

# Internal carbon pricing for decision makers

A practical playbook to developing and applying an internal carbon price

April 2024





## Disclaimer

Information as at publication release date: 8 April 2024.

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## Australian Financial Services Licence Limitations

A price based on forecast cost of carbon offsets is often the starting point many organisations choose to use when first implementing an Internal Carbon Price (ICP). The length and cost of the carbon offset forecast should align with investment or business decision making lifespan.

It should be noted that carbon offsets, like Australian Carbon Credit Units (ACCUs) and Safeguard Mechanism Credits (SMCs), are *financial products*. To provide advice on them, the advisor is required to hold an Australian Financial Services Licence (AFSL).

This publication is general only and does not constitute financial advice under AFSL and should not be relied on as a substitute for obtaining detailed advice.



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The Climate Leaders Coalition acknowledges and pays our respects to Aboriginal and Torres Strait Islander peoples as the First Peoples of Australia whose ancestral lands and waters we work and live on. We honour their wisdom and pay respect to Elders past and present, and acknowledge the cultural authority of all Aboriginal and Torres Strait Islander peoples across Australia.

## Foreword

### Internal carbon pricing for decision makers

#### Drive change from within

Welcome to Internal Carbon Pricing for Decision Makers, a guide designed to empower leaders to take meaningful steps in addressing their carbon footprint. At its core, the playbook emphasises the paramount importance of applying a carbon price for emissions, a fundamental cornerstone of any sustainable strategy.

Many organisations have already embarked on a journey of strategic decarbonisation. However, without evaluating the true cost of carbon to the business, achievement of desired decarbonisation targets is not guaranteed.

Strategic carbon pricing means businesses can understand the investment needed and take decisive steps to decarbonise. Carbon pricing can become a lever to drive behavioural change and to actively align the organisation with its sustainability and climate change objectives.

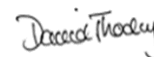
Organisations that understand their internal carbon price and incorporate it in their decision making can successfully transition their business and create a more sustainable world for future generations.

The first step towards achieving this goal is quantifying the carbon footprint of operations, products, and services. By measuring carbon emissions, leaders gain invaluable insights into their organisation's environmental impact, business risk and exposure to climate transition. Armed with this knowledge of the potential cost implications, they can make informed decisions to reduce emissions, optimise processes, and embrace renewable energy sources. In addition, costing carbon emissions opens the door to a broader set of carbon market solutions, where organisations can trade carbon emission reduction credits and foster innovative, eco-friendly initiatives.

The publication explores the methodologies for applying a carbon price, the benefits of implementing carbon reduction strategies, and how to integrate sustainability into the core operations of your organisation – with a carbon investment scheme representing a powerful mechanism for driving awareness, engagement and transformational change.

The urgency to act is not merely an abstract concept but a concrete reality for the Climate Leaders Coalition as it shapes the landscape of economic, social, and environmental progress. A commitment to measuring and reducing carbon emissions is no longer a choice but a moral and strategic imperative for leaders worldwide. The time for action is now – particularly given the publication of the first two IFRS Sustainability Disclosure Standards by the International Sustainability Standards Board (ISSB) in June 2023 and the rollout schedule planned from 2024 onwards.

Whatever stage you are at and progress you are making on the journey towards carbon neutrality and environmental stewardship, let us seize this moment, let us embrace this responsibility, and let us take decisive action to build a more sustainable world for generations to come.



**David Thodey**  
Climate Leaders Coalition  
Co-Chair



**John Lydon**  
Climate Leaders Coalition  
Co-Chair



**Lynette Mayne**  
Climate Leaders Coalition  
Executive Chair B Team  
Australasia

# Purpose of this Playbook

The internal carbon pricing for decision makers provides a practical guide on how to develop and apply an internal carbon price.

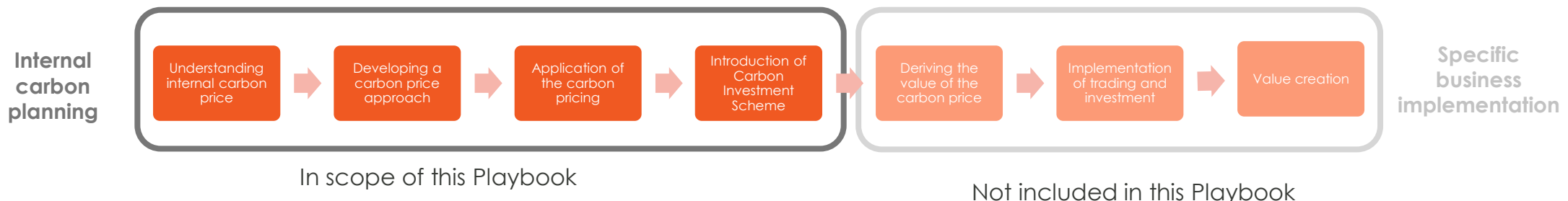


## Objective of the internal carbon pricing for decision makers

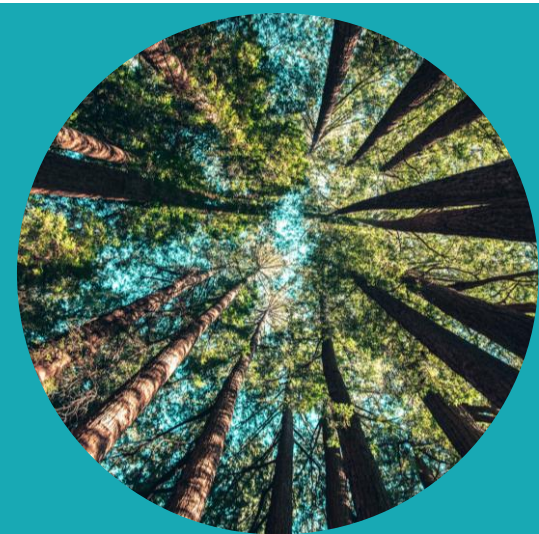
- The objective of this Playbook is to provide guidance on the development and application of an internal carbon price. This most commonly takes the form of an internal fee or a shadow price.
- This guidance explains:
  - the steps required for an organisation to apply an internal carbon price,
  - how it can inform decarbonisation strategies,
  - future participation in a Carbon Investment Scheme wherein external carbon investment or market participation can occur.

## What is not in the Internal Carbon Pricing for Decision Makers?

- The playbook provides general guidance for developing an internal carbon price; however, it does not consider implementation for a specific business.
- Internal carbon pricing informs a company's decarbonisation risk and transition investment strategies. The playbook does not:
  - derive a carbon price, which is unique to each company
  - discuss how to participate in carbon investments or the carbon market itself, or
  - explore risk and investment advice, as this needs to be tailored for each company.
- Determining where to play in these investments or markets is a more complex question that requires a strategy tailored to the business' risks and opportunities.



*Advice on carbon price is unique to each business and can only be provided under an Australian Financial Services Licence (AFSL)*



## Summary of Insights

### Why internal carbon pricing?

Climate transition risk is emerging as a key challenge for organisations as they encounter an increasingly complex regulatory landscape, experience physical climate change impacts to their asset base, and meet internal and external stakeholder expectations around environment, social, and governance (ESG) commitments.

Per World Bank statistics (2023), there are 73 carbon pricing initiatives implemented globally – covering 23 per cent of global greenhouse gas emissions. The initiatives collected revenue of close to US\$100 billion, a 10 per cent increase on the year prior. It is expected carbon pricing implementation will advance rapidly, placing increased external cost on businesses.

**Businesses have an opportunity to internalise external costs through implementing an Internal Carbon Price (ICP) and reap the benefit from proactive action.**



#### Literature review

For deeper insight into the current state of play of internal carbon pricing please refer to Appendix: Literature review

Internal Carbon Pricing (ICP) is a business practice of assigning a fee to a unit of carbon emissions within an organisation. This creates a clear link between emissions and current and future business decisions.

**Situation** – Businesses recognise the need for a climate transition strategy that considers the impact of multiple interdependent regulatory, energy, market, social, and physical climate change factors on their business operating environment.

**Problem** – Legacy business performance and investment decision-making approaches, measures, and metrics do not consider the cost impacts of carbon to an organisation, and ultimately cannot guarantee achievement of the company's decarbonisation objectives. A fit-for-purpose approach is required that can calculate the costs and benefits associated with carbon in order to underpin an organisation's transition strategy.

**Question** – The challenge that businesses face is how to evolve their measurement, reporting, and governance approaches to drive:

- Performance requirements and target setting for transition strategies,
- Transition options analysis and prioritisation, and
- Management of climate change transition investments and risks.

**Answer** – Implementing an ICP allows businesses to:

- provide a defensible approach to emissions reduction targets, both voluntary and regulatory,
- facilitate informed investment and divestment decision making, either to reduce emissions or identify business opportunities,
- drive decarbonisation and organisational change, and
- prepare for climate transition and carbon regulatory and reporting requirements.



Carbon Pricing delivers for Planet, your People, inspires Purpose and will enhance Profits. What more could a business leader hope for from such an initiative?

**Radek Sali**  
Light Warrior Group



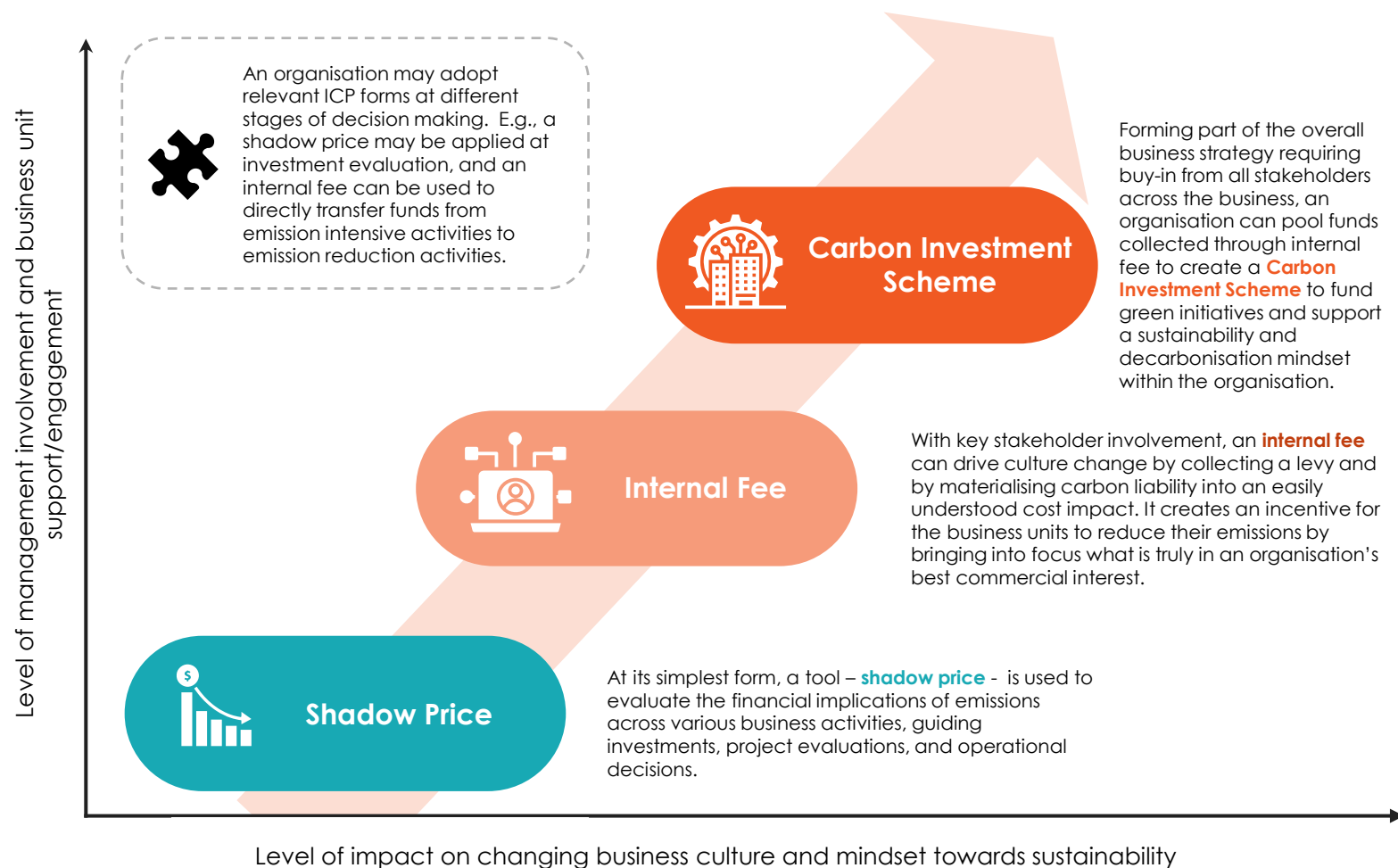


## Summary of Insights

### What is an internal carbon price?

**Internal Carbon Pricing (ICP)** is the business practice of assigning a monetary value (price) to greenhouse gas emissions as part of the business decision-making processes. The cost imposition from implementing an ICP serves as a commercial incentive for businesses to strategically plan for emissions reductions. For the ICP to efficiently facilitate achievement of decarbonisation targets, the price has to encapsulate factors such as social cost of carbon, future regulatory expectations, internal sustainability goals, cost of carbon offsets etc. Therefore, the selected price for the ICP needs to be strategically evaluated.

An ICP can be applied in a number of non-mutually exclusive forms, with a varying degree of involvement:

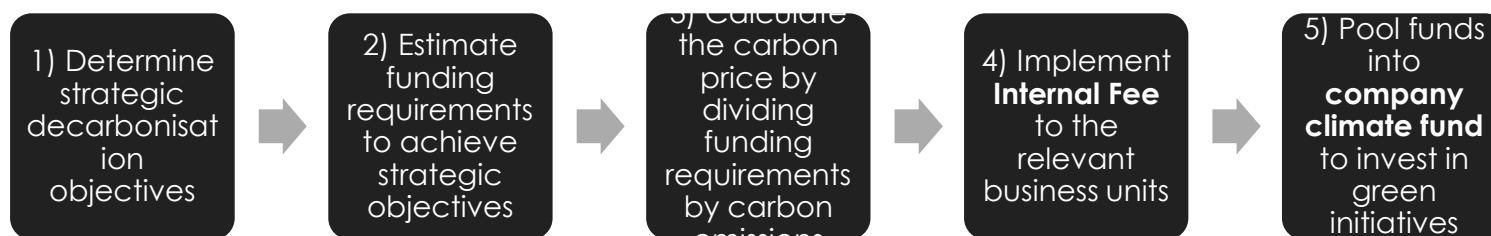




## Summary of Insights

## Carbon Investment Scheme (CIS) concept

Internal carbon pricing can form the basis for a **Carbon Investment Scheme (CIS)**. With a CIS, internal carbon fees are collected into a climate fund to invest in green initiatives that benefit the organisation. Direct impact from imposing a fee on business units drive a culture of innovation and decarbonisation – leading to better investment decisions.



### Regulatory factors

Increasing compliance scheme requirements to reduce Scope 1 and 2 emissions e.g. Safeguard Mechanism, NGER, etc.



### Stakeholder and global factors

Emissions reduction and net zero targets driving whole of economy decarbonisation, including Scope 3 emissions



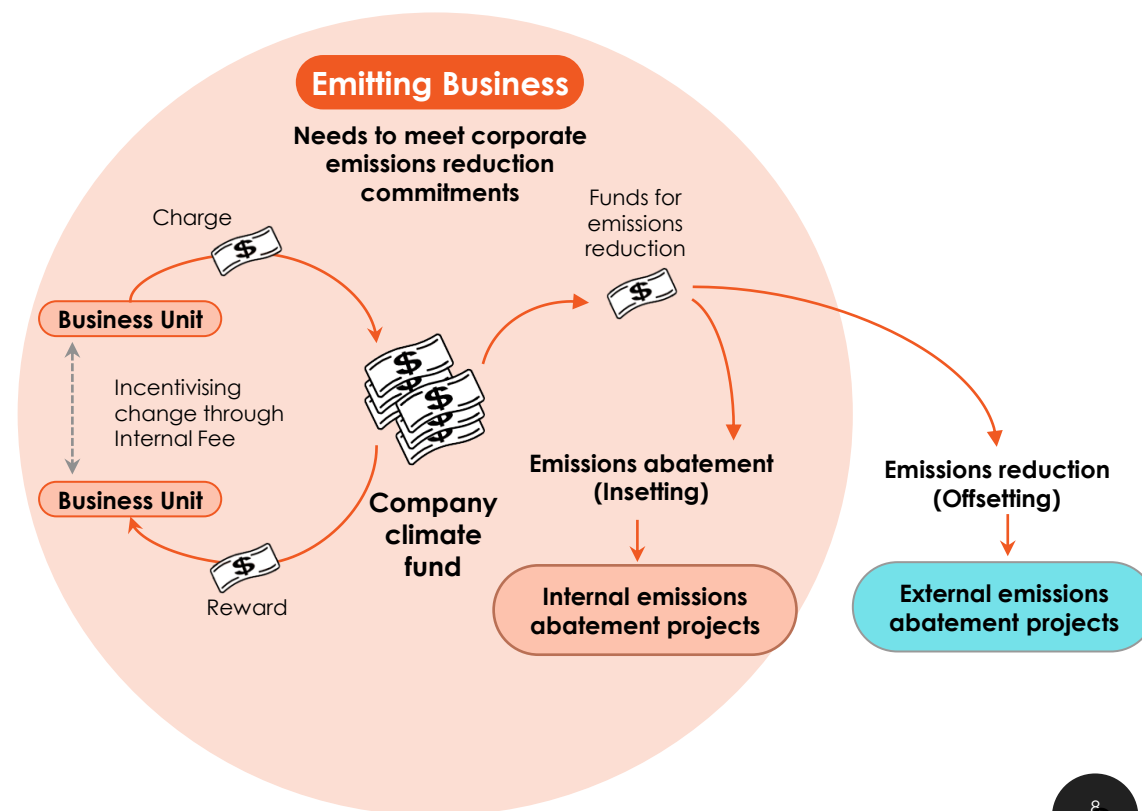
Increasing global ambition driving further requirements and action to meet emissions reduction commitments



### Disclosure obligations

Pressure to disclose climate risks under emerging domestic requirements aligned to International Sustainability Standards Boards (ISSB) reporting standards

## Carbon investment and market participation via a Carbon Investment Scheme





# Introduction to Internal Carbon Pricing

Internalising the external cost of decarbonisation can enable organisations to identify opportunities and increase profitability.

Australia has legislated GHG emissions reduction targets of 43% reduction against a 2005 baseline by 2030 and net-zero by 2050 (Climate Change Act 2022).

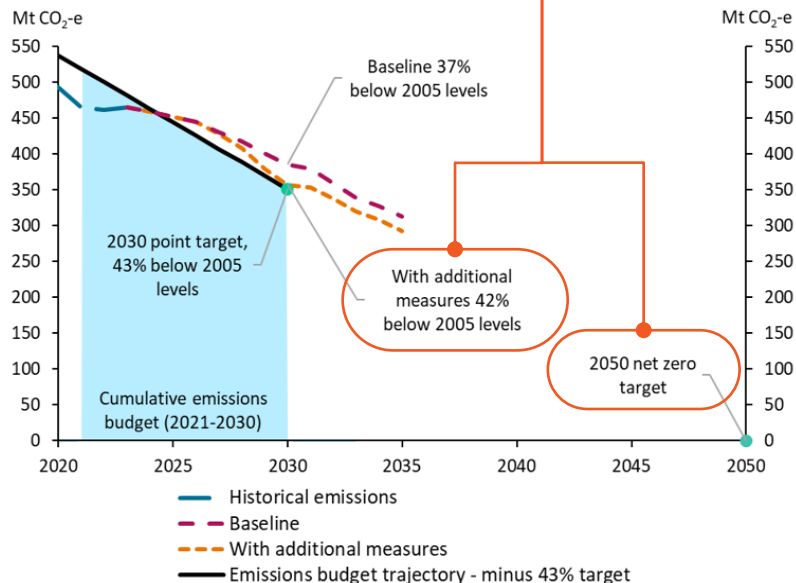
All businesses will need to do more to contribute to meeting our national emissions reduction target. Per Australian Government projections, business-as-usual will not get us there.

Existing government policy\* does not provide sufficient emissions reduction to reach the 2030 goal. This means to meet the legally binding 43% emissions reduction target, further policies and compliance obligations may be required.

\*such as the reformed Safeguard Mechanism 'additional measure', requiring large emitters to reduce emissions by 4.9% per year.

External costs are increasingly imposed on emitters to ensure Australia meets legislated targets

Instead of reactively bearing these external costs, businesses have an opportunity to internalise them through an **Internal Carbon Price** and reap the benefit from proactive action.



Source: DCCEEW, *Australia's emissions projections 2023*, November 2023



While the path ahead will not be easy, acceptance of the need to decarbonise as rapidly as possible is necessary to mitigate the transition risks associated with climate change. The transition and choices available will be different for each organisation.

**Paul Gleeson,**

Group Director, Sustainability, Aurecon



Organisations need to be more transparent about how they are measuring climate risk and what scenarios they model. Under ISSB it is not enough to simply commit to net zero by 2050 because not all net zero pathways are created equal.

**Ryan Isaac,**

Future Leader Highly Commended - Consult Australia 2024, Rising Star Nominee - Sustainability Delivery Award 2024, Senior Consultant, Sustainability, Aurecon

# Introduction to Internal Carbon Pricing (cont.)

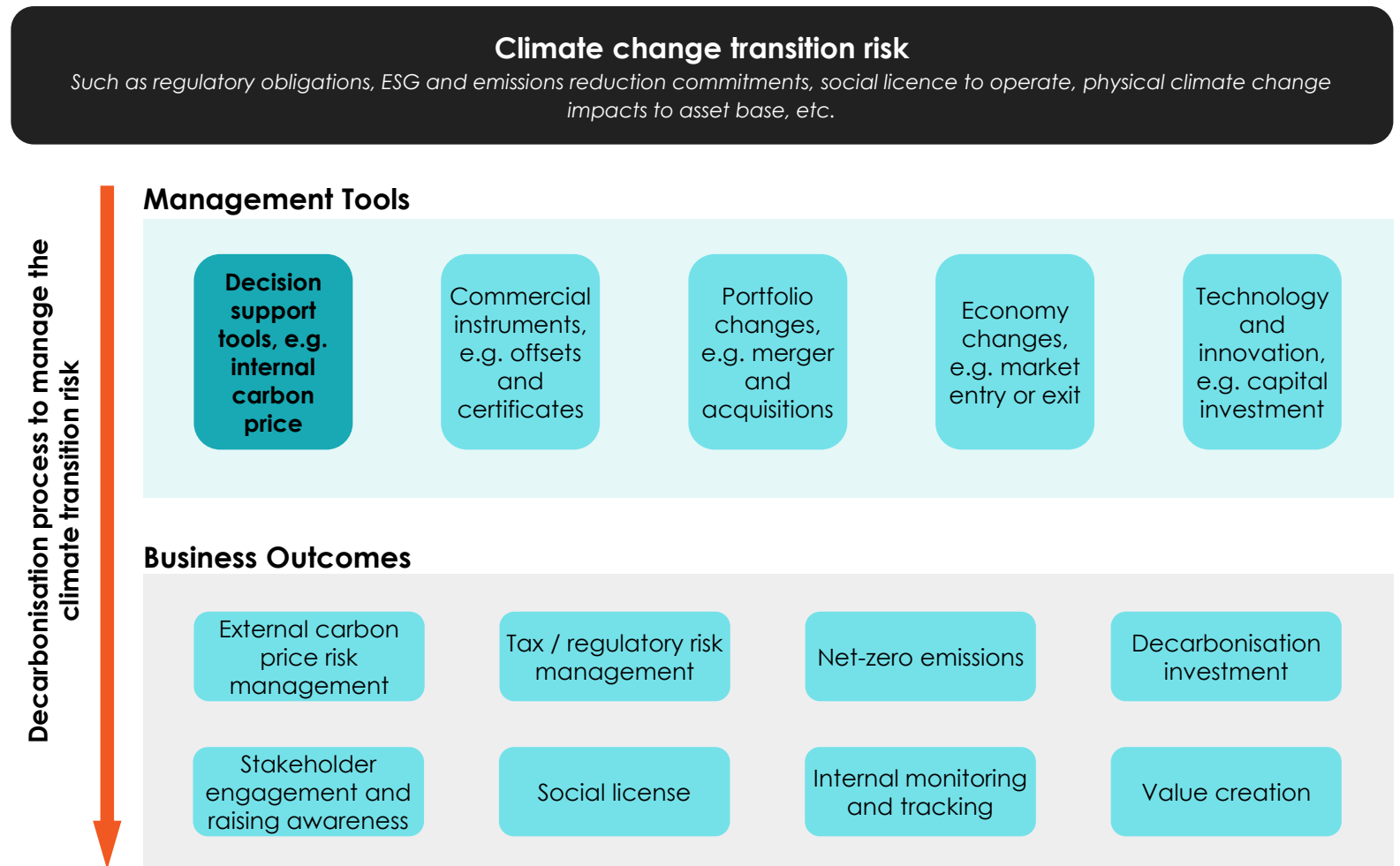
An internal carbon price is a strategic tool to help organisations manage emissions risk and for businesses to navigate the climate change transition.

An organisation may implement a decarbonisation program to minimise business impacts from climate transition risks.

There are many levers in the decarbonisation process that can be pulled to achieve different business outcomes for the organisation.

An internal carbon price compares levers, converting emissions into dollars, making the invisible more visible.

An ICP can be used by an organisation to support investment decision-making. It can also drive behavioural change and organisational awareness of the costs and consequences of carbon emissions.



# Drivers for Implementing an Internal Carbon Pricing

Organisations may seek to introduce an internal carbon price to account for the cost of carbon emissions in their operations.

An internal carbon price is a financial mechanism that companies can use to account for the cost of emissions in their operations. This price can be set by the company itself and serves as an estimate of the financial impact of the emissions that the company generates.

An internal carbon price allows proper consideration of a cost which is commonly externalised and borne by the broader community. Carbon market analytics are becoming increasingly prevalent as organisations participate in the compliance and/or voluntary carbon markets:

- **Compliance carbon market** – established by governments as a mechanism to reduce emissions. Participation is mandatory for regulated entities which typically trade and obtain emissions allowances or carbon credits to meet a compliance requirement.
- **Voluntary carbon market** – participants voluntarily create, trade and surrender carbon credits to reduce or offset emissions. These markets typically rely upon programs through which carbon credits can be created for undertaking emissions abatement activities.

As carbon pricing schemes become more common and more likely, businesses are adopting internal prices to provide them with broader transparency around the effects of their decisions.

Overall, an internal carbon price is a valuable risk management tool and behavioral change lever for companies looking to manage their carbon emissions exposure and prepare for a low-carbon future.

## Why is it useful to have an internal carbon price?

### 1. Incentivises organisational change

By making the costs and consequences of carbon emissions explicit and visible within a company, it can drive significant awareness and positive behaviour changes across employee and leadership cohorts.

### 2. Facilitates informed investment decision making

By describing the 'cost' of emissions in financial terms, an internal carbon price captures the economic cost of an externality that has previously been unpriced and therefore difficult to consider in investment decision making. Expressing emissions in financial terms enables comparison with more traditional decision-making metrics.

### 3. Demonstrates leadership

Companies that implement an internal carbon price can demonstrate their commitment to addressing climate change and position themselves as leaders in their industry.

### 4. Prepares for regulatory requirements

As governments around the world take steps to address climate change, companies that have already priced in the cost of carbon emissions will be better prepared to comply with new regulations and avoid potential financial penalties.



Internal Carbon Pricing helps to drive awareness of and behavioural change regarding an organisation's carbon emissions at all levels of an enterprise.

**Jane Watts**  
Non-executive Director, Climate Leaders Coalition



## How does an Internal Carbon Price work?

Internal carbon pricing (ICP) is a business practice of assigning a fee to a unit of carbon emissions within an organisation.

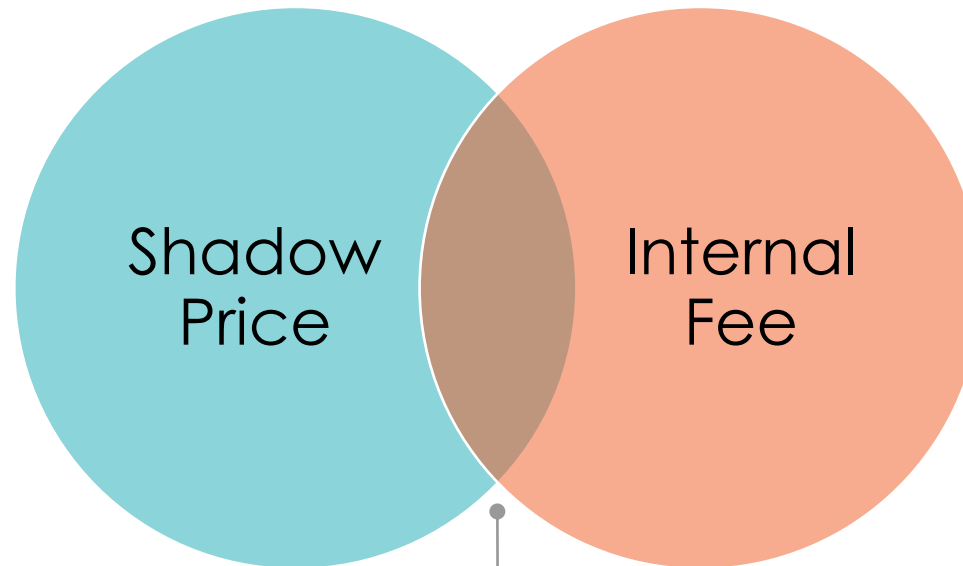


### Implementation of internal carbon price

ICP can be implemented as a **shadow price** for investment and divestment decisions.

A shadow price is a **sensitivity analysis tool** used in financial models (e.g. discounted cashflow analysis) by organisations to **compare investment options**.

A shadow carbon price does not impact cashflow or re-allocate business unit budgets.



ICP as an **internal fee** applies a charge on business units based on its GHG emissions.

Internal fee **drive business change** by "taxing" high-emitting business units and re-allocating funds to reduce emissions. It creates a **direct financial incentive** for business units to reduce their carbon footprint and contribute to the organisation's overall emission reduction goals.

Implementations of a shadow price and internal fee are **not** mutually exclusive. An organisation may adopt both at different stages of decision making. A shadow price may be applied at investment evaluation, and internal fee can be used to directly transfer funds from emission intensive activities to emission reduction activities.

# Types of Internal Carbon Price

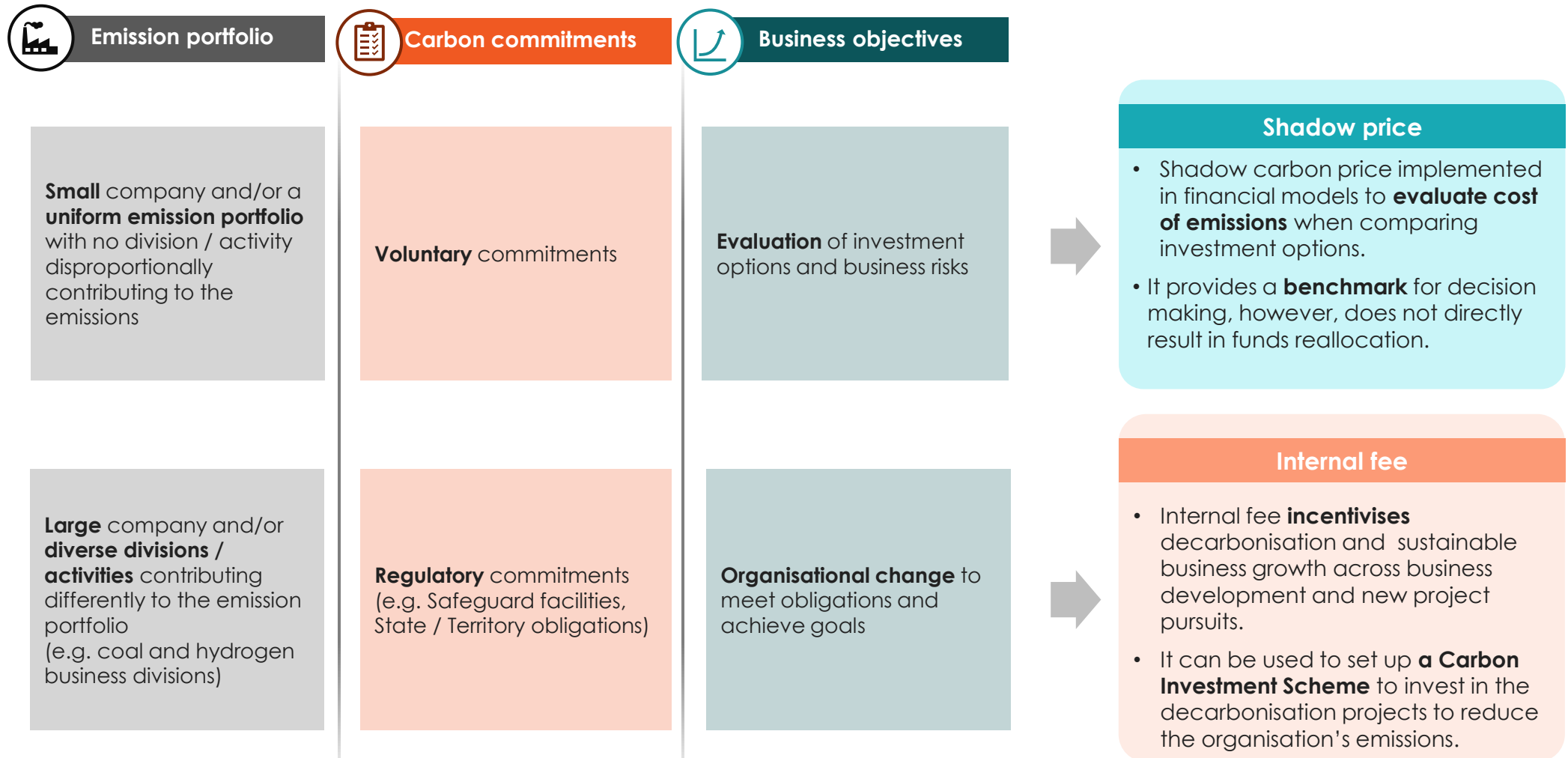
There are two common types of internal carbon pricing – the internal fee and the shadow price, both of which can be applied within an organisation.



Type of ICP	Description	Purpose	Application	Market Interaction
<b>Shadow price</b>	<p>The shadow price reflects a view of the future spot price on carbon. This price is linked to and governed by the external market.</p>	<p><b>A shadow price is tool used for assessing CAPEX investment options.</b></p> <p>The purpose of the shadow price is transition risk management; to test new investments and ventures against future environments where carbon is a material cost.</p> <p>No cashflow occurs with a shadow carbon price. It is used to stress test decisions against a carbon-priced economy.</p>	<p>The shadow price is typically used in capital budgeting/financial modelling/investment decisions by including the price of carbon associated with the investment as an expense item.</p> <p>If financial modelling is acceptable after including a carbon expense, there is elevated assurance that the investment will still be valuable if the price of carbon becomes material.</p>	<p>The shadow price is a reflection of the future carbon spot price. The forecast period should align with the investment horizon. E.g. if your investment has a 10 year horizon, financial modelling should include a 10 year forecast of spot price. Consideration should be given to salvage value if applicable, given the buyer in the future will be looking further ahead.</p>
<b>Internal Fee</b>	<p>An internal fee is an internal price on carbon that reflects the cost to decarbonise, unique to each company and/or it reflects a view on potential future regulatory cost/penalties.</p> <p>The assigned internal price essentially becomes an organisation's internal currency for carbon emissions, influencing how business units account for and manage their carbon footprints.</p>	<p><b>An internal fee is used to incentivise change.</b></p> <p>The purpose of the internal fee is to incentivise decarbonisation by making the impact of carbon emissions felt by the high emitting business units. Fees collected can be pooled into a Carbon Investment Scheme used to invest in emissions reduction activities.</p> <p>Funds re-allocations within the business occur with internal fee.</p>	<p>The internal fee reduces and reallocates business units' budgets in proportion to their carbon emissions</p> <p>Strong internal buy-in is required to ensure the success of the internal transaction to reallocate funds. Reallocated funds are used for decarbonisation activities, e.g. investment in renewable energy generation that can benefit all business units in the organisation.</p>	<p>An Internal fee price could be set based on factors such as the social cost of carbon, future regulatory expectations, or internal sustainability goals.</p> <p>It could also be set in reverse, where the organisation first sets a decarbonisation budget. This budget is then divided by the total emissions of the organisation to calculate the internal fee price.</p>

# Choosing an Appropriate Internal Carbon Price

Choosing an appropriate internal carbon pricing depends on the emission portfolio, carbon commitments and objectives of each organisation\*.

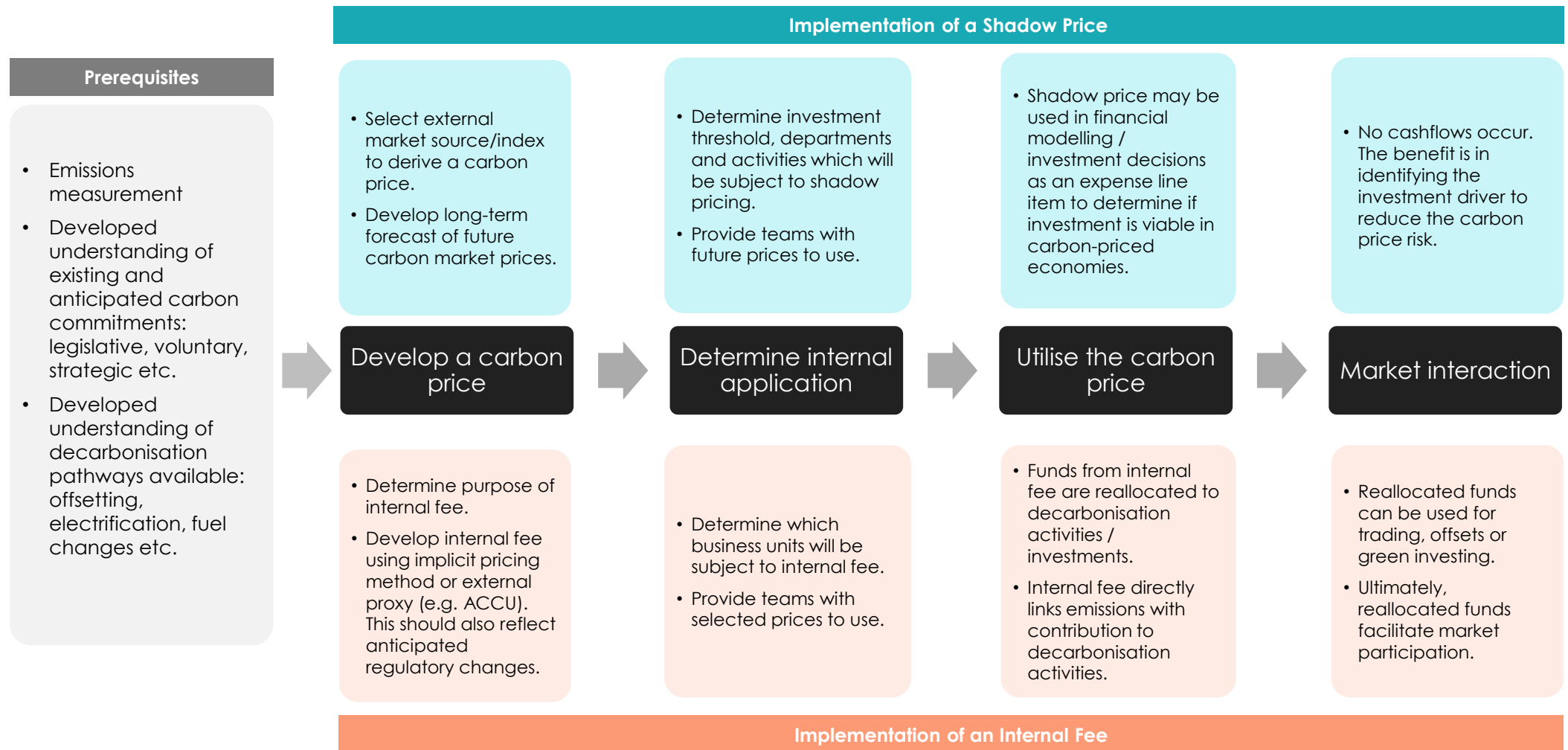


\*Choosing a shadow price or an internal fee is not mutually exclusive.



# Roadmap to Introducing an Internal Carbon Price

While internal carbon pricing facilitates decarbonisation decision-making, prior strategic business planning on decarbonisation pathways is a prerequisite



# Capturing True Cost of Carbon

The value of the ICP is derived from aligning with business objectives and by mitigating climate risk.

Historical local or international carbon credit market price

- *Start point*

Forecast of carbon credit price that considers decarbonisation costs of economy

- *Good*

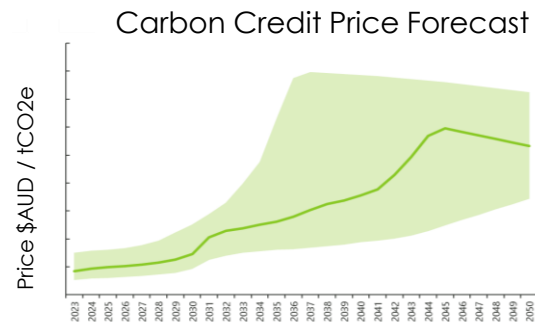
Carbon price tailored to your business risk appetite, targets and drivers

- *Ideal*



Using historical carbon market price is **unlikely to capture true cost of carbon** for the business:

- It does not consider technological decarbonisation
- It does not reflect the true variability of carbon prices overtime



For carbon pricing to be **defensible** and **effective**, it should also reflect the business activities.

Using a forecast of carbon price that considers general decarbonisation costs **builds in a business cost of carbon emissions reduction**, however:

- It may not reflect the whole cost of CO<sub>2</sub> abatement for your business

For the carbon pricing to be defensible and effective, it can be tailored to reflect the business drivers:

- Customers demanding net zero products & services
- Disclosure obligations (e.g. ISSB)
- Investors desire low emissions business and returns
- International costs, e.g. EU Carbon Border Adjustment (CBAM)
- Domestic Compliance Costs e.g. Safeguard Mechanism
- The real cost of CO<sub>2</sub> abatement for your business

# Managing an Internal Carbon Price

Setting up an appropriate carbon price is a key governance tool that directly impacts financial decisions. To be effective, its implementation should be an integrated business process that aligns with the corporate strategy.



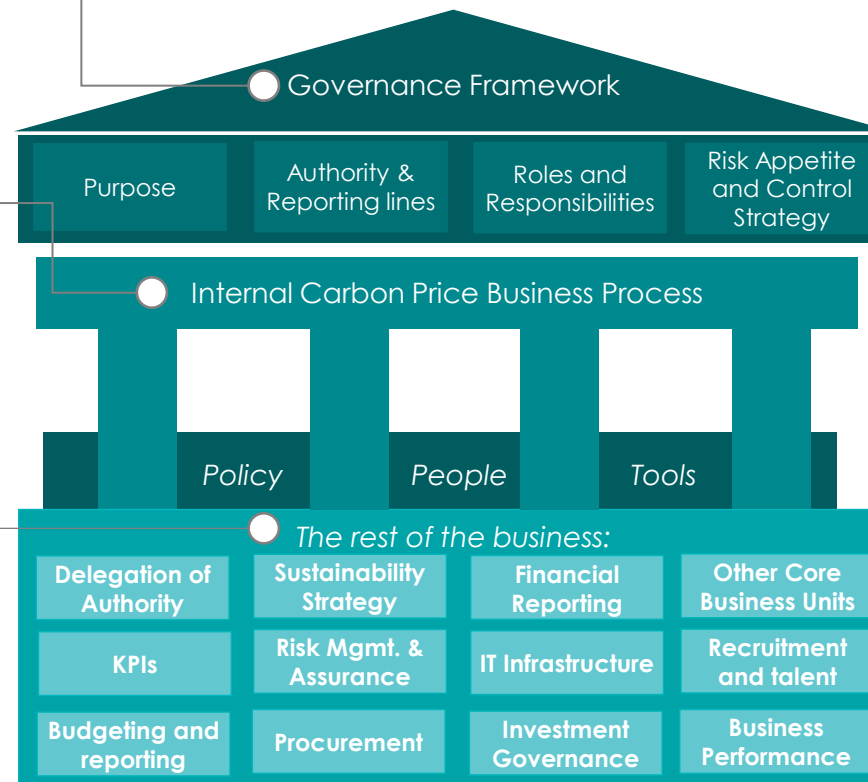
- Establish a clear purpose for the internal carbon price, which aligns to (and evolves with) corporate strategy
- Identify where decision-making authority and accountability resides
- Integrate with Corporate Risk Appetite, Compliance and Internal / External audit functions



- Define the key processes and sub-processes being performed
- Identify inherent process risks (e.g. financial loss, reputation damage, fraud, non-compliance) and implement internal controls (e.g. segregation of duties, access, approvals) to prevent and detect process deviation.
- Develop standard guidance, tools, flowcharts and systems to enable personnel to perform required process(es).
- Ensure a consistent, reliable and auditable process



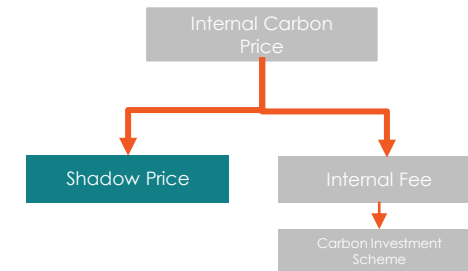
- Integrate the internal carbon price process into the broader business, to leverage and align with existing infrastructure, functions, and culture



## Examples of Questions that a Governance Framework will address:

- “Who has the authority to determine when, and how, an internal carbon price is used?”
- “How quickly can the process adapt if a change in Corporate Strategy occurs?”
- “How can the Board and Executive obtain assurance that the process is operating as intended?”
- “How will internal carbon price activities be recorded / disclosed in financial reports?”
- “What triggers are in place to indicate that a change in internal carbon price application may be required?”
- “How do we ensure that all internal carbon price applications are appropriately authorised?”
- “How do we ensure our business clearly understands the risks associated with an internal carbon price and has the capability to manage these risks effectively?”





## Applying an Internal Carbon Price

### Shadow Price

The shadow price is typically used to future-proof (stress test) investment decisions by pricing carbon emissions associated with the investment as a negative cashflow.

If an investment still meets an organisation's hurdle rate after pricing carbon emissions, there is elevated assurance that the investment will still be valuable if the price of carbon becomes material.

Potential options for deriving a shadow price

A Shadow Price is derived from an estimate of a future carbon spot price. The future carbon spot price estimate should cover the investment horizon in question.

A Shadow Price is likely to require a choice which market(s) base to use for forward estimates e.g. the local Australian market (ACCU) or an international view (EU ETS). The price selected may reflect your business's local and international obligations and stakeholders.

A Shadow Price should reflect expectations around future market prices of carbon, so that if economies require carbon emissions to be paid for during the life of the investments, this expense has been accounted for in financial modelling.

Shadow Carbon Prices can be included across an organisation in all investment decision-making, or on a project basis, such as NPV modelling.

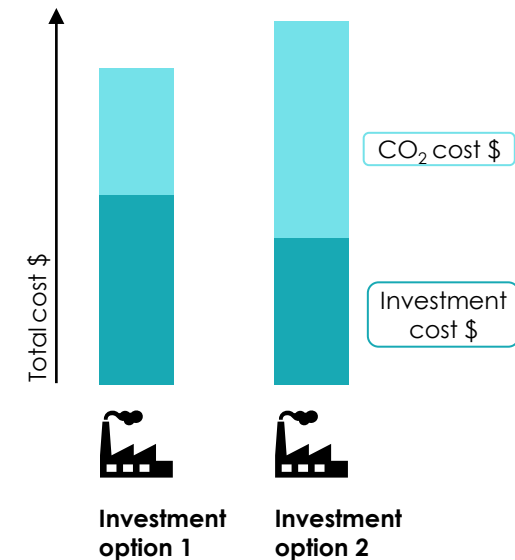
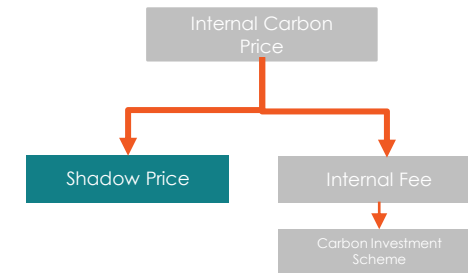


## Case Study Energy and resource companies

Large energy and resources companies with significant carbon footprints have been early adopters of the shadow price. A number of major petroleum companies have publicly stated their support for carbon pricing as a tool to address climate change, incorporate carbon pricing scenarios into their strategic planning and risk management processes.

One organisation uses a shadow carbon price to assess the potential impact of carbon pricing policies on its business. This internal carbon price is used in investment decision-making and helps to identify high-carbon assets that may be at risk of becoming stranded in a low-carbon future.

Whilst carbon pricing is used in their risk assessments, it's just one of several factors they consider. Other factors, such as technological advancements, regulatory changes, and market trends, are also taken into account when assessing the potential impact of climate change on their business.





## Application of a shadow carbon price to an infrastructure services organisation

### About Ventia

Ventia provides operation, maintenance and management services for public and private assets and infrastructure.

Ventia's emissions are largely associated with the fuel and electricity usage required to carry out their contracts. Diesel for vehicles, plant and equipment represents the greatest contributor.

### Shadow Price

Instead of being used as a tool to compare investment options, for a service oriented organisation like Ventia, a Shadow Price can be used to stress test the financial viability of existing contracts if the 'cost' of carbon was fully priced into the cost base.

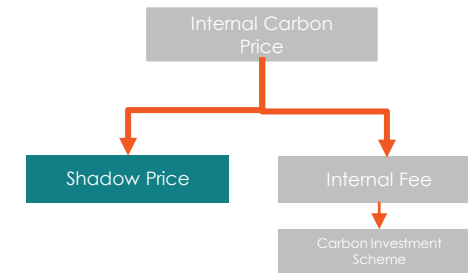
The Shadow Price modelling was based on the assumption that Ventia's contract was subject to a net zero requirement, achieved solely through retiring carbon offsets.

In brief, the steps were:

1. Analysis of emissions data for a single Ventia contract.
2. Indicative low/medium/high case static Shadow Price chosen to provide broad sensitivity analysis based on the cost of carbon credits in Australia.
3. Shadow Price applied to the contract to determine the 'cost' of emissions for a single year.

### Pilot learnings

- Robust modelling requires consideration of complex variables – i.e. carbon price volatility, price growth over time, offset procurement strategies.
- Price derivation should consider future price forecast to extract greater meaning from results.
- Inputs and assumptions differ depending on the desired business outcomes.



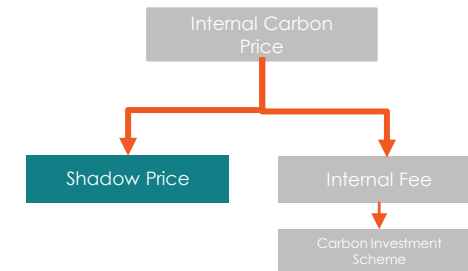
### Findings

- Modelling highlighted the cost of achieving net zero with no decarbonisation (i.e. the cost of inaction if a regulatory requirement were to apply).

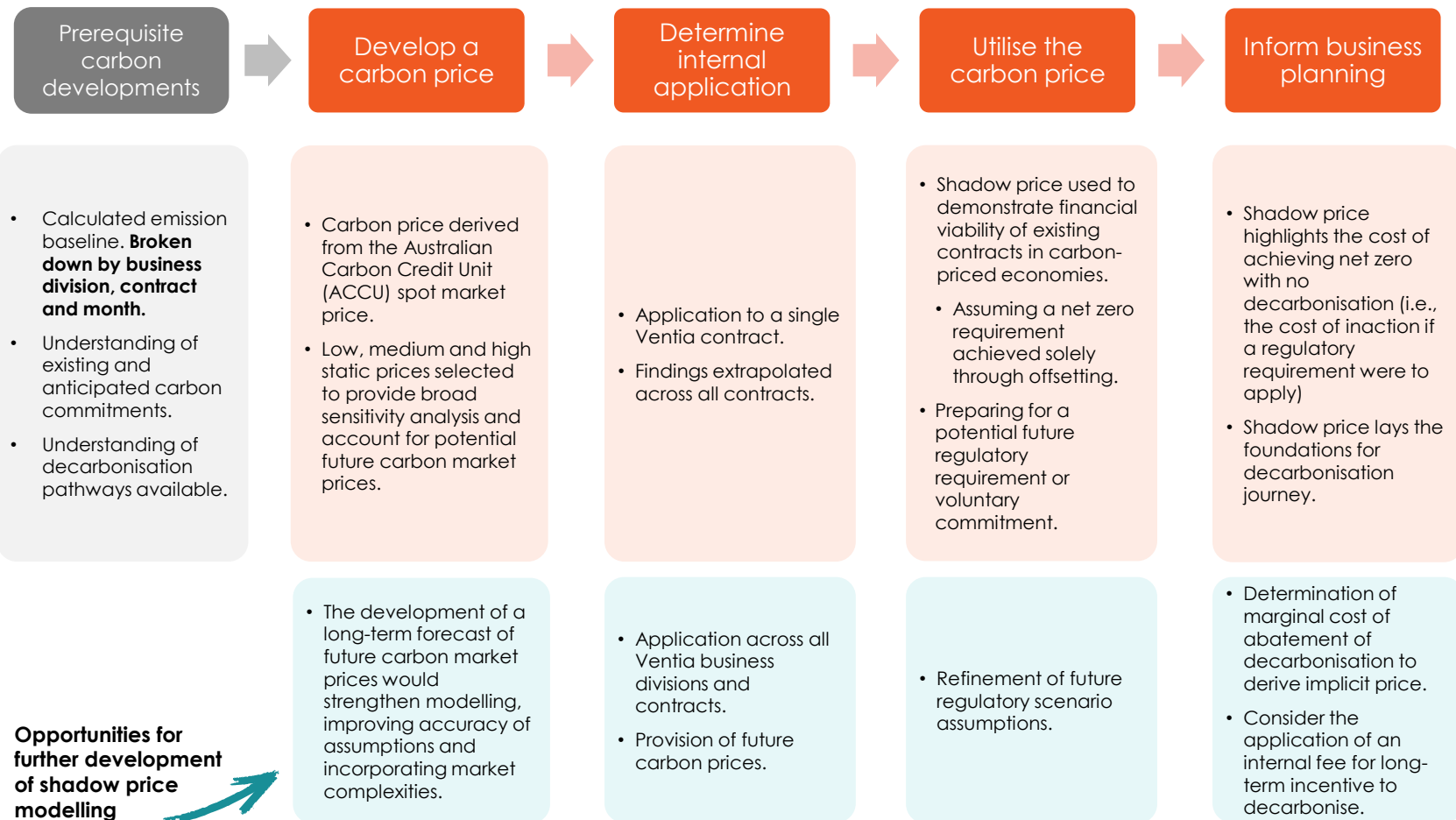
### Outcomes for the future

- Lays the foundation for business and decarbonisation planning.
- Testing the resilience of future contracts in a carbon constrained world.
- Differentiation from competitors on sustainability grounds.
- Value to investors and other stakeholders.

## Pilot: Ventia Shadow Price



## Shadow Price application – roadmap steps and proof of concept



## Pilot: Ventia Shadow Price



## Applying an Internal Carbon Price

### Internal Fee

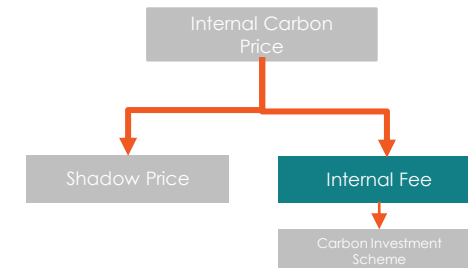
The internal fee is applied to business units as a cost for associated carbon emissions.

**It requires a transaction to occur, either as a cashflow or an internal charge.** The internal fee could be structured as an internal cost or a cap-and-trade system.

Funds generated from the internal fee are used for decarbonisation activities.

Potential options for deriving an internal fee price

1. An **implicit** carbon price is derived by determining the price to remove 1 tonne of CO<sub>2</sub>-e specific to an organisation. This approach uses technical, engineering and commercial analysis to tailor a price for the organisation based on internal context, such as the costs of decarbonisation.
2. An internal carbon price can be set by an organisation based on a view of potential external carbon markets, whereby an internal **price is a reflection of expected future regulatory obligations.**



Internal carbon fees should be set at a level that encourages behavioural change in an organisation – Too low can facilitate inaction, too high can halt business activities.

Internal carbon fees can be applied across entire organisations, or selectively to certain business units. **The imposition of an internal fee must be top-down and align with corporate strategy.**



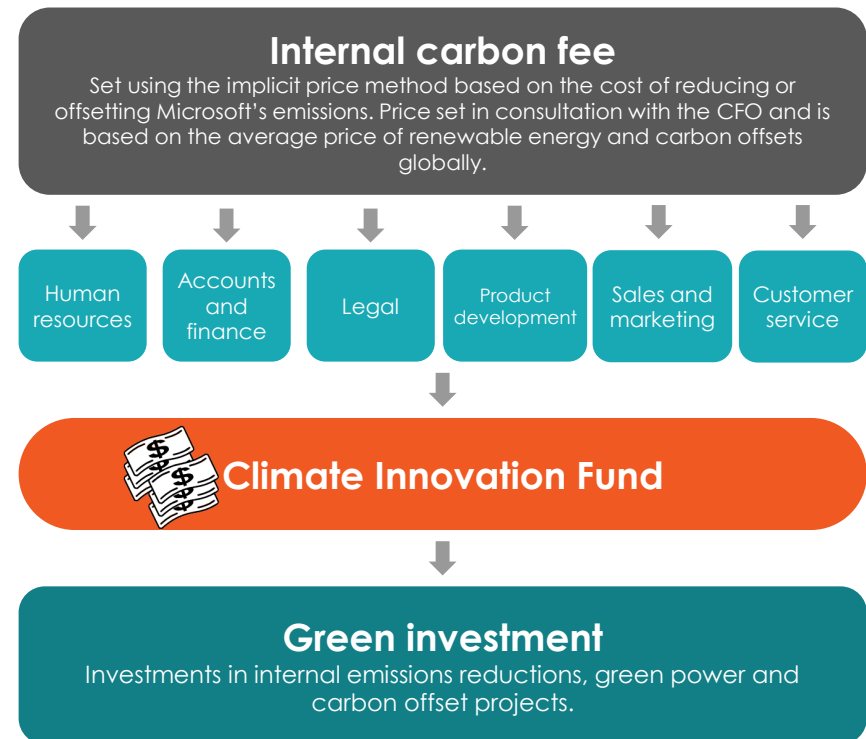
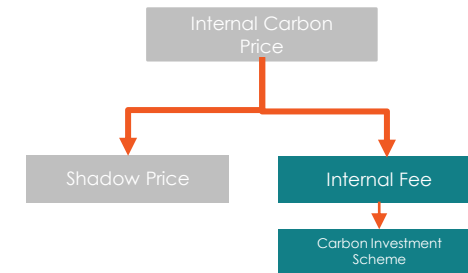


## Case Study Microsoft

Microsoft established an internal fee program in 2012 to hold business units accountable for carbon emissions and encourage environmental impact reduction.

Microsoft's internal fee works by charging business units for emissions associated with energy consumption, air travel, and data centres. These funds are pooled in a central 'Climate Innovation Fund' which is invested in emissions reduction initiatives. The fund now contains over USD\$1 billion.

The program has reduced emissions by over 10 million metric tonnes, encouraged employee action, and has inspired other companies to develop similar initiatives.



Our fee is paid by each division in our business based on its carbon emissions, and the funds are used to pay for sustainability improvements. By charging business groups based on the emissions they generate, we help to drive efficiency initiatives and innovation across our business. The carbon fee affects investment decisions by providing an incentive, the financial justification, and in some cases the funds for climate-related energy and technology innovation. The fee also helps drive culture change by raising internal awareness of the environmental implications of our business and establishing an expectation for environmental and climate responsibility within the company.

Microsoft  Microsoft



## Wesfarmers

Application of internal carbon pricing to a conglomerate with a diverse emission portfolio

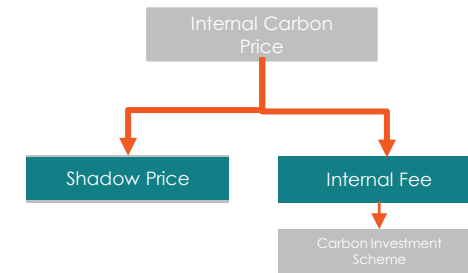
### About Wesfarmers

Wesfarmers is a large diversified Australian conglomerate\*. WesCEF (chemicals, energy and fertilizers), Bunnings (retail) and the Corporate Business Development function participated in the pilot.

### Internal Carbon Price and Decarbonisation Framework

Wesfarmers has a Group Climate Policy that requires its divisions to set net zero targets and is required to be implemented across all divisions. Bunnings and WesCEF have clear public-facing interim and net-zero Scope 1 and Scope 2 targets.

Since 2014, Wesfarmers has incorporated a shadow carbon price into capital allocation and capital expenditure decisions. However, as its approach to decarbonisation has matured, there is a need to review its application of internal carbon pricing.



### Findings

Divisions across Wesfarmers have very different reasons and risk appetite for decarbonisation, and hence, potentially different value of the true cost of carbon to their business (value of ICP).

### Outcomes for the future

- At the Group level, consider diversification of ICP structure to match division objectives
- Create transparency within the division on how the ICP process can support their divisional decarbonisation objectives

Internal Carbon Pricing (ICP) is a tool that can be used to contextualise Group policies across the divisions – how to translate divisional strategy into action.

As a part of the pilot:

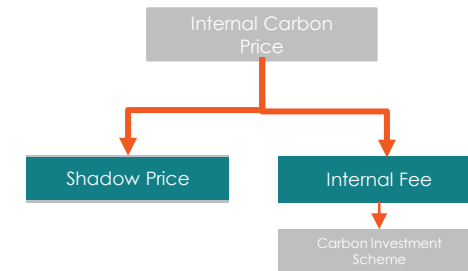
1. Stakeholder engagement was conducted to understand how ICP is currently being used, and how it can be adjusted to better reflect the risks and opportunities related to its decarbonisation goals
2. The main drivers for ICP implementation were identified for each division.

### Pilot learnings

- A decision framework that incorporates ICP application is important to provide sufficient support for the divisions' decision making. This framework can drive a consistent view of objectives across the conglomerate by translating strategic goals into operational objectives.
- The shadow price needs to be sufficiently high enough to make the business case for internal decarbonisation projects more economic.
- For Safeguard Facilities, the true cost of carbon can incorporate associated liability (or opportunity) under the Safeguard Mechanism – using the value of Safeguard Mechanism Credits (SMCs). It can then be reflected using a shadow cost price in business cases on a project-by-project basis.

## Pilot: Wesfarmers Shadow Price and Internal Fee

\* Wesfarmers business operations cover: home improvement, outdoor living products and supply of building materials; general merchandise and apparel; office and technology products; health, beauty and wellbeing products and services; management of a retail subscription program and shared data asset; wholesale distribution of pharmaceutical goods; manufacturing and distribution of chemicals and fertilisers; development of an integrated lithium project, including mine, concentrator and refinery; industrial and safety product distribution; gas processing and distribution; and management of the Group's investments.



## Aligning Internal Carbon Pricing with Business Objectives

Business Objective	ICP Rationale	Applicable Divisions	Type of ICP	Implementation nuance
<b>Capital Project stress testing</b>	Determine carbon exposure to potential market price, both opportunity and threat	<ul style="list-style-type: none"> <li>All divisions</li> </ul>	Shadow Price	Low, medium and high carbon market forecast
<b>Safeguard Mechanism</b>	Determine Scope 1 carbon exposure to Safeguard Mechanism baselines, both opportunity and threat	<ul style="list-style-type: none"> <li>WesCEF</li> </ul>	Shadow Price	Low, medium and high carbon market forecast + SMC opportunities
<b>Support decarbonisation by incentivising internal activity</b>	Apply internal budget charges to operational teams for carbon emissions to financially incentivise low carbon decision-making	<ul style="list-style-type: none"> <li>All divisions (where relevant / opting in)</li> </ul>	Internal Fee	Shadow Price value + Premium sufficient to incentivise low carbon decision-making
<b>Business strategy and stress-testing</b>	Capture cost of the decarbonisation initiatives in the business strategy	<ul style="list-style-type: none"> <li>All divisions and/or</li> <li>Group</li> </ul>	Shadow Price	Carbon market forecast + Premium based on the desired progress of decarbonisation
<b>Merger, Acquisition &amp; Divestment</b>	Determine the impact of M&A and divestment on Wesfarmers' emissions profile.	<ul style="list-style-type: none"> <li>Group</li> </ul>	Shadow Price	Low, medium and high carbon market forecast

## Pilot: Wesfarmers Shadow Price and Internal Fee

# Basis of a Carbon Investment Scheme

The internal fees can be pooled to create a climate fund as a part of broader carbon investment scheme (CIS).

## Business outcomes from implementing an internal carbon price



The Carbon Investment Scheme provides organisations with a unique opportunity, allowing you to scale your business whilst not growing your emissions.

**Brett Shoemaker**  
Former Chief Sustainability Officer, Microsoft ANZ



### The Internal Carbon Price:

The internal carbon price is used to determine a financial cost associated with an activity based on the amount of carbon emissions.



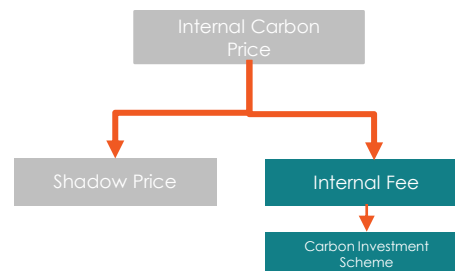
### Cost to the business:

Business units are charged a tangible figure that applies to the emissions they produce both now and into the future.



### Carbon Investment Scheme:

The pooled fees are used for efficient decarbonation using all the available options which include on-site emission reductions as well as carbon credits.

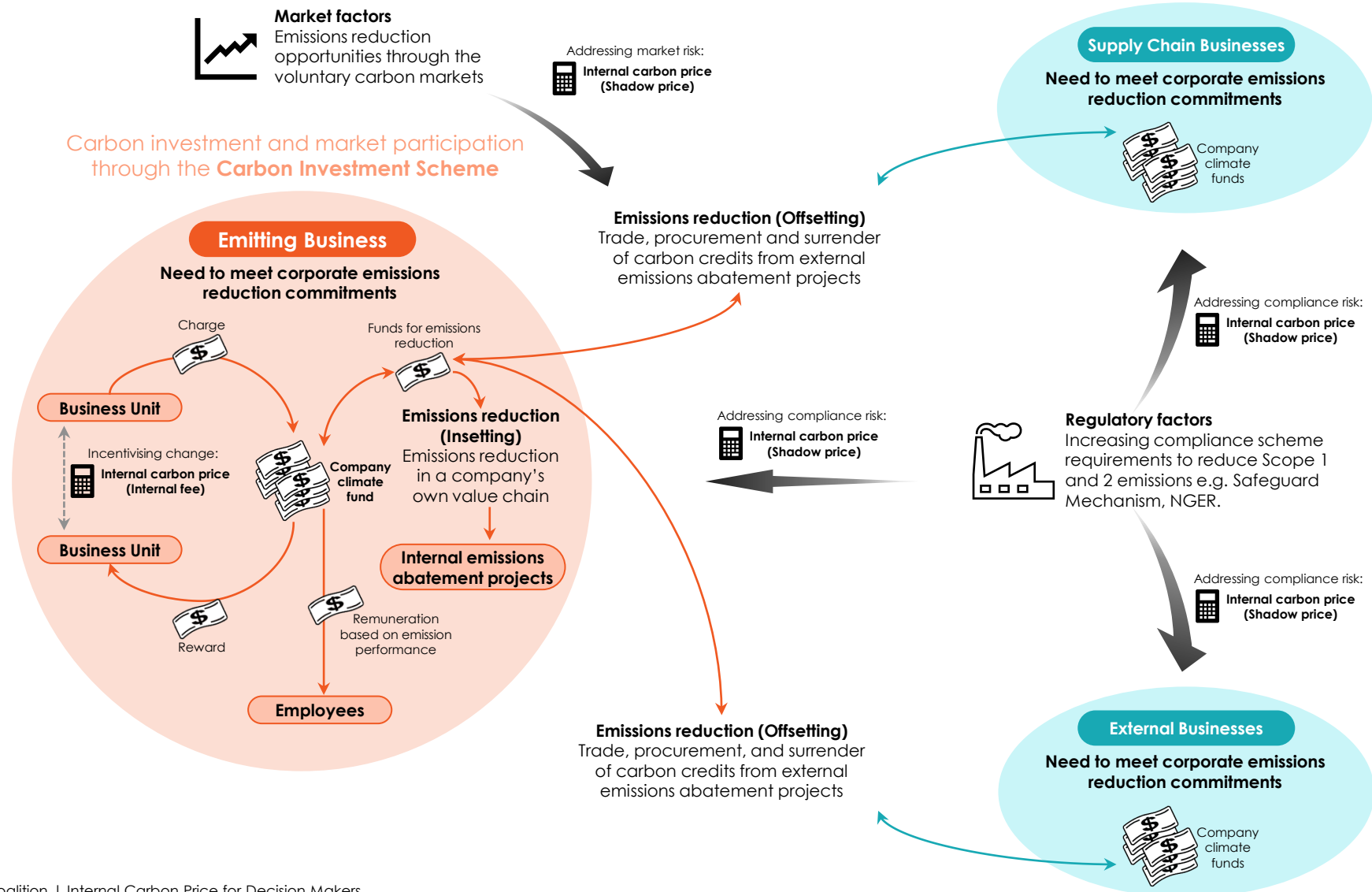


### Literature review

For more on the basis for a Carbon Investment Scheme please refer to Appendix: Literature review

# Carbon Investment Scheme Ecosystem

A CIS sits inside an ecosystem of emissions reduction commitments, requirements and opportunities beyond an individual organisation.





# Acknowledgments

In a dynamic and evolving context understanding the emissions profiles and the costs and opportunities within the organisation will deliver value



## WORKING GROUP



**Dr Jane Watts**  
Non-executive Director,  
Carbon Investment Scheme,  
B Team Australasia (BTA)



**Ben Power**  
Principal, Energy & Carbon,  
Aurecon  
E: ben.power@arecongroup.com



**Richard Liu**  
Senior Consultant, Carbon Markets,  
Aurecon



**Radek Sali**  
Chair, Light Warrior Group



**Nicole Joffe**  
Principal, Carbon Markets,  
Aurecon  
E: nicole.joffe@arecongroup.com



**Emma Cho**  
Senior Consultant, Decarbonisation,  
Aurecon



**Matthew Tominc**  
Chief Investment Officer,  
Conscious Investment  
Management



**Rosie Walshe**  
Consultant, Carbon Markets,  
Aurecon



**Ollie Syniagovska**  
Senior Consultant, Carbon Markets,  
Aurecon

## ASHURST



**Elena Lambros**  
Partner



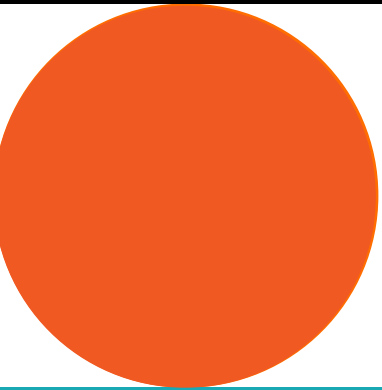
**Dr Michael Duggan**  
Director  
E: michael.duggan@ashurst.com



**Charlotte O'Sullivan**  
Executive



**Harriet Curran**  
Lawyer



**Disclaimer:** The information contained in this Internal Carbon Price Playbook is accurate at the date of publication 8 April 2024.

**Climate Leaders Coalition**

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