, understanding, managing and disclosing these risks is essential to help their financial, operational, societal and reputational impact.









# Physical risks

These risks arise from exposure to physical events such as flooding, drought, and fires.

Physical risks are already impacting operations, assets, and supply chains, causing harm to employees, asset damage and disruption to operations. If the global average temperature continues to rise, these climate-related risks will increase.

## Examples of physical risks

Acute	<b>Floods</b> 	India experienced rainfall double its September average of past years sending Bangalore under more than five inches of rain, resulting in the loss of life, and disrupting evacuation plans and the supply of food, water, and electricity. <sup>1</sup> New research also shows that in India, 36 million people would face annual flooding by 2050 and 44 million by 2100 if emissions continue to rise unabated. <sup>2</sup>
	<b>Bushfires</b> 	Australia's bushfire season lengthened by almost a month in the past 40 years to 130 days a year. <sup>3</sup> The estimated cost of restoring Australia's native environment from the 2022 summer is US\$50 billion a year for 30 years. <sup>4</sup>
	<b>Tropical cyclones</b> 	South Korea was hit with the heaviest rainfall in at least 115 years <sup>5</sup> and the strongest global storm of 2022, Typhoon Hinnamnor <sup>6</sup> , almost within a month of each other, resulting in the loss of life, homes, and disruption to transportation systems.
Chronic	<b>Chronic temperature rise</b> 	Taiwan is expected to have longer summers with the number of winter days sharply declining from 70 to 20 in recent years. In the worst-case scenario, Taiwan may lose its winter by as early as 2060. <sup>7</sup>
	<b>Droughts and long term rainfall deficits</b> 	China saw its most severe heatwave in six decades this summer, exacerbating impacts on food and factory production, transportation, and supply of power throughout the country. <sup>8</sup>
	<b>Sea level rise</b> 	Indonesian capital Jakarta is one of the world's largest and fastest disappearing cities. The city has sunk by 4 meters in the last 30 years, and it's estimated that 95% of north Jakarta will be underwater by 2050, directly impacting 1.8 million of the city's 10 million people. <sup>9</sup>

# Transition risks

These risks relate to decarbonization and associated regulatory, market, technology and broader societal changes.

Transition risks are emerging rapidly and asymmetrically, with risk significance broadly aligned with the carbon emission intensity of organizational value creation.

## Examples of transition risks

<b>Policy</b>	According to the Climate Action Tracker, countries in Asia Pacific have set net-zero targets by years ranging from 2050 to 2070. However, these along with their current policies and actions are mostly categorised to be insufficient to meet the Paris Agreement. <sup>10</sup> As climate action intensifies to meet these targets, new and more robust policies will follow, such as needing organizations to disclose against the International Sustainability Standards Board's (ISSB) disclosure standards. <sup>11</sup>
<b>Regulation</b>	Organizations should expect governments, as well as sector and industry governing bodies, to develop new and stricter regulations with a shorter lead time for implementation as they accelerate the transition to net-zero. This would impact whole value chains, especially those with cross-border operations or international supply chains.
<b>Reputation</b>	Organizations that are slow to take bold climate action risk damaging their reputation as it can give the impression of being irresponsible and callous of the negative impacts on economies, communities, and the planet. The <a href="#">Deloitte Global 2022 Gen Z and Millennial Survey</a> also found that globally, 45% of Gen Z and millennial employees are putting pressure on employers to take climate action, and not doing so would negatively impact employee attraction and retention efforts.
<b>Market</b>	As climate change poses significant uncertainties to the future cash flow of organizations, financial regulators are increasingly concerned about the extent to which climate risks are reflected in the value of financial assets as sudden shifts in investor sentiment could trigger disorderly market repricing. <sup>12</sup> Further, natural disasters cost Asia Pacific US\$50 billion in 2021 and less than 20% was covered by insurance. Globally, it was the second costliest year on record. <sup>13</sup>
<b>Liability</b>	In 2021, Royal Dutch Shell was ordered by a Dutch court to reduce emissions by 45% by 2030, above its current aim of 20%. This landmark ruling comes at a time when the world's largest corporate emitters are under immense pressure to set short, medium and long-term emissions targets that are consistent with the Paris Agreement. <sup>14</sup>
<b>Technology</b>	Investors and policymakers are realising the incredible potential of leveraging technology solutions to help fight climate change—innovative solutions for climate adaptation and mitigation that can be scaled across sectors such as agriculture, energy, manufacturing, and transport. <sup>15</sup> Examples include carbon capture utilization and storage, electrification, low-emissions construction materials, and climate resilient agriculture.

# Opportunities

As economies decarbonize and are increasingly impacted by the changing climate, new market opportunities are emerging.

An example is renewable energy—a small, niche industry 20 years ago that is now a multi-billion dollar industry employing millions of workers across Asia Pacific.

New climate-driven industries are also emerging, including energy storage and transportation, electric vehicles, green hydrogen, sustainable liquid fuels and carbon capture utilization and storage.

These opportunities for growth are not only available to those already established in the relevant sector—new entrants are growing and there is significant convergence emerging, where organizations from seemingly unrelated sectors are challenging incumbents. As the transition to a low-carbon economy accelerates, many more opportunities will likely emerge.

The TCFD has identified the following categories of climate-related opportunities

## Examples of climate-related opportunities

### Energy source



Organizations that switch to renewables can benefit from significant cost savings as the cost of renewable energy has decreased significantly—renewables were the cheapest energy source in the world in 2020, including solar and wind. Currently, the world's largest corporate purchaser of renewable energy is an American technology multinational that has 401 renewable energy projects in 22 countries.<sup>18</sup> Its wind farms, solar farms, and rooftop solar projects power its operations including data centers, fulfillment centers, and physical stores across the globe. Also imperative to enabling more flexible, reliable and efficient energy use is energy storage and its related technologies.<sup>19</sup> If developed and deployed at scale, it can dramatically transform the way the world uses energy and shift the dial on the energy transition.<sup>20</sup>

### Products and services & Markets



A meta-study of more than 200 different sources found that diligent sustainability business practices have a remarkable correlation with lower operating costs, better profitability and superior share price performance.<sup>21</sup> Organizations that invest in developing sustainable, low-carbon products and services that can be brought to large and small-scale locations, including developing nations, can stay competitive in current markets or expand into new markets. Examples include electric vehicle value chain, battery management, sustainable fuels, carbon neutral concrete, carbon management solutions for hard-to-abate sectors, and carbon offset markets, including offset verification, management, and trading.

### Resource efficiency



Organizations that increase the efficiency at each stage of the material life cycle can reduce the demand for and reliance on any single, primary material while reducing operating costs, energy use and greenhouse gas emissions from production. Examples include re-designing a product to use less material or allowing for an alternative material substitute and extending the use of a product or recycling. The world's second-largest food and beverage company reported over US\$375 million in cost savings attributed to its sustainability initiatives. These savings were recognized within the first five years of the sustainability goals being established.<sup>22</sup> The initiatives include designing 100% of packaging to be recyclable, compostable or biodegradable by 2025<sup>23</sup>, and diverting 99% of all operational waste from landfill<sup>24</sup>.

### Resilience



Organizations that invest in and develop the capabilities, including technology and scalable solutions, to respond to the physical and transition risks could find themselves well-placed to save on damage recovery costs and capture opportunities. For example, using internet of things (IoT)-enabled technology for better climate monitoring, such as management of droughts, floods and sea-level rise, and particularly for small and medium-sized enterprises to identify and prevent pollution in their operations and value chain and improve on predictive maintenance of their industrial machines.<sup>25</sup>

# Climate change mitigation

The mitigation of climate change is the intervention to reduce the sources or enhance the sinks of greenhouse gases (GHGs).<sup>26</sup>

This includes reducing sources of emissions caused by the burning of fossil fuels for electricity, heat, or transport, or enhancing sinks such as oceans, forests and soil that accumulate and store GHGs.

Mitigation methods can also help reduce your organization's exposure to transition risks—

for example, reducing carbon emissions can reduce exposure to a future carbon tax.

The goal of mitigation is to minimize human interference with the climate system and stabilise GHG levels in a timely manner.

## MITIGATION

*Human intervention to reduce sources or enhance the sinks of greenhouse gases.*



## ADAPTATION

*Process of adjustment to actual or expected climate change and its effects.*

Figure 2: Definitions and examples of climate change mitigation and adaptation

# Climate change adaptation

Adaptation to climate change is the process of adjustment to actual or expected climate change and its effects.<sup>27</sup>

In human systems, adaptation seeks to moderate, avoid harm or exploit beneficial opportunities. In some natural systems, human intervention may facilitate adjustment to the expected climate and its effects. All in all, adaptation is a crucial component of the long-term response to climate change to protect people, livelihoods and ecosystems.<sup>28</sup>

The goal of adaptation is to reduce your organization's vulnerability and seek to moderate harm to your operations and business activities from the effects of climate change and its related risks.

Your organization must assess how current and future climate change may affect its operations (e.g., supply chain disruption, damage to assets, etc.) and take steps to reduce the exposure to climate-related risks, such as by relocating vulnerable links in the supply chain. The severity and frequency of impacts are likely to increase and compound with time even if global mitigation efforts succeed, adding urgency to your organization's efforts to build climate resilience.<sup>29</sup>

Adapting to climate change first requires a detailed understanding of how the changing climate may impact your assets, operations and supply chains, then putting in place plans to reduce these impacts.

### Case study

## BHP

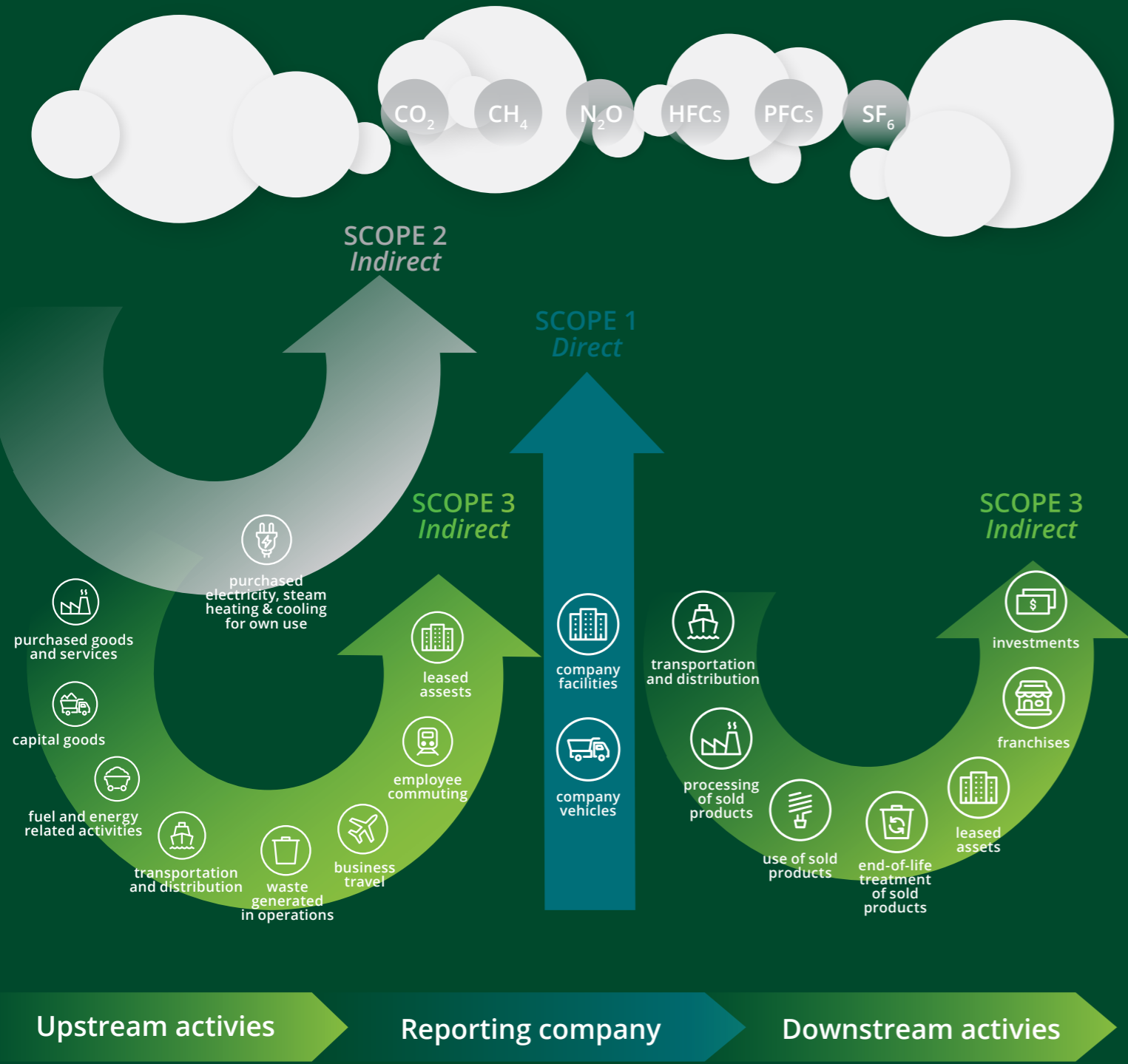
*BHP is adapting to climate change by building the resilience of its operated assets and investments, communities and ecosystems.*

They prioritise capital investment to ensure activities are aligned with their climate goals, undertake risk assessments of sites to understand the implication of different climate scenarios on their physical assets, and regularly monitor and report on climate change responses.

# GHG emissions across the value chain

The *GHG Protocol Corporate Standard* classifies GHG emissions in three scopes:<sup>30</sup>

Figure 3: Overview of GHG Protocol scopes and emissions across the value chain



There are numerous standards and engagement mechanisms available to support the setting and achievement of carbon emission reduction targets, including the UN's "[Race to Zero Campaign](#)", and [Science Based Targets Initiative](#) (SBTi).

## Case study BHP

To reduce its carbon emissions, BHP set a range of targets.

Scope 1 and 2 emissions have been easier to address as these emissions are within BHP's operational control. Scope 3 emissions reductions are more challenging due to the lack of operational control, requiring the need to work with third parties.

### Scope 1 and 2 targets

BHP's Scope 1 and 2 targets are to:

- Maintain Scope 1 and 2 emissions at or below FY17 levels until FY22
- Reduce Scope 1 and 2 by at least 30% by FY30 from FY20 levels

### Scope 3 targets

BHP's Scope 3 targets are less extensive, relying on business partners and ecosystem participation. These Scope 3 targets are to achieve:

- Net-zero emissions across its value chain by FY50, including for direct suppliers and maritime transport of products
- For steelmaking activities, a reduction of 12% GHG emission intensity by 2030, based on 2018 levels
- For non-steelmaking activities, a reduction of 30% GHG emissions intensity by 2030, based on 2018 levels

Overview

# Five steps to accelerate to zero

*Explore what it takes to complete a deep transformation of your organization and capture opportunities from the net-zero journeys underway.*

Every organization faces unique challenges when developing a climate action plan.



These five steps can help you to develop an integrated climate change response, set targets, build a strategy, align your operating model, cultivate workforce and leadership skills and consistently monitor and report.

You will need to apply them flexibly and keep in mind that they are non-linear. The climate-led transformation is an iterative and ongoing process so the five steps should be revisited regularly and tailor your organization's bold climate plays to fit your strategic ambitions and the ever-evolving climate risk and opportunity landscape. It is time for you to accelerate to net-zero.

# The 5-Step Climate-led Transformation Framework



Understand your organization's current state, identify and prioritize the material climate-related issues facing your business, and define and commit to a climate aspiration/target that suits your business.

Step 1 will allow your organization to understand how to set ambitious yet achievable climate targets for your organization.

[Read Step 1:  
Commit to a climate aspiration](#)

Assess the strategic impacts of the climate on your organization, the importance of engaging key stakeholders, identifying the best response options and opportunities, and create a detailed climate implementation roadmap.

Step 2 will help to ensure your organization has an integrated strategy to reduce your carbon footprint and climate risks and create value through climate-related opportunities.

[Read Step 2:  
Develop a climate strategy](#)

Identify the operating model changes required to realize your climate aspirations and execute your climate strategy.

Step 3 will support your organization to reflect on its current state, identify the future target state and determine the steps needed to achieve success.

[Read Step 3:  
Align the operating model](#)

Identify capability gaps and barriers in your organization, understand your capability requirements, and implement initiatives, tools and metrics to increase your capabilities to deliver your climate strategy.

Step 4 will empower your organization to help achieve your climate goals through targeted and effective capability development.

[Read Step 4:  
Enhance organizational capability](#)

Identify what your organization needs to monitor and report and the capabilities and operational changes required.

Step 5 will help enable your organization to disclose according to stakeholder needs, ensure your management has the information needed to adjust strategy over time, identify savings and costs and be accountable for performance.

[Read Step 5:  
Regularly monitor and report](#)

# Five steps in action

## BHP case study

### Case study

## BHP

*BHP's strategy is to deliver long-term value and returns through owning a portfolio of world class assets*

with exposure to attractive commodities that benefit from the trends playing out in the world around us, by operating them exceptionally well, by maintaining a disciplined approach to capital allocation and through being industry leaders in sustainability and the creation of social value.

### BHP's Climate Transition Action Plan and the five steps to accelerate to zero

Steps	BHP's actions and commitment
<b>Step One</b> <b>Commit to a climate aspiration</b>	<p>BHP is transitioning to a low carbon future, progressing on a path towards its long-term Scope 3 goal:</p> <ul style="list-style-type: none"> <li>• BHP will maintain operational GHG emissions at or below FY2017 levels until FY2022</li> <li>• Target a reduction in operational GHG emissions by at least 30% from FY2020 level by FY2030</li> <li>• Target net-zero emissions across the value chain by FY2050, including net-zero emissions of direct suppliers' operations and emissions from maritime transport of products, which includes founding the Maritime Decarbonization Centre in Singapore.</li> </ul>
<b>Step Two</b> <b>Develop a climate strategy</b>	<p><b>BHP is committed to:</b></p> <ul style="list-style-type: none"> <li>• Reducing its operational GHG emissions</li> <li>• Supporting emissions reductions in its value chain and the economy-wide transitions necessary to achieve sectoral decarbonization</li> <li>• Partnering with key ecosystem actors to solve the industry's most complex challenges and accelerate the transition to a low carbon future</li> <li>• Adapting to the potential physical impacts of climate change and contributing to community and ecosystem resilience, and</li> <li>• Seeking to enhance the global response to climate change by engaging with governments and maintaining a commitment to climate change advocacy.</li> </ul>
<b>Step Three</b> <b>Align the operating model</b>	<ul style="list-style-type: none"> <li>• BHP's board is engaged in the governance of climate change issues and strategic approach while key management decisions are made by the CEO and management.</li> <li>• Management has primary responsibility for the design and implementation of the climate change strategy, and the execution of the strategy is overseen by the Climate Change Steering Committee.</li> <li>• A Climate Change Team is responsible for advising the Executive Leadership Team and developing practical climate change solutions designed to preserve and unlock value.</li> </ul>
<b>Step Four</b> <b>Enhance organizational capability</b>	<ul style="list-style-type: none"> <li>• The Climate Change Team collaborates across BHP to develop solutions and build capability in key areas such as operational decarbonization, supporting decarbonization in its value chain, and adaptation.</li> <li>• Transition and physical risks are included in BHP's risk management framework that acts to identify and address priority actions to manage risks across the organization.</li> <li>• BHP has climate change capabilities included in its global capabilities framework, which defines the climate skills and knowledge required in roles across the organization.</li> <li>• BHP has enhanced its approach to the collation and use of climate-related data and information to build better knowledge and capability.</li> </ul>
<b>Step Five</b> <b>Monitor and report regularly</b>	<ul style="list-style-type: none"> <li>• Climate change is a material governance and strategic issue and is routinely on the board agenda, being part of strategy discussions, portfolio reviews, and investment decisions, risk management oversight and monitoring, and performance against BHP's commitments.</li> <li>• Performance and progress against BHP's commitments are regularly reported to the Executive Leadership Team.</li> <li>• BHP was one of the first organizations to align its climate-related disclosures with the TCFD recommendations. In FY2021, it published its Climate Change Report 2020 and participated in the CA100+ NZCB, which assesses the world's largest corporate GHG emitters on their progress in the transition to a net-zero future.</li> <li>• In September 2021, BHP published the BHP Climate Transition Action Plan 2021, which sets out the steps BHP intends to take with the goal of reducing GHG emissions to net-zero within its own operations by 2050 and pursuing net-zero across our value chain.</li> <li>• BHP's immediate next steps are to execute the Climate Transition Action Plan and share an update with shareholders on the progress against plans every three years.</li> </ul>

# Key terms

List of the key terms used in this publication and their definitions.

Key terms	Definition
<b>The Paris Agreement</b>	The Paris Agreement, or Paris Accord, is an international agreement which was ratified in 2015 by almost 200 nations. The agreement was a commitment by member nations to address the impacts of climate change and attempt to limit average surface temperature warming to below 2°C by the end of the century, and ideally below 1.5°C.
<b>Mitigation</b>	Climate change mitigation is the act of implementing operational changes to reduce the emissions attributable to a facility or business, e.g., installing solar panels as a source of green energy rather than using energy derived from fossil fuels.
<b>Adaptation</b>	Climate change adaptation is the act of adjusting business operations or behaviours to account for changes or expected changes in climate patterns. Climate change adaptation reduces the potential harm caused to the business, without removing the source of the impact, e.g., installing sea walls along coastal facilities to mitigate against storm surge events.
<b>Physical risk</b>	Physical risk refers to the resulting effect of climate change on organizations, including assets, services and people. This includes acute risks which are driven by events such as severe storms, hurricanes, or floods and chronic risks which emerge from longer-term shifts in climate patterns such as sustained higher temperatures causing chronic heat waves or sea level rise.
<b>Transition risk</b>	Transition risk accounts for all the risks associated with the transition to a low carbon economy. This includes, but is not limited to changing policy and legislation, disruptive technologies, market shifts, and reputational damage. An example of a transition risk that is fast emerging is carbon tax.





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