Building a Net-Zero Future:
Australian Businesses Taking Science-Based Climate Action

October 2021

Acknowledgement of Country

The Global Compact Network Australia, World Wide Fund for Nature (WWF) Australia and Griffith University acknowledge the Aboriginal and Torres Strait Islander peoples as the traditional owners and custodians of the lands that we live and work on across Australia.

We pay our respects to Elders past, present and emerging and recognise the valuable contributions Aboriginal and Torres Strait Islander peoples make towards all aspects of Australian life. We imagine a future where all Australians are united by our shared past, present, future and humanity. This is our vision for reconciliation.

Acknowledgements

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About the Organisations

Global Compact Network Australia

As a special initiative of the United Nations (UN) Secretary-General, the **UN Global Compact** is a call to companies everywhere to align their operations and strategies with **Ten Principles** in the areas of human rights, labour, environment and anti-corruption. Our ambition is to accelerate and scale the global collective impact of business by upholding the Ten Principles and delivering the **Sustainable Development Goals** (SDGs) through accountable companies and ecosystems that enable change. With more than 13,000 companies and 3,800 non-business signatories based in over 160 countries and 69 local networks, the UN Global Compact is the world's largest corporate sustainability initiative – one Global Compact uniting business for a better world.

Locally, **Global Compact Network Australia** brings together signatories to the UN Global Compact, including 35 ASX100 companies and other major corporates, non-profits and universities, to advance the private sector's contribution to sustainable development. We lead, enable and connect businesses and stakeholders to create a sustainable future by supporting businesses to act responsibly and helping them find opportunities to drive positive business outcomes.

www.unglobalcompact.org.au

World Wide Fund for Nature Australia

World Wide Fund for Nature (WWF) is one of the world's largest and most experienced independent conservation organisations, with over five million supporters and a global network active in more than 100 countries.

WWF's mission is to stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature, by conserving the world's biological diversity, ensuring that the use of renewable natural resources is sustainable and promoting the reduction of pollution and wasteful consumption.

www.wwf.org.au

Griffith Centre for Sustainable Enterprise, Griffith University

A regenerative approach to business leads to the creation of conditions for a future where an ecologically sound environment, a just, healthy society and a vibrant economy can flourish equally.

The mission of **Griffith Centre for Sustainable Enterprise** is to inform and assist business in the development of sustainable enterprise through innovative research, teaching and engagement activities. The Griffith Centre for Sustainable Enterprise is a key centre of the Griffith Business School to advance research and teaching in sustainable business practices. We are highly collaborative with strong national and international connections to industry, academia, government and non-government organisations. We take a global perspective while focusing on the Asia Pacific region.

www.griffith.edu.au

Foreword

Kylie Porter
Executive Director,
Global Compact Network Australia

A 'code red for humanity.'[1]

That is what the UN Secretary-General, António Guterres, has called the findings from the Intergovernmental Panel on Climate Change's (IPCC) Sixth Assessment Report, which provides the most up to date and comprehensive understanding of the climate system both today and into the future.[2]

As world leaders take to the stage in November 2021 at the 26th Conference of Parties (COP26) of the UN Framework Convention on Climate Change (UNFCCC), countries must demonstrate their true commitment to climate change action.

Under the current Nationally Determined Contributions (NDCs) of 191 parties to the **Paris Agreement**,[i] the world's greenhouse gas (GHG) emissions are set to rise by roughly 16 per cent by the end of this decade.[ii] This trajectory would lead to a 2.7°C increase in temperatures by the end of this century.

We know that this level of warming is unacceptable, and we all have a part to play in safeguarding future generations from the impacts of climate change.

COP26 will represent the most significant talks since the Paris Agreement was signed in 2015 and it will be a true test for countries globally to see if we can keep the 1.5°C goal within reach. Around the world, member states have begun to set net-zero targets and ramp up their climate change commitments in the lead up to the summit.

The Global Compact Network Australia calls on Australian business and government to act towards a net-zero future before 2050.

With Australia being one of the largest emitters of GHG emissions per capita, it is up to our nation's leaders to take substantial and tangible action. As our global allies and trade partners advance their efforts to combat climate change, Australia cannot be left behind.

Australia has always been a country that prides itself in driving trade and innovation. In order to preserve this position, we need strong leadership to be at the forefront of global developments, and we need to work collectively to create a clear roadmap out of the climate crisis.

We also have the potential to position ourselves to take advantage of climate-related opportunities, both now and into the future.

We are witnessing a shift in the Australian market, with a growing number of businesses and financial institutions moving to align their strategies and operations with the goal of net-zero emissions, not only to avoid a disruptive transition, but to position their businesses for competitive advantage.

The Science Based Targets initiative (SBTi) supports businesses in developing their own clearly defined path to reduce emissions in line with a 1.5°C pathway. The UN Global Compact is a founding partner of the SBTi. As a local network, the Global Compact Network Australia is committed to increasing the uptake of science-based targets among Australian businesses.

This report highlights how leading companies in Australia are overcoming challenges and innovating their business models to plan and deliver for a more sustainable future.

The technology required to reach net zero is already available. The science has spoken. It's not too late but we must act now, and Australian business has a vital role to play.

Kylie Porter

Dermot O'Gorman
Chief Executive Officer,
WWF Australia

At WWF, we work with companies that recognise the benefits of acting on climate change and are prepared to take the steps needed to cut emissions throughout their value chain. The SBTi helps businesses on their path to align with a 1.5°C world and achieve net-zero emissions before 2050.

The Paris Agreement, under the UNFCCC, is the world's collective response to addressing climate change. Through the 2015 Agreement, national governments committed to curbing global temperature rise to well below 2°C above pre-industrial levels and pursuing efforts to limit warming to 1.5°C. In 2018, the IPCC warned that global warming must not exceed 1.5°C, to avoid the catastrophic impacts of climate change. To achieve this, GHG emissions must at a minimum halve by 2030 and reduce to net zero by 2050. We have limited time for action and the private sector has a crucial role to play – every sector in every market must transform.

Companies with science-based targets are already **cutting emissions at scale**. We encourage all businesses to join them. Since its inception in 2015, there are now more than 35 Australian companies that have committed to setting science-based targets. Uptake has accelerated in the last 12 months, with 18 Australian companies beginning their journey through the SBTi. This includes the three largest ASX20 companies, namely Telstra, Transurban and Woolworths. We are delighted to see this progress and would encourage other companies to embark on a similar path.

The SBTi is unique for several reasons. For the first time businesses have had to grapple with new concepts, such as aligning their targets with the science and a carbon budget, setting a medium-term target within a 10-year timeframe[i] and considering Scope 3 and value chain emissions.[iii] It's important to note the complexities of Scope 3 emissions, which businesses have influence but no control over.

Science-based target setting has become mainstream as financial institutions set greater expectations for publicly listed companies to drive down their emissions, including Scope 3.

Businesses across diverse sectors are joining the SBTi to rapidly advance their corporate climate ambition, cutting emissions from their own operations and throughout their supply chain and adding their voice to drive strong climate policy.

A healthy and stable climate underpins all life on Earth, supporting nature and people. **Our climate is now rapidly changing** and threatening the people, animals and places we love, as well as the resources we all depend on. We now know that activities such as cutting down forests and burning fossil fuels like coal, oil, and gas, are polluting our atmosphere and warming our planet, causing an increase in extreme weather events, sea level rise and a warming and acidification of the oceans. Our precious wildlife and ecosystems **can't adapt fast enough**. Through the SBTi, businesses are demonstrating that economic benefit is interconnected with environmental stewardship and climate stability. Australia is well placed to be a leader in a decarbonised, clean energy future, to create a more sustainable, cleaner and better future for all.

[i] As at the time of publication.

[ii] According to the UNFCCC's **NDC Synthesis Report**.

[iii] The **Greenhouse Gas Protocol** categorises GHG emissions into three groups or 'scopes', based on the company's direct level of impact or control over their sources. Scope 1 covers direct emissions from owned or controlled sources. Scope 2 covers indirect emissions consumed by the reporting company. **Scope 3** includes all other indirect emissions that occur in a company's value chain.

Professor Carolyn Evans
Vice Chancellor,
Griffith University

We live in challenging times. In ways unimaginable just two years ago, the global COVID-19 pandemic has had far-reaching influences on our daily lives and continues to have major impacts on our economies. A significant response to COVID-19 and other complex problems of recent years has been for businesses to re-evaluate their purpose and to refocus on social responsibility. Social license to operate has expanded towards more collective action and collaboration in overcoming global challenges.

The growing climate crisis has also shifted the social license to operate for business. The tipping point will soon be reached where it is likely to be normal practice for all businesses to have net-zero emissions targets that are aligned with the ambition of the Paris Agreement. Early adopters have already reaped the social and economic rewards of shifting their business strategy to align with net-zero emissions by 2050. For these commitments to be meaningful, a robust scientific approach must be adopted to ensure their actions achieve their commitments. The science-based targets approach is at the top of the standards for net-zero emissions target and strategy alignment.

Griffith University is proud to partner with WWF Australia and the Global Compact Network Australia to examine how leading Australian businesses have transformed their operations by adopting science-based targets. The research highlights the transformative process of developing a business case for adopting such a target.

The research makes a significant contribution to Griffith University's **Climate Action Beacon**, which has a key aim of acting as a forum to bring together experts and partners to address climate change. At Griffith University we have set a net-zero emission target by 2050 and have several initiatives underway to enable the university to meet this commitment. This will require a collective responsibility of people within Griffith University to respond to the goal as well as the inclusion of academics and professional staff in developing a scientific approach to our targets. The challenge remains for all organisations to increase ambition and set robust science-based targets to respond to climate change.

Carolyn Evans
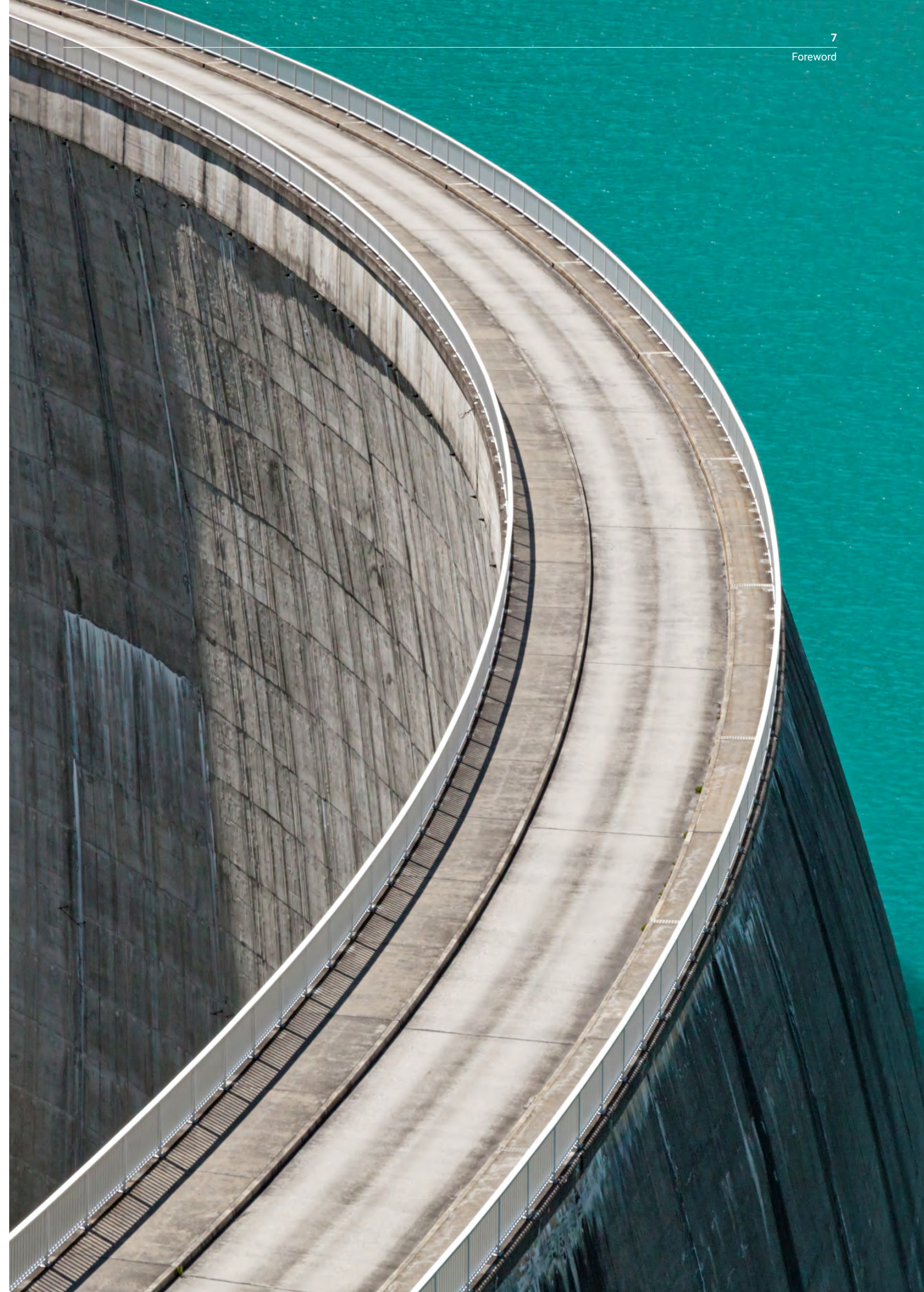
About This Publication

Purpose

We embarked on a study to determine the motivations and related processes of businesses that have set science-based targets in Australia. Throughout this report, we provide actual examples of how businesses have developed a business case for adopting and implementing the initiative. The report showcases a series of case studies from Australian companies that have adopted a science-based target and illustrates both the challenges they grappled with and the opportunities they harnessed.

This research focuses on process. It is generally accepted that a business case approach is an effective way to implement change. However, in the past, businesses have indicated that implementing this approach for sustainability can be very difficult.

This report identifies and demonstrates the process for developing a successful business case. It examines procedures used to secure a business commitment to net-zero emissions. It then explores the need for rigorous internal and external processes and engagement to ensure targets are achieved, once committed to setting an independently verified science-based target.

This research has also identified the motivations for joining the SBTi, as well as how businesses have developed and implemented policy and procedures in commitment to the SBTi program.

Approach

This report is a collaboration between the Global Compact Network Australia, WWF Australia and Griffith University. Data analysis was led by Griffith University.

We interviewed sustainability managers of businesses that were early adopters in setting formal and informal science-based targets in Australia to understand their processes, barriers, attitudes and motivations. These insights are shared to inform other businesses as they adopt the SBTi framework.

Participants were sourced from the list of companies that have either formally or informally adopted a science-based target approach. Participation was voluntary and only companies that wanted their names to be made public were included in the case studies. In total 15 companies participated. Interviews were conducted mostly with sustainability managers.[iv] Online surveys were completed afterwards to verify the data. Thematic analysis showed a range of common responses about how companies develop a business case for the adoption of science-based targets. The conduct of the study was governed by Griffith University ethics protocols. The findings presented here have also been verified by the companies listed in the case studies.

Seven companies provided in-depth information about internal business case processes made public in this report. These are Bank Australia, Downer, Intrepid Travel, Investa, Singtel Optus, Taylors Wines and Transurban. All companies have targets covering GHG emissions from company operations (Scopes 1 and 2) that are consistent with reductions required to keep warming to 1.5°C as well as targets for their Scope 3 emissions.

How to use this report

Readers of this report will gain an understanding of the foundational pieces required when setting a science-based target, the key elements in forming a business case for adopting the SBTi and how the other businesses have overcome the associated challenges. This report intends to foster discussion among businesses, government, civil society and other key stakeholders on how the SBTi can form a crucial part of a wholistic approach to climate action.

Part One of the report offers readers a basis for understanding how to set a science-based target, what some of the benefits are and how the SBTi relates to other global initiatives.

Part Two considers the research results and explores:

- Why companies choose to set science-based targets;
- The main drivers and benefits;
- How to find the key influencers to support your business case;
- The pathways to setting a target; and
- How to overcome resistance.

Part Three summarises the key learnings.

Detailed case studies are also presented throughout the report.

Key Takeaways:
The journey to setting a science-based target

Carbon accounting framework as a precondition

Businesses should develop a comprehensive carbon accounting framework as a minimum baseline for developing the business case for adopting science-based targets. GHG protocols are already mainstream and standard practice for larger businesses, but this needs to focus on evaluating potential activities for emissions reduction.

Science-based target methodology competence

Businesses should consider developing training, knowledge sharing or other tools to build staff competence around the sector guidance materials for science-based targets. They should keep up to date on methodology developments for the sector. External consultants with expertise and advice are important to develop staff knowledge and skills.

The sustainability manager makes a long-term commitment

The personal agency of the sustainability manager should not be underestimated. A long-term commitment is needed to establish the supporting processes that contribute to developing the final business: case presented to C-suites and directors of boards. The long-term commitment by sustainability managers was underpinned by strong personal commitment to strong action on climate change.

Harnessing key external influences to build an internal science-based target narrative

To progress a business case internally, sustainability managers have had to weave a number of external influences into their narrative that included: direct climate change impacts on the business; the business risks that are directly linked to climate change; customer demands for carbon-friendly products and services; stakeholder demands for action on climate change; the ability to access cheaper finance when science-based targets are adopted; directors' duties; and growing reporting demands (e.g. Task Force on Climate-related Financial Disclosures (TCFD)).

Staff support of business case

Staff support plays an important role when seeking to develop and articulate a business case for setting and adopting a science-based target. This support is one of the many levers that a sustainability manager may need when progressing the business case through to upper management for approval. How support is obtained and how support is gauged depends on the culture of the company.

The business case for science-based targets requires transformational shifts within the company

The likelihood of success is linked to alignment with existing business processes, which also embed sustainability strategies. Developing a plan to adopt a science-based target is not a simple 'business case' because of the level of transformational change needed within the business (e.g. review of the Scope 3 emissions and the setting of medium-term targets). The development of a business case enables a series of shifts to take place to the business model itself. Sustainability managers should not just see a business case, but rather understand that its development is foundational to changes across the whole business system.

Developing relationships with the board and upper management

Engagement with, and approval from, the board and C-suite is needed when setting a science-based target. Given the implications for companies and the transformational nature of the commitment, sustainability managers will need to liaise with upper management and their board to gauge sentiment, informally educate them and get their input into narrative framing. This will reassure them of the ability to achieve the ambitious targets.

Managing risk as the lens for company directors and C-suite

In situations where the science-based target adoption originated from the top down—from boards or company owners—climate risk related to carbon disclosure and fiduciary duties of company directors is a key driver. This was often in addition to investor pressure and supply chain requests.

Overcoming resistance

Two common roadblocks must be overcome. Firstly, key decision-makers need to agree that the positive benefits of adopting a science-based target are greater than (or equal to) other competing interests within the business. Secondly, board concerns about long-term corporate governance implications of committing to public targets must be addressed.

Contents

Acronyms and Abbreviations

APRA	Australian Prudential Regulation Authority
ASIC	Australian Securities and Investments Commission
CEO	Chief Executive Officer
CFO	Chief Financial Officer
CIO	Chief Information Officer
COP26	26th Conference of Parties to the United Nations Framework Convention on Climate Change
ESG	Environmental, social and governance
EU	European Union
FY	Financial year
GCNA	Global Compact Network Australia
GHG	Greenhouse gas
IPCC	Intergovernmental Panel on Climate Change
NDC	Nationally Determined Contributions
NSW	New South Wales
OECD	Organisation for Economic Co-operation and Development
SBTi	Science Based Targets initiative
SDGs	Sustainable Development Goals
TCFD	Task Force on Climate-related Financial Disclosures
UK	United Kingdom of Great Britain and Northern Ireland
UN	United Nations
UNFCCC	United Nations Framework Convention on Climate Change
USA	United States of America
WRI	World Resources Institute
WWF	World Wide Fund for Nature

Introduction

Introduction

Global shifts toward net zero

'The world will see, and your people will remember, and history will judge',[3] if the world's richest countries fail to act now to tackle the climate crisis.

A sobering analysis by United Kingdom (UK) Prime Minister Boris Johnson, but one that will resonate with countries around the world as the 26th Conference of the Parties (COP26) to the United Nations Framework Convention on Climate Change (UNFCCC) looms. In November 2021, COP26 will be held in Glasgow, UK. It will be six years since the Paris Agreement where countries agreed to limit warming to well below 2°C, preferably to 1.5°C, compared to pre-industrial levels.

The Paris Agreement was a landmark multilateral climate change process. For the first time, a binding agreement brought nations together around a common cause. Together they committed to ambitious efforts to combat climate change and adapt to its effects.

COP26 will be an important step for countries to address what has and hasn't been achieved since 2015. They will set new commitments and make firm plans to reach the Paris Agreement targets. It is also the first Conference of the Parties to be held since the United States of America (USA) re-joined the Paris Agreement.

In the lead up to COP26, the Intergovernmental Panel on Climate Change (IPCC) released its latest assessment report, The Physical Science Basis.[4] It found that unless drastic, urgent action is taken by business, government and civil society, the world is likely to heat to 1.5°C or more above pre-industrial levels by 2040,[5] putting the goals of the Paris Agreement at imminent risk.

The International Energy Agency's recent report, A Roadmap for the Global Energy Sector outlined a pathway to get to net-zero greenhouse gas (GHG) emissions globally by 2050.[6] The roadmap sets out milestones to guide the global journey, including no new investments in new fossil fuel supply projects and no final investment decisions for new unabated coal plants. By 2035 there should be no sales of new internal combustion engine passenger cars and by 2040 the global electricity sector will need to reach net-zero emissions. This would require a substantial reduction in the use of fossil fuels, including a complete phase out of unabated coal power plants by 2040.[7]

The question is no longer whether climate change will happen or when it will occur, but what can be done now to prevent the worst outcomes.

Countries around the world now recognise that for a 1.5°C future to remain within reach, global GHG emissions must peak immediately and net-zero emissions must be achieved before 2050. In the USA, the Biden administration has committed to a target of 50-52 per cent reduction in GHG emissions by 2030[v] and to reach a carbon-free electricity system by 2035.[8] In Europe, ambitious carbon policy is also continuing to develop. In July 2021, the European Union (EU) adopted a new Carbon Border Adjustment Mechanism proposal, which aims to put a price on carbon-heavy imported goods and avoid 'carbon leakage'.[9] The mechanism is designed to ensure that Europe's emissions reduction initiatives are not offset by carbon-intensive production elsewhere. This encourages exporting nations to work towards stronger emissions reduction efforts. Countries such as the USA and Japan are following this policy closely. Policies like this have the potential to affect countries like Australia, with producers at risk of losing access to export markets if they don't reduce the carbon footprint of their products and match the climate commitments made by major trading partners.

Australian states and territories are taking their own actions to show the world that they are committed to decarbonisation. In New South Wales (NSW), the Liberal-Nationals Government has pledged to cut the State's emissions by 50 per cent below 2005 levels by the end of this decade, up from a previous target of 35 per cent.[10] The updated target is part of the State's plan to achieve net zero by 2050, which will be supported by policies for renewable energy, electric vehicles, hydrogen and primary industries. Victoria has also announced a net-zero ambition, supported by a short-term target to reduce emissions by 45-50 per cent by 2030.[11]

Managing climate risks: Increasing expectations for Australian business

International developments have filtered through to the Australian market. Both companies and investors increasingly recognise that transforming business models to align with a net-zero future is both a financial and governance issue. Net-zero emissions commitments among the ASX200 more than tripled during the year,[vi] with half of the ASX200 having set a net-zero target and 49 of these companies aiming to reach this by 2050 or sooner.[12] Additionally, 80 companies in this group have adopted and disclosed against the Task Force on Climate-related Financial Disclosures (TCFD), to help identify and manage climate risk.

Australian regulatory agencies are also increasing supervision and guidance on climate change. In 2019, the Australian Securities and Investments Commission (ASIC) reviewed its guidance to include explicit references to the systemic risks that climate change can have on business performance and advised company directors to embed climate considerations within public disclosures.[13] During the same year, the Australian Prudential Regulation Authority (APRA) said it will increase its scrutiny over financial institutions' management of climate risks, including banks, insurers and superannuation trustees.[14] It is important that corporate climate ambition continues to evolve in line with these developments, with businesses supporting meaningful commitments with deliberate action.

[v] From 2005 levels.
[vi] To 31 March 2021.

Using the Science Based Targets initiative as a framework for change

The Science Based Targets initiative (SBTi) promotes good-practice corporate target setting, in line with the latest climate science. A science-based target can enhance board-level governance on climate change. It also enables businesses to show that they are embedding the Paris Agreement goals into their operations and strategy.

The initiative's strict criteria encourage independent, reputable assessments and approvals of company targets. This allows businesses to show robust analysis of corporate emissions, as well as meaningful commitments to reduce them.

The number of SBTi participants has grown from 100 companies in 2015 to over 1800 companies globally. The initiative is approaching a critical mass, with companies across 60 countries and nearly 50 sectors joining. This includes one-fifth of the Global Fortune 500 companies.[15] Science-based targets are a catalyst for systems-wide change, including large scale investment in mitigation activities and a greening of global supply chains. For example, financial institutions are using the SBTi framework and independent verification of targets to assess a company's carbon management and risk plan. The SBTi is the first initiative of its kind that has required companies to set medium-term targets as well as account for their value chain emissions (Scope 3).

Since 2015, more than 35 Australian companies have made formal commitments to set a science-based target; 18 of these companies have made commitments in the last 12 months. The majority of these commitments are aligned to the calls of the **Business Ambition for 1.5°C campaign.**

Business Ambition for 1.5°C

The Business Ambition for 1.5°C campaign is an urgent call for companies to set emissions reduction targets in line with limiting global warming to 1.5°C and to join the race to net-zero emissions.

The SBTi encourages companies to sign the Business Ambition for 1.5°C commitment letter. If companies are not currently committed to the SBTi, the commitment letter constitutes their commitment to develop and submit emissions reduction targets aligned with the SBTi criteria.

In July 2021, the SBTi announced its new strategy for the minimum ambition for company targets to increase from well below 2°C to 1.5°C above pre-industrial levels. Companies in the initiative will gradually transition to the new framework and all new participants will need to set targets that align to the new criteria from 15 July 2022.

The campaign is led by the SBTi and **We Mean Business Coalition**.

Setting a Net-zero Standard

On the same day of the release of this report,[vii] the SBTi launched the **first science-based global standard** for corporate net-zero targets. The purpose of the standard is to ensure that announced net-zero targets are consistent with achieving a net-zero world by no later than 2050, and limiting global warming to 1.5°C. The new standard will allow companies to have their net-zero targets assessed and officially validated through the SBTi.

vii This report was released on 28 October 2021.

Part One:
The Science Based Targets Initiative
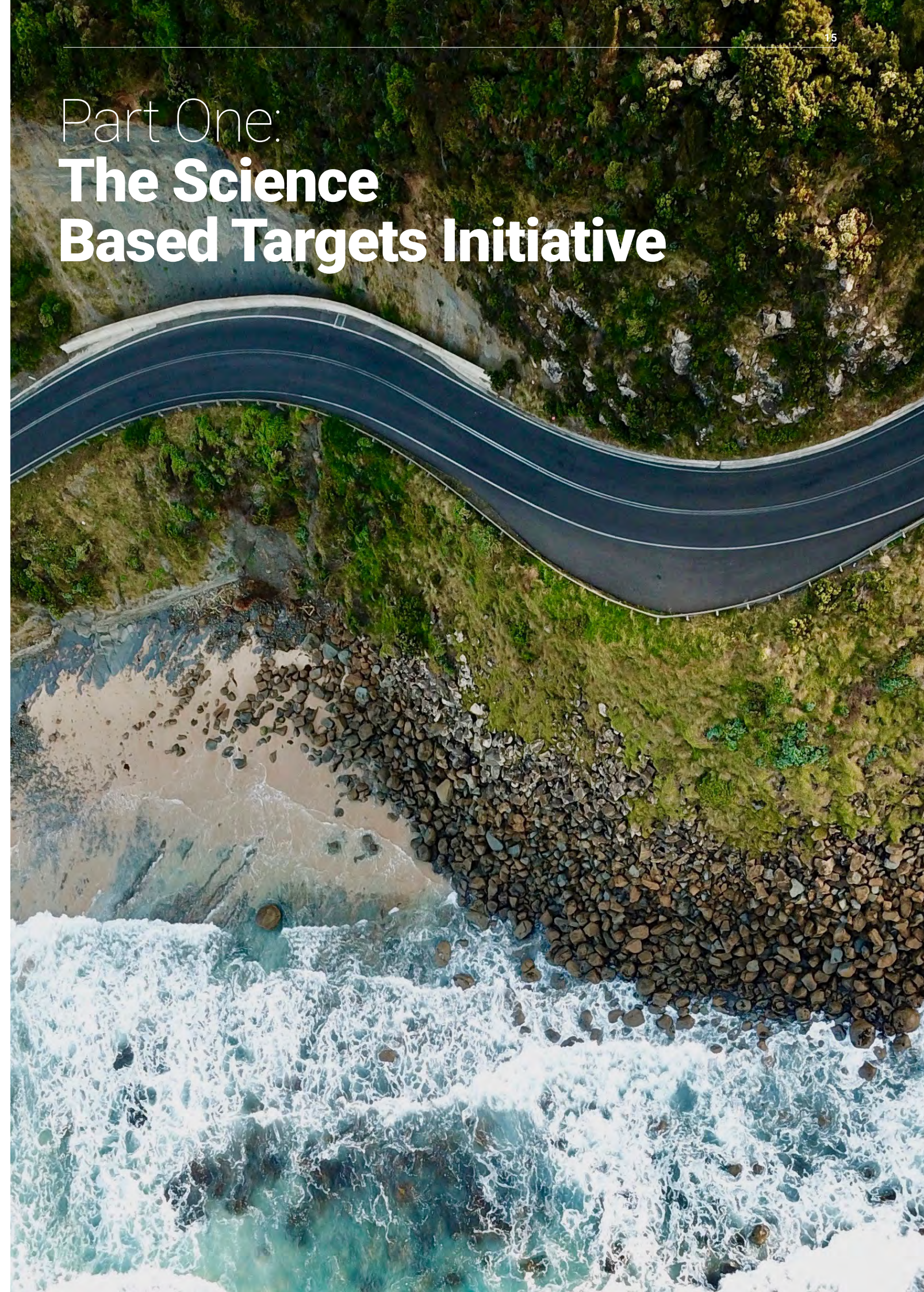
Part One:
The Science Based Targets Initiative

The aims of the initiative

The SBTi was established in 2015 following the Paris Agreement announcement, in collaboration between the United Nations (UN) Global Compact, World Wide Fund for Nature (WWF), CDP (formerly known as the Carbon Disclosure Project), and the World Resources Institute (WRI). It aims to promote good practice in science-based target setting and encourages all companies to set science-based emissions reduction targets.

Targets are considered science-based if they are in line with what is necessary to meet the goals of the Paris Agreement,[viii] according to the latest climate science. Targets set under the SBTi show how far and at what pace companies need to go to reduce their GHG emissions.

Setting science-based emissions reduction targets and standardising them within business practice will enable more ambitious corporate climate action that reverberates across the business, financial and government sectors.

How to adopt a science-based target

The SBTi provides a range of target-setting resources and guidance and independently assesses and approves companies' targets in line with its strict criteria.

Adopting a science-based target is a five-step process.

- **Commit:** Submit a standard commitment letter establishing your intent to set a science-based target. The commitment will be publicly recognised on the SBTi website.

- **Develop:** Develop an emissions reduction target in line with the SBTi's criteria and recommendations within 24 months of making the commitment.
- **Submit:** Send the target to the SBTi for official validation.
- **Communicate:** Announce the targets and inform stakeholders.
- **Disclose:** Report annually on your company-wide emissions and progress against targets.[16]

Prior to making a commitment, we have identified additional internal steps that will efficiently drive businesses towards adopting science-based targets.

These include:

- A clear pathway to adoption, either top-down or bottom-up;
- Establishing the business case; and
- Identifying and engaging the key stakeholders who can help develop and drive the business case.

The benefits of setting a target

By setting a science-based target through the SBTi, companies can:

- Adopt the best practice for setting emissions reductions targets in line with the latest climate science.
- Access technical assistance and expertise to support their target setting.
- Receive independent assessment and validation of their targets.
- Commit to the Business Ambition for 1.5°C campaign.

COMMIT	DEVELOP	SUBMIT	COMMUNICATE	DISCLOSE
Submit a letter establishing your intent to set a science-based target.	Work on an emissions reduction target in line with the SBTi's criteria.	Present your target to the SBTi for official validation.	Announce your target and inform your stakeholders.	Report company-wide emissions and progress against targets on an annual basis.

Part Two:
Research Results

[viii] Under the terms of the Paris Agreement, parties committed to limiting global temperature increases to well below 2°C above pre-industrial levels and to further pursue efforts to limit warming to 1.5°C.

Part Two:
Research Results

The external landscape

Reasons for committing to science-based targets

Our research identified multiple reasons why businesses adopt science-based targets.

Market-driven

- Attract capital;
- Increase market demand;
- Enhance reputation;
- Influence social license;
- Respond to shifts in financial markets; and
- Market pressure.

A moral imperative

- Culture and values alignment;
- Establish a social license; and
- Align with the Paris Agreement.

Business improvement

- Improve and refine business processes;
- Demonstrate leadership and advocacy by setting an example;
- Strategic business opportunity;
- Manage risks;
- Improve employee engagement; and
- Good governance.

Stakeholder-driven

- Align with stakeholder values;
- Provide justification for investors; and
- Owner or director motivation.

SBTi-specific

- Robustness of the methodology;
- Opportunity to transform business processes;
- Collective process;
- Independent verification; and
- Focus on supply chain emissions and pressure from supply chain.

Climate change impacts

- Direct and indirect weather and climate related impacts on business; and
- Better manage climate risks and exposure.

External influences

Our research showed that there are a range of external influences which have a direct effect on whether and how science-based targets are adopted. Below are further insights into the external influences and the internal supporting action which drive the business case for science-based targets.

Social license

- Many companies indicated that the robust science-based target methodology, independent verification and annual reporting gave their environmental, social and governance (ESG) claims authority, as they are linked to credible, ongoing plans and subsequent actions.

Climate events

- Bushfires, floods, heatwaves, drought and coral reef bleaching have an impact on companies with retail customers. Therefore, they need to have significant mitigation activities in place that are aligned with these climate-related impacts.

Task Force on Climate-related Financial Disclosures (TCFD) and director duties

- The TCFD is seen as an important process for identifying major risks. This was a major justification for the adoption of science-based targets by financial companies, in parallel with their TCFD requirements.
- In 2021, the TCFD provided updated guidance regarding disclosures of climate-related metrics, targets and transition plan information, noting that transition plans should include 'quantitative and qualitative targets based on sound climate science'.[17]
- The TCFD drives science-based targets in businesses that have carbon risk, as one of the mechanisms for demonstrating independently verified targets to achieve well below 2°C to 1.5°C above pre-industrial levels.

Stakeholders

- Shareholder activism has encouraged the adoption of science-based targets.
- Some companies are part of a network of stakeholders with carbon emissions reduction objectives, so there was limited option but to join the SBTi, particularly to cooperate around Scope 3 emissions. For example, a group of global telecommunications companies came together to collaborate on driving supply chain emissions reductions opportunities because they realised they couldn't do it by themselves.
- In the finance sector, adopting the science-based target framework leveraged access to lower cost financing.

Competitors

- Companies do not want to lag behind others in their sector.

Supply chain

- Where companies within the supply chain are already moving to adopt net-zero emissions strategies and targets, this can influence the adoption of science-based targets.
- In some instances, the influence of the external supply chain on internal policy has led to science-based targets being adopted.

Case study:
Bank Australia

About the company

Bank Australia uses science-based methods to determine their own share of worldwide emissions reductions needed to keep global temperature increase below 2°C, compared with pre-industrial temperatures. Using science-based methods, Bank Australia has determined that they need to reduce emissions from gas, the Bank's cars and electricity by 16 per cent by 2025. The company is well on track to exceed this target following its switch to 100 per cent renewable electricity in April 2019. Responding to this development, together with the evolving science and methodologies, Bank Australia is strengthening its target to align with the latest methodologies and to include Scope 3 emissions, and will seek endorsement from the SBTi in financial year (FY) 2021-22.

Bank Australia's science-based target

Bank Australia has committed to setting a science-based target to reduce its GHG emissions and to switching to 100 per cent renewable electricity by 2020.

Sector: Banks, diverse financials, insurance

Target set date: 2017

The benefits and opportunities of a science-based target to Bank Australia

- Simplifies complex apportioning of responsibility.
- Provides an avenue to engage complex business models.
- Cannot rely on governments and individuals alone to achieve net-zero emissions targets.
- Ensures reviews within five years as circumstances change.
- Clarified their understanding of their carbon accounts and where there are opportunities to save on costs while reducing emissions.
- They can communicate their emissions reduction commitments with confidence knowing they are validated using a robust, globally standardised framework.
- They are seeking clarification of the long-term cost to the business.

Top reasons why Bank Australia adopted a science-based target

- **Credibility:** The SBTi provides a credible methodology for genuine, ambitious targets.
- **External expectations:** *'Our customer-owners and staff expect ambitious targets.'*
- **Certification:** The company values a global, standardised certification.
- **Short-term accountability:** Review within five years, to align with Paris Agreement and best practice.

The key people who advanced the business case

- Consultants with knowledge of science-based targets;
- Group finance teams; and
- Group sustainability teams.

The internal mindset:

The science-based target champion and their motivations

In the context of this study, the sustainability manager is defined as the primary manager or officer charged with leading sustainability governance and initiatives of a business.

Sustainability managers are often the key people driving the change, so it is useful to know their personal motivators for using science-based targets as an emissions reduction framework. Our research showed that their primary motivators are centred on the moral imperative to address climate change with science-based targets being a quality mechanism to advance business action. Secondary motivations centred on the impact of the long-term actions of a business, the reputational benefits and the capacity of science-based target adoption to influence others. The link between the sustainability manager's moral foundation, personal beliefs and the externally validated, robust, science-based methodology legitimises their actions as a change agent within the business.

Sustainability manager motivators for using science-based targets	
Primary motivations	**Secondary motivations**
• Personal commitment to climate justice; • Desire to be a 'change agent'; • Science-based targets provide professional justification; • Science-based targets provide collective action benefits; • Science-based targets provide a credible, high standard, benchmarked process; • A moral imperative – the right thing for the planet; and • Science-based targets align with the rights of future generations.	• Science-based targets can influence other companies; • Desire to leave a positive personal legacy in the company; • A way to engage stakeholders; • A way to demonstrate it is a caring company; • Long and short-term ambition for reducing a company's emissions profile; • Science-based targets provide mechanisms for urgent action; and • To address the direct impacts of climate change on the company.

Variations in motivations were influenced by factors including the sector, size of the business, stage of the business's sustainability journey and importantly, the personal characteristics of the sustainability manager. However, a consistent motivator is the legitimacy that science-based targets bring.

About the company

Downer designs, builds and sustains assets, infrastructure and facilities and is a leading provider of integrated services in Australia and New Zealand. In FY2018, Downer undertook a detailed assessment against the TCFD framework, identifying climate change risks and opportunities and the associated impacts, mitigation and management response.

Downer's science-based target

Downer has set a 45-50 per cent reduction in absolute Scope 1 and 2 GHG emissions by 2035 (from an FY2018 base year). The targets covering GHG emissions from company operations (Scopes 1 and 2) are consistent with reductions required to keep warming to 1.5°C.

Sector: Commercial services, construction and engineering

Target set date: September 2019 (SBTi commitment letter signed in February 2021)

The benefits and opportunities of science-based targets to Downer

• Internally, setting a science-based target has given Downer's emissions reductions activities immense credibility and Downer has significant buy-in from executives across the business. Decarbonisation plans have been established across each of the company's business units, which have annual accountability mechanisms to ensure that cost-effective emissions reductions are occurring in line with Downer's overall target.

• Downer has entered into a sustainability linked loan, which is directly linked to the company's science-based target. This provides Downer with an interest rate margin adjustment on the syndicated debt facility, should the company achieve annual emissions reductions, in line with its science-based target and other ESG related key performance indicators. It also provides for a penalty should Downer deviate from these targets, which sends a positive price signal to the company to decarbonise.

• Downer has also had the opportunity to consolidate its urban services strategy and its core business, which resulted in the decisions to divest its laundries and mining services businesses, with the exception of Open Cut East. At the time of publication, Downer was exploring opportunities to divest Open Cut East. In the event Downer is unable to complete a sale, it will fulfill its contractual commitments. Once the terms of these contracts are complete, Downer will have no further participation in mining services.

The top reasons Downer adopted a science-based target

• **Credibility:** To align its sustainability journey and emissions reductions to the most credible science, to ensure that Downer is meaningfully reducing its emissions to limit global warming by 1.5°C.

• **Strategy:** To guide business strategy and capital allocation.

• **Opportunities:** To maximise business opportunities from decarbonisation.

The key people who advanced the business case

• Board of directors;

• Executive team (including Chief Executive Officer (CEO), Chief Financial Officer (CFO)); and

• Sustainability team.

Identifying key influencers

Finding influential people who can drive the development of the business case is critical to success.

Our research showed there are two primary pathways to the adoption of science-based targets (see *Part Three*). For approaches that are driven by sustainability managers, liaison with similar level managers was essential to developing the license to effectively engage with the C-suite including the CEO. This takes considerable time and there needs to be a supportive staff culture to drive change. Operational, energy and procurement staff as well as external consultants were essential to assist with developing the technical justification and proving the viability of the business case.

When the business case is owner-driven, the imperative is to align the directive to a set of business processes. Business values were already aligned to the science-based targets, so operationalising the directive encountered minimal, to no resistance. Therefore, primary attention was needed on influencers who could help implement the science-based target framework within the business.

The participants in the study were asked to rank the importance of people in the company in advancing the business case for science-based targets. The top roles were:

- Sustainability managers;
- Finance managers;
- Group executives;
- Fund managers;
- Family business owners;
- Chief purpose officers; and
- Environmental consultants.

Other important, but less critical roles in advancing the business case were:

- Energy managers;
- Asset managers;
- Risk managers;
- External consultants;
- Chief marketing managers;
- Systems and operations managers; and
- 'Whole of staff', which is interpreted as a supportive staff culture.

Case study:
Intrepid Travel

About the company

Intrepid Travel is the largest global adventure travel company and the first tour operator to set a science-based target globally. Setting science-based climate targets will see Intrepid Travel reduce the emissions across their operations and supply chains for a 1.5°C future.

Intrepid Travel's science-based target

Intrepid Travel commits to reduce absolute Scope 1 and 2 GHG emissions by 71 per cent by 2035 (from a 2018 base year). The company also commits to reduce Scope 3 GHG emissions from its offices by 34 per cent per full-time equivalent employee and from its trips by 56 per cent per passenger day [ix] over the same period.

The targets covering GHG emissions from company operations (Scopes 1 and 2) are consistent with reductions required to keep warming to 1.5°C.

Sector: Hotels, restaurants and leisure, and tourism services

Target set date: October 2020

The benefits and opportunities of a science-based target to Intrepid Travel

- Intrepid Travel hopes to use this action to encourage the entire travel industry to make critical collective action on climate a priority in the industry's post-COVID-19 recovery. '*We simply can't rebuild at the expense of the planet.*'
- The ability to screen Scope 3 across all its 15 categories [x] globally and understand its emissions profiles is fundamental to Intrepid Travel's emissions reduction.
- The ability to dive deeper into the emissions profile provided Intrepid Travel with opportunities for collaboration with suppliers and open sourcing methodology.

The top reasons Intrepid Travel adopted a science-based target

- **Risk management:** '*The tourism industry is front row to this unfolding emergency, with the impacts being felt on the places and people that we visit.*'
- **Reputation:** '*We have been carbon neutral [xi] since 2010 - carbon neutral is no longer enough anymore as climate change is a shared and urgent issue.*'
- **Collaboration:** '*In both mitigating climate change and in adapting to its impacts, a collaboration between business, suppliers, destinations and investors makes sense.*'
- **Accountability:** '*Starting the next phase of Intrepid Travel's ongoing carbon journey and providing clear targets to hold us accountable.*'
- **Values alignment:** '*[The SBTi] aligns with who we are.*' Intrepid Travel is the world's largest B Corp certified travel company and part of a growing community of businesses looking beyond the bottom line.

The key people who advanced the business case

- Environmental Impact Specialist;
- Chief Purpose Officer;
- Chair and Co-Founder;
- Core management team; and
- Leadership team.

[ix] 'Passenger day' refers to the customer paying for one day of a tourism product.
[x] The fifteen categories in Scope 3 emissions for science-based targets can be found in the **SBTi Criteria and Recommendations**.
[xi] Carbon-neutral refers to the purchasing of carbon credits to the equivalent value of emissions released. It does not necessarily refer to a reduction in emissions.

Internal supporting activities

Our research showed that if certain internal activities and a deliberate decarbonisation pathway are in place, they will create a supporting environment for the adoption of science-based targets.

Existing sustainability framework

- A clear direction from the executive and board, underpinned by a range of supporting ESG initiatives enabled by a central sustainability manager (e.g. energy policy, a shift to renewables, addressing supply chains), created a supporting environment for adoption.
- If carbon reduction targets are embedded across the business, this will facilitate easier adoption of the science-based targets.
- A narrative focused on business operations rather than sustainability, helps the business case be prioritised internally.
- Where companies must develop climate responses, for example an internal carbon price, in the absence of government direction, this creates an environment conducive to adopting science-based targets.
- Staged integration and increasing targets towards net-zero emissions target adoption.

Changing business model

- Dynamic change in the external business environment can create an opportunity for science-based targets to be integrated into a new business model. External changes, such as shifting customer attitudes towards climate change, only influence how a business operates if it responds internally. The willingness to adopt different ways of doing business was indicated by many sustainability managers as an important supporting action.

Long-term commitment by sustainability staff

- The long-term persistence of sustainability managers to progress emissions reduction policies is critical to success. This spanned more than three years for most companies.
- Board commitment is seen to ensure long-term strategic focus.
- Companies benefit from sustainability managers who have personal and professional agency and values aligned to developing a business case for net-zero emissions. This enables them to drive change in the business.

Broader staff buy-in

- Cross-business cultural support can be built when science-based targets are part of a larger staff engagement piece on sustainability and climate policies and practices. Support from across a range of departments in the business was stated as important supporting action.
- The language used to communicate science-based targets needs to be simplified and aligned to business culture for greater staff buy-in.

Sustainability return on investment

- Science-based targets can be linked to the business's financial model. Whilst sustainability managers didn't supply financial records of the benefits, many indicated that the cost of implementing science-based targets was far outweighed by financial return through increased market share of their product, increased stakeholder benefits and for some, increased funding from investors.

Risk reduction

- Companies can justify their climate policies as being ahead of governments on climate policy.
- Locking in the policy commitment of net-zero emissions by 2050 ensures the business is future-proofing itself against future compliance or other risks (including stranded assets risk).

Market demand

- Consumer-facing companies adopt science-based targets because of increasing market pressure. Companies with a major retail orientation indicated that they were responsive to changes in their customer's attitudes. It was not necessarily that their product had to be climate-related, but rather the company needed to show it was being responsible on climate change and responding to customer attitudes.

Case study:
Investa

About the company

Australian commercial real estate manager Investa has consistently shown that focusing on sustainability can provide superior long-term investment returns. Investa's ambitious target of net-zero carbon emissions by 2040 was Australia's first approved real estate science-based target.

Investa's science-based target

Investa commits to reduce absolute Scope 1 and 2 GHG emissions by 60 per cent per square metre of net lettable area by 2030 and by 100 per cent by 2040 (from a 2015 base rate). Investa also commits to reduce Scope 3 GHG emissions by 26 per cent per net lettable area by 2030 and by 42 per cent by 2040 (from a 2015 base rate). The targets covering GHG emissions from company operations (Scopes 1 and 2) are consistent with reductions required to keep warming to 1.5°C.

Sector: Real estate

Target set date: January 2019

The benefits and opportunities of science-based targets to Investa

- Investa has improved market share since adopting science-based targets.
- Science-based targets have improved the development of the business model.
- Science-based targets have ensured Investa achieve its initial carbon risk reduction targets.
- Science-based targets have unlocked new funding opportunities, particularly green debt instruments such as those certified by the climate bonds initiative.

The top reasons why Investa adopted a science-based target

- **Financial:** Science-based targets are important in attracting capital from clients.
- **Stakeholder engagement:** Adopting a science-based target has been important in attracting tenants to properties.
- **Risk reduction:** Science-based targets mitigate transitional risks to a low carbon economy.
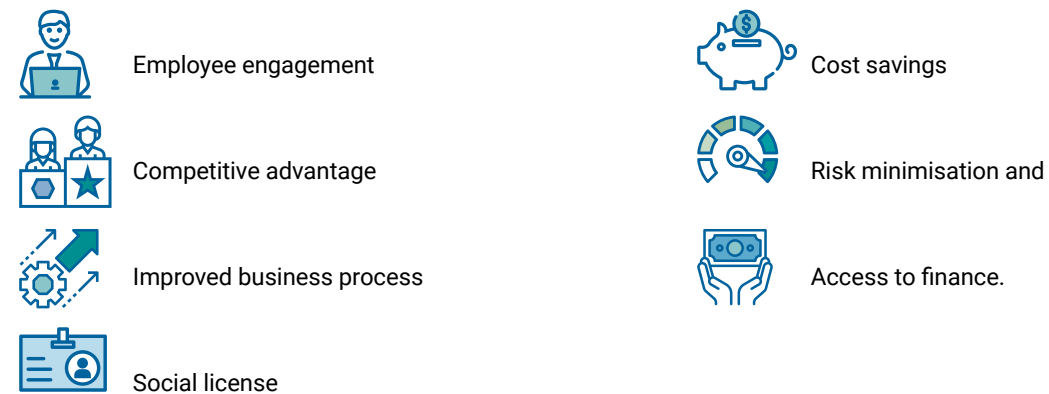- **Moral imperative:** *'It's the right thing!'*

The key people who advanced the business case

- Group executive (including CEO, Chief Information Officer (CIO), Group Counsel);
- Fund managers;
- Board of directors; and
- Rest of staff team.

Understanding the main drivers and benefits

Benefits of adopting a science-based target

There were six areas of benefits to businesses, according to the responses of sustainability managers:

Employee engagement

Cost savings

Competitive advantage

Risk minimisation and

Improved business process

Access to finance.

Social license

What companies say: The benefits of adopting science-based targets

'There is full engagement through key functions in the organisation from the executive and the board to the people in the organisation.'

'We have seen the success of our counterparts who have adopted science-based targets. They demonstrated leadership and have driven change in the sector significantly in the last two-three years.'

'Adopting science-based targets elevates the importance and visibility of carbon reduction and sustainability generally within an organisation. Employee surveys revealed sustainability is a driver of satisfaction. Science-based targets work enhances this.'

'[A science-based target] elevates the profile of the organisation as a sustainability leader, both externally and to our ownership. This gives us credibility in our other sustainability pursuits.'

'As a consultancy, there is simply no way we could go out to market promoting climate action without walking the walk.'

'[Science-based targets are] providing a recognised brand to communicate our decarbonisation ambitions to our investors.'

'There is a scientific basis for determining an emissions reductions target for a company.'

'In the business case I proposed, I highlighted the cost savings and potential emission reduction opportunities.'

Case study:
Singtel and Optus

About the company

The Singtel Group (including Optus) is a Singaporean-based telecommunications company operating in Australia under the Optus brand. Optus's purpose is to power optimism with options, and the company aims to deeply embed sustainability in their culture, values, decision-making, operations, products and services to create a sustainable business. Singtel and Optus undertook a company-wide lifecycle analysis in 2016 and again in 2020 to understand their direct and indirect ESG impacts across their value chain including GHG emissions. This analysis has enabled a focus on the company's material environmental and social impacts.

Singtel and Optus's science-based target

The Singtel Group (including Optus) commits to reduce its consolidated Scope 1, 2 and 3 GHG emissions by 40 per cent by 2030 from a 2015 base year. The targets covering GHG emissions from company operations (Scopes 1 and 2) are consistent with reductions required to keep warming to well below 2°C, which was the global ambition in 2017 when the company's science-based target was first approved by SBTi.

Sector: Telecommunication services

Target set date: October 2017 (target approved by SBTi)

The benefits and opportunities of science-based targets to Singtel and Optus

- A credible structure and approach to setting carbon targets.
- A quantitative methodology linked to global science, with basis to update it if needed.
- Raised awareness for all scopes of emissions (versus only energy consumption).
- Provided the basis upon which initial energy efficiency initiatives were developed.
- Science-based targets have been the basis upon which sustainability linked loans and bond framework KPIs have been established.

The top reasons why Singtel Optus adopted a science-based target

- **Methodology:** The methodology and pathway can be benchmarked and updated.
- **Guiding targets:** The framework can guide the business's long and short-term ambitions, targets and actions.
- **Stakeholder engagement:** Science-based targets are a basis to engage internal and external stakeholders, such as suppliers, on decarbonisation.
- **Advocacy:** Science-based targets enable the company to support a science-based approach to climate action.
- **Assurance:** Can be externally assured and validated.

The key people who advanced the business case

- Sustainability team;
- Networks organisation;
- Energy teams;
- Finance team; and
- Approved by C-level management committee.

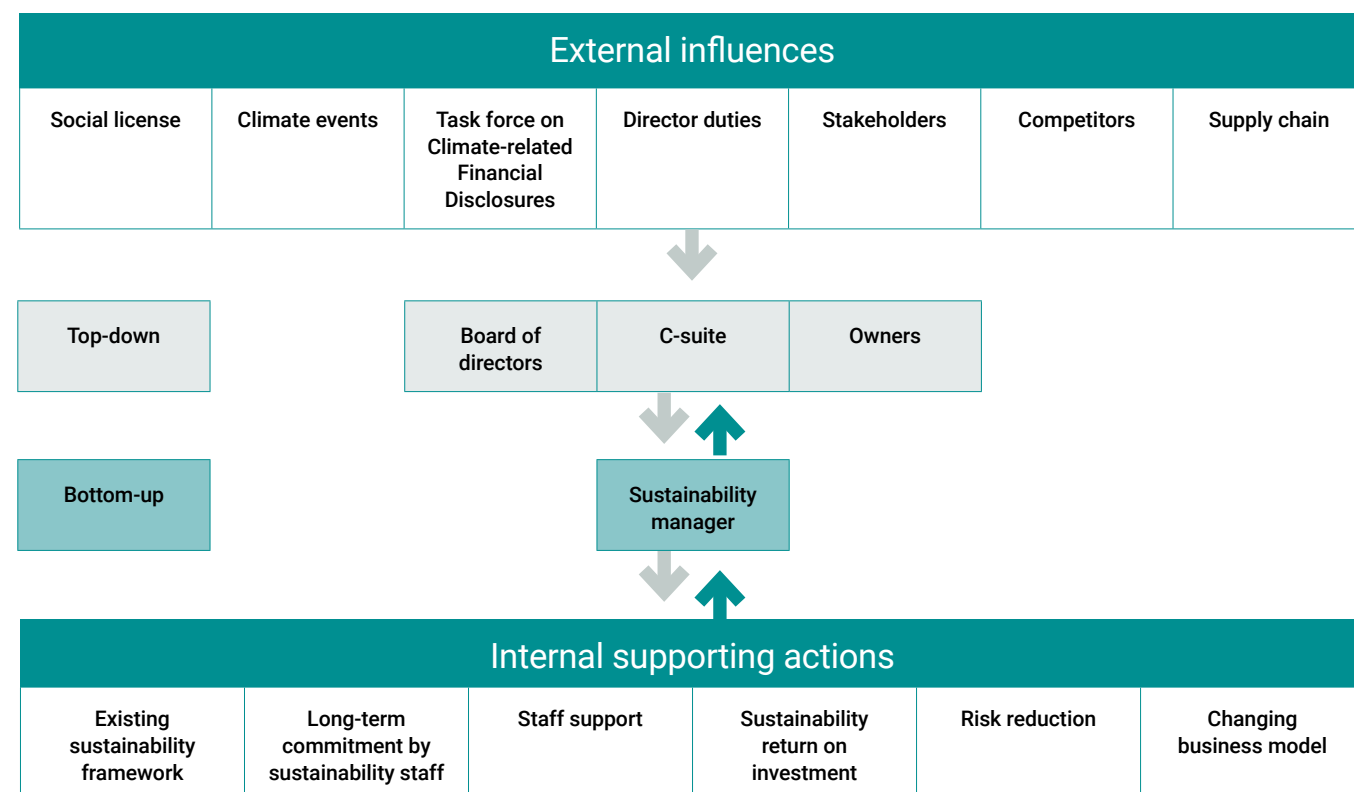## Pathways to setting a science-based target

Bottom-up versus top-down approach

Our research identified two main pathways to adopting science-based targets:

- **Bottom-up:** The business case is developed by the sustainability manager - the most common pathway; or
- **Top-down:** The owner or the chair of the board initiated the business case process - which was less common.

Across both pathways, external influences had a major impact on the decision to adopt a science-based target. Internal supporting actions assisted the business case development. If the process is led by the sustainability manager, it was critical they held a level of professional agency that allowed them to instigate and execute the business case.

The two pathways and related factors that influence the development of the business case are presented below.

External influences						
Social license	Climate events	Task force on Climate-related Financial Disclosures	Director duties	Stakeholders	Competitors	Supply chain

Top-down		Board of directors	C-suite	Owners

Bottom-up			Sustainability manager	

Internal supporting actions					
Existing sustainability framework	Long-term commitment by sustainability staff	Staff support	Sustainability return on investment	Risk reduction	Changing business model

The sustainability manager pathway

Business cases were more commonly instigated and developed by the sustainability manager. The manager's long-term commitment, capacity, influence and trust within the business enabled them to initiate and support the kinds of transformational changes needed. This was primarily based on long-term relationship building, including influencing the C-suite and subsequently the business's boards or owners. A coalition of support from staff across the business was also important.

Boards need to be educated on science-based targets. Socialising the concept across departments and gaining support from key individuals before presenting to upper management and boards was important, to ensure there is full buy-in. An in-depth understanding of science-based targets is important but the ability to communicate in simple terms to non-sustainability people is critical. Aligning personal values with business values helps underpin the sustainability manager's actions.

Board of directors or owner's pathway

Our research showed that where boards have instigated the adoption of science-based targets, board members had three primary motivations.[xii] First, they had a personal commitment to taking strong action on climate change mitigation. Second, they felt pressure to act from regulators. Third, they felt pressure upon receiving guidance to act as part of their fiduciary duties. A range of other motivators include a commercial interest, investor influences, a moral imperative to take strong action on climate change and fiduciary responsibilities.[xiii] In these instances, the sustainability manager was responsible for developing an implementation plan after the board decided to adopt science-based targets.

There were limited instances where C-suite or business owners were the champion for science-based targets, however the C-suite are a critical gateway for a business case to gain acceptance in both pathways.

[xii] Board directors, owners and C-suite staff were not directly interviewed. Findings are based on the views of the sustainability managers who were interviewed.

[xiii] It is noted that, while sustainability managers did not mention climate-related litigation as a primary motivation, this is a major growing area for board members to consider as part of climate-related governance processes.

Case study: **Taylors Wines**

TAYLORS®
CLARE VALLEY

About the company

Taylors Wines' goal is to be Australia's best wine company, applying best-practice principles in environmental management to enhance sustainable business activities and products. The company aims to use the most innovative techniques to improve energy efficiency, water conservation and packaging. Taylors Wines take all measures available to prevent or eliminate as far as possible the production of waste or pollution. Through this holistic approach to environmental management the company aims to achieve sustainable land and biodiversity management outcomes for the present and future.

Taylors Wines' science-based target

This target was approved using a streamlined target validation route exclusive to small and medium-sized enterprises. Taylors Wines commits to reduce absolute Scope 1 and Scope 2 GHG emissions by 50 per cent by 2030 (from a 2018 base year) and to measure and reduce its Scope 3 emissions. The targets covering GHG emissions from company operations (Scopes 1 and 2) are consistent with reductions required to keep warming to 1.5°C.

Sector: Food and beverage processing

Target set date: June 2021

The benefits and opportunities of science-based targets to Taylors Wines

- Several of the projects to reduce their emissions that were identified by the company also have reasonable payback periods, resulting from better efficiencies and reduced costs.
- Processes like science-based targets that encourage companies to review the way they operate are useful in identifying business improvements.
- The science-based target development process helped the company identify and gain internal support for the investment required.
- Taylors Wines has only recently announced their science-based targets. The company is still communicating these to customers and suppliers. There has been early interest from agents and distributors around the world, but at present no significant new opportunities have emerged.

The top reasons why Taylors Wines adopted science-based targets

- **Moral imperative:** The Taylor family's desire to make a positive contribution to the environmental challenges facing the planet.
- **Business optimisation:** Improving business efficiency and optimisation.
- **Stakeholder influence:** Aligning with global customers that are implementing changes.
- **Leadership:** Demonstrating continued industry leadership and continued employer of choice.
- **Employee engagement:** Staff and consumer beliefs.

The key people who advanced the business case

- Group executive (including, CEO, CIO, Group Counsel);
- Fund managers;
- Board of directors; and
- Whole of staff.

Overcoming resistance

Barriers to businesses adopting science-based targets include:

- A general resistance to change;
- The desire to maintain the status quo; and
- Concern that the technological solutions to achieve the set targets are not yet realisable or commercially viable, particularly when it comes to influencing supply chain emissions.

This puts businesses at considerable risk as technology, markets, stakeholders, society and the physical environment change around them.

While developing a business case for science-based targets encountered some resistance, sustainability managers spoke about how the process of developing the business case helped to facilitate a sense of urgency around setting net-zero targets and subsequently acting strategically to address the serious climate change challenge for their business.

Sustainability managers encountered resistance related to:

- **Staff understanding:** Difficulty for staff to understand the SBTi framework and to appreciate the climate science around a global carbon budget.
- **Board comfort:** Being convinced of the business case and the ability to deliver on the targets given the requirement to annually report to shareholders and stakeholders.
- **Targets:** The way targets are set, including re-thinking ways of setting targets to be climate science-aligned and medium-term (five-10 years), not short-term (three-five years).
- **Value chain (Scope 3) emissions:** The difficulty of engaging in supply chain emissions was a major challenge as they are outside the control of the company and the lack of data on supply chain emissions meant that many companies had to start from scratch to collect it.
- **Process clarity:** Concern about how to get there, as not all technologies and methods were available.
- **Complexity:** Challenges in how to communicate science-based targets and what they mean within business processes.
- **Stakeholder engagement:** There was difficulty engaging stakeholders who did not understand what net-zero emissions meant in practice. Networking was vital, along with bringing the business along the journey together, from shop floor to senior executives.
- **Board resistance:** There were three aspect of board resistance that sustainability managers encountered:
  - **Time:** The amount of people's time required for reporting and data gathering.
  - **Cost:** Uncertainty around the cost of implementing the projects to reduce emissions.
  - **Commitment:** Concerns about committing to long-term and public targets that the company may not be able to meet for a range of technical and other reasons.

What sustainability managers say: Overcoming resistance

'The only resistance we had was a reluctance to set a target we might not be able to meet.'

'There was no resistance, but we needed to address concerns about business growth and setting targets for Scope 3 which led to physical intensity targets for offices and trips which may be difficult to achieve.'

'There needed to be a clear pathway to achieving targets. Boards queried the 1.5°C commitment versus the Paris Agreement's 'well below' [2°C, compared to pre-industrial levels] target. Ultimately these were not showstoppers, just upskilling required.'

'We overcame resistance through educating the board with great presentations.'

'Having closely tracked the carbon footprint of the business over several years helped build a good baseline understanding of carbon.'

'Networking and communication were vital to overcoming resistance.'

Case study:
Transurban

About the company

Transurban is an Australian-owned company that builds and operates toll roads in Melbourne, Sydney and Brisbane, as well as in Greater Washington, USA and Montreal, Canada. As an industry leader, Transurban sets high standards on social and environmental issues and invests in both to create social inclusion and manage environmental impacts.

In 2020 Transurban became the first ASX20 company to have their GHG targets validated by the SBTi. Their targets cover Scope 1, 2 and 3 emissions.

Transurban's science-based target

The targets covering GHG emissions from company operations (Scopes 1 and 2) are consistent with reductions required to keep warming to 1.5°C. Transurban commits to:

- Reduce absolute Scope 1 and 2 GHG emissions by 50 per cent by 2030 (from a 2019 base year).
- Reduce Scope 3 GHG emissions from purchased goods and services by 22 per cent by 2030 (from a 2019 base year) relative to business size, as measured by total kilometres travelled by our customers.
- Reduce Scope 3 GHG emissions from capital goods 55 per cent per million dollars in capital expenditure by 2030 (from a 2019 base year).

Sector: Ground transportation, highways and rail tracks

Target set date: August 2020

The benefits and opportunities of science-based target to Transurban

- Adopting the science-based target framework has resulted in the organisation having a greater understanding of what GHG targets mean in practice. The systematic approach has increased buy-in, knowledge, and action across the organisation.
- The requirements of the framework have accelerated discussions with supply chain partners about GHG emissions reduction and net-zero emission targets.
- Updating science-based targets over time in line with new science provides opportunity to re-engage and communicate with external stakeholders, reaffirming Transurban's commitment and demonstrating ongoing leadership.

The top reasons why Transurban adopted a science-based target

- **Social license:** Acting on climate change by adopting science-based targets is required to maintain social license with the community.
- **Methodology:** The SBTi framework offers a robust methodology for emissions reduction.
- **Leadership:** Adopting the SBTi framework demonstrates leadership in the sector.

The key people who advanced the business case

- Executive team;
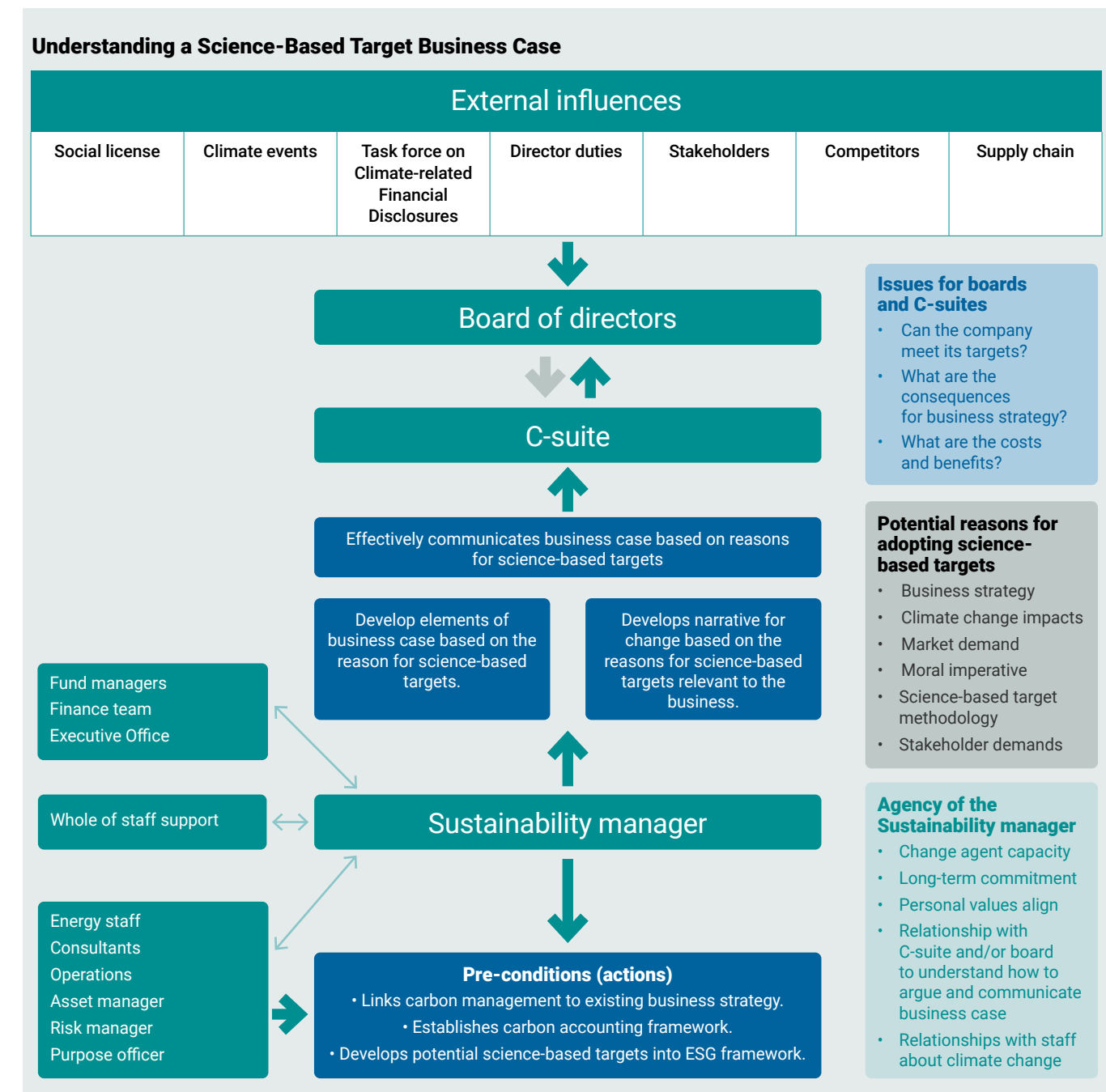- Board of directors; and
- Sustainability team.

Part Three:
Key Learnings

Part Three:
Key Learnings

A model for understanding business case development

Our model for science-based target business case development summarises what sustainability managers need to consider. It aims to capture the key people, processes and activities. Different sectors will have their own unique influences and supporting actions.

Understanding a Science-Based Target Business Case

External influences						
Social license	Climate events	Task force on Climate-related Financial Disclosures	Director duties	Stakeholders	Competitors	Supply chain

Board of directors

Issues for boards and C-suites
- Can the company meet its targets?
- What are the consequences for business strategy?
- What are the costs and benefits?

C-suite

Effectively communicates business case based on reasons for science-based targets

Develop elements of business case based on the reason for science-based targets.

Develops narrative for change based on the reasons for science-based targets relevant to the business.

Potential reasons for adopting science-based targets
- Business strategy
- Climate change impacts
- Market demand
- Moral imperative
- Science-based target methodology
- Stakeholder demands

Fund managers
Finance team
Executive Office

Whole of staff support

Sustainability manager

Agency of the Sustainability manager
- Change agent capacity
- Long-term commitment
- Personal values align
- Relationship with C-suite and/or board to understand how to argue and communicate business case
- Relationships with staff about climate change

Energy staff
Consultants
Operations
Asset manager
Risk manager
Purpose officer

Pre-conditions (actions)
• Links carbon management to existing business strategy.
• Establishes carbon accounting framework.
• Develops potential science-based targets into ESG framework.

Key

People involved in the science-based targets business case development.

Business activities to develop a business case.

The sustainability manager pathway explained

There are certain actions that sustainability managers need to take to adopt a science-based target.

The personal commitment and agency of the sustainability manager is fundamental to success. To drive acceptance and reduce resistance, the sustainability manager must demonstrate personal values that ground the long-term commitment needed to enact change. They must be able to communicate complex concepts so they can be well understood by the executive and board. However, the sustainability manager needs the support of the executive and board to help drive the changes required. Keeping up to date with ESG developments enables sustainability managers to be at the forefront of changes in knowledge and provide relevant information to the business as needed.

Pre-conditions

Science-based target setting is a transformative business process. To advance a business case through various decision gateways the sustainability manager, with the support of relevant individuals and departments, can:

- Establish a carbon accounting framework;
- Embed the potential science-based target into the ESG framework;
- Link general carbon management to the existing business strategy; and
- Collaborate with key people in relevant departments to assist with developing a business case.

The board

Boards want to know the costs and benefits of any new proposal that has a large impact on the business. We found that they were aware that science-based targets are a transformational process and would have a potential impact on business processes. They wanted to see evidence in a business case that outlined how their business would be able to commit to the changes proposed. They were aware of the external influences related to committing to strong action on climate change and wanted to see how science-based targets would help mitigate reputational risks.

Key people

There are key people who need to be involved in developing the pre-conditions and the business case before it is presented to upper management. Enlisting support from finance teams was critical to getting the business case developed. Establishing good relations with key people was highly important to developing an evidence base for the case. Many sustainability managers developed good relations with C-suite executives and or boards and these relationships are fundamental to the success of embedding science-based targets.

Communication and engagement with C-suite and the board

Education and knowledge building of the C-suite and board regarding the growing responsibilities relating to climate risk allowed the business case development to advance. Presenting comprehensive arguments for science-based targets to the C-suite and board was essential for companies to advance to the adoption stage. More importantly, establishing good relationships with the C-suite was a precursor to the effective communication of the business case in more formal presentations.

Climate change narrative

Stand-out business cases include framing the climate change narrative around the science-based target argument. Sustainability managers used the external influences and internal supporting features to frame arguments for adopting science-based targets. It is important to not frame the case solely on environmental sustainability arguments, but to include aspects that align with the whole-of-operation business model.

External influences

External influences can be categorised in three ways:

- Moral imperative which relates to the social license of a business;
- Increasing market demand which relates to not only customer trends but also investment shifts; and
- Increasing risk, the visibility of which is increasing with the uptake of TCFD and company director responsibilities for climate risks.

Challenges in adopting science-based targets

The challenges vary depending on the industry and how sustainability is positioned in the business. The commitment needed to engage in the SBTi target setting process should not be underestimated. Having strong sustainability processes linked to existing business processes is important for easing implementation.

Board of directors or owner's pathway explained

Our research found four main motivators or influencers that contributed to boards or owners adopting a science-based target. Whilst directors and owners were not interviewed, the rationale for their decisions was discussed by sustainability managers.

Personal commitment/social license to operate: Boards and business owners may be motivated by both a personal commitment to taking strong action on climate change and impacts on the business's social license to operate. Some sustainability managers noted that when this was the case there was little organisational resistance to implementing science-based targets.

Climate change risks: The risk that climate change poses and how this is translated into the business's risk governance may influence the decision. Climate risks include changes in weather patterns resulting in flow on risks (e.g. infrastructure damage), and transition risks (e.g. failing to divest from carbon intensive activities or industries). Consideration of climate risk within business operations has increasing influence within governance practices at the upper levels of management.

Understanding reporting requirements: The legal reporting requirements under the *Corporations Act 2001* influenced the decision to adopt a science-based target. Climate risk is considered a material risk that affects the company's financial performance. Company directors are increasingly aware of their responsibilities and requirement to make material climate-related disclosures. Questions remain, however, as to how a company director interprets the risk and how this translates into the adoption of a science-based target.

Commercial and investor influences: Commercial and investor interests can influence boards and business owners to initiate science-based targets as part of their disclosure of climate risk. There is an expectation by investors that businesses use the TCFD as a process to disclose climate risk.

Making a business case to mainstream science-based targets

Sustainability managers are key in progressing a business case for science-based targets within businesses. The personal agency of the sustainability manager and engagement of key staff is vital in this process. A science-based target can be transformative for a business and its value chain. Whilst a sustainability manager will face several challenges there are many ways to overcome these hurdles:

- **Establish a carbon accounting framework as a precondition:** Businesses should develop a comprehensive carbon accounting framework as a minimum baseline, forming part of the business case for adopting science-based targets. **The GHG Protocol** is mainstream and standard practice.

- **Build competence in science-based target methodology:** Businesses should consider developing competence in staff around the sector guidance materials for science-based targets through training and support. It is important to keep updated on industry-specific methodology developments and to use external consultants' expertise and advice.

- **Develop the justification narrative:** Frame the business case based on relevant external influences and align this with key supporting mechanisms to move the case up to C-suite and the board.

- **Encourage staff support:** With the growing importance of climate change mitigation, staff support is less of a challenge but should still be harnessed. The support from staff across the business builds confidence in the cultural support within the business.

- **Develop relationships with board and upper management:** Liaise with upper management and board to gauge sentiment and informally educate them before presenting a business case. This will also help inform the framing of the narrative.

- **Develop risk as the lens for directors and C-suite:** When adoption of science-based targets originates from boards or owners, risk surrounding carbon disclosure (such as TCFD) and fiduciary duties of company directors, is often a driver. Targeting boards and owners around carbon risk may reduce the need for presenting an extensive business case.

There is much to learn from companies that have already made the commitment to science-based targets. There is also considerable assistance for businesses through an expansion of the methodologies and support from a community of practice for businesses committed to science-based targets. There are challenges to implementing science-based targets, but there are considerable benefits of the transformative change that they can provide.

At the time of publication, science-based targets were adopted by one-fifth of Global Fortune 500 companies.[16] The proportion of companies adopting science-based targets in the ASX500 was far less. In Australia the uptake of science-based targets by companies lags behind Organisation for Economic Co-operation and Development (OECD) market trends.

Australian companies need to join the growing trend of global companies setting net-zero emissions targets. Irrespective of the rate of adoption in any country, the aim for the business community is to have all companies committed to science-based medium and long-term targets including net-zero emissions by 2050 at the latest, and importantly that this commitment is backed by a robust and accountable system of carbon management such as the SBTi. The commitment cannot be delayed as urgent action from all sectors of society is needed now.

The recent conclusions by the IPCC's Sixth Assessment Report are unequivocal. There are increasing direct climate change impacts being experienced globally and there is a present and urgent need for significant reductions in greenhouse gas emissions.

'Human-induced climate change is already affecting many weather and climate extremes in every region across the globe. Evidence of observed changes in extremes such as heatwaves, heavy precipitation, droughts, and tropical cyclones, and, in particular, their attribution to human influence, has strengthened since the Fifth Assessment Report (AR5).'[18]

'The [latest IPCC] report provides new estimates of the chances of crossing the global warming level of 1.5°C in the next decades, and finds that unless there are immediate, rapid and large-scale reductions in greenhouse gas emissions, limiting warming to close to 1.5°C or even 2°C will be beyond reach.'[19]

Reducing GHG emissions in line with climate science is good for the planet and for business. Science-based target setting future-proofs growth, saves money, provides resilience against regulation, boosts investor confidence and spurs innovation and competitiveness – while also demonstrating concrete sustainability commitments to increasingly conscious consumers. We look forward to more businesses going beyond incremental change and moving towards the transformational changes required to put our society on a path to a climate resilient and decarbonised future.
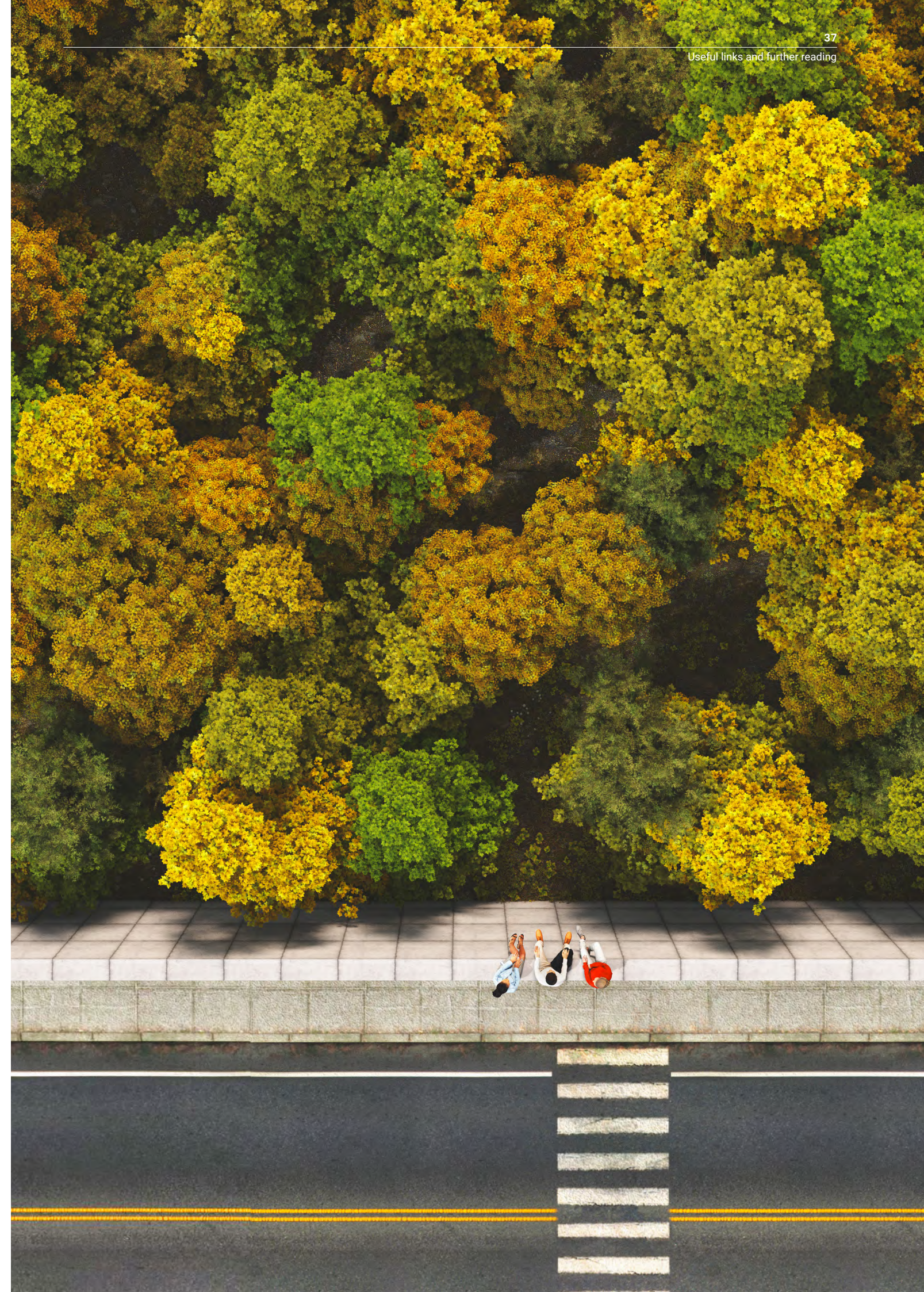
Useful links

Global Compact Network Australia, Science Based Targets Initiative

About the Science Based Targets initiative

Science Based Targets initiative resources

Science-based Target Setting Manual

WWF Australia, Science-based Targets

Further reading

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Endnotes

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