



Insurance Council  
of Australia



# General Insurance Industry Guidelines Scope 3 Emissions



### Acknowledgement of country

The Insurance Council of Australia acknowledges the Traditional Owners of Country throughout Australia and their continuing connection to land, culture, sea and community. We recognise the tens of thousands of years of continuous custodianship and placemaking by First Nations peoples and their proud role in our shared future. This report was produced on the lands of the Gadigal people of the Eora Nation. We pay our respects to Elders past, present and emerging.

### About this Report

This guide has been written at a time when many relevant regulatory and voluntary standards and guidelines are still under development. The guidance therein may therefore be superseded in future – for example, if the Partnership for Carbon Accounting Financials (PCAF) develop a standard for Insurance Associated Emissions (IAE) for homes.

# Contents

## Part A

### Scope 3 Emissions Guide

1	Executive summary	4
2	Introduction	5
3	Significant sources of Scope 3 emissions	9
4	Calculating organisational Scope 3 emissions	17

## Part B

### Decarbonisation Supply Chain Engagement Roadmap

1	Executive summary	41
2	Introduction	42
3	Process overview	44
4	References	62



# Part A

1	Executive summary	4
2	Introduction	5
3	Significant sources of Scope 3 emissions	9
4	Calculating organisational Scope 3 emissions	17

# Scope 3 Emissions Guide





# 1. Executive summary

**This guide provides a framework for general insurers to measure, manage and disclose their Scope 3 emissions in alignment with the Australian Sustainability Reporting Standard AASB S2.<sup>1</sup> The guide addresses the complex challenge of measuring and reporting indirect emissions across general insurance operations, with a particular focus on home and motor claims.**

<p>The guide identifies that the most significant sources of emissions for insurers typically include insurance-associated emissions (IAEs), financed emissions, and claims-related emissions.</p> <p>The guide provides an eight-stage process for Scope 3 emissions reporting, from defining general principles through to disclosure and target setting. This structured approach helps general insurers navigate the complexity of emissions reporting whilst ensuring alignment with regulatory requirements and stakeholder expectations.</p>	<p>For claims emissions, the guide provides flexibility in categorisation, allowing general insurers to classify these as either “Category 1 (Purchased Goods and Services)” or “Category 11 (Use of Sold Products)”<sup>2</sup>, depending on their approach to calculation and reporting. Detailed methodologies are provided for calculating emissions across both motor and home insurance claims, including industry average factors for initial estimation.</p> <p>The document emphasises data quality and improvement over time, particularly for material emission sources. It acknowledges the practical challenges general insurers face in data collection and provides a framework for progressively improving data quality.</p>	<p>The guide includes specific consideration of how to treat cash settlements, temporary accommodation during repairs, and other insurance-specific scenarios for the purpose of calculating emissions.</p> <p>Implementation of the guide requires cross-functional collaboration and engagement on an ongoing basis. The guide provides specific guidance on materiality thresholds and when to reassess boundaries or calculation approaches, helping insurers manage the resource implications of emissions reporting.</p> <p>This guide ultimately aims to support the transition of Australia’s general insurance industry to net-zero emissions by 2050, as outlined in the Insurance Council of Australia’s Climate Change Roadmap.<sup>3</sup></p>
---	---	---

## Key recommendations

### Data quality

Prioritise obtaining high-quality data for the most material emission sources first, particularly focusing on claims, insurance-associated emissions and financed emissions. Develop a clear data improvement plan with timelines and responsibilities.

### Boundary setting

Carefully consider and document organisational and operational boundaries at the outset, ensuring these align with financial reporting structures where possible, while meeting stakeholder needs.

### Claims emissions

Select and consistently apply either Category 1 or Category 11 classification for claims emissions, based on the insurer’s degree of control over claims settlement and data availability<sup>2</sup>.

### Regular review

Establish a process to regularly review and update emission calculations, particularly when material changes occur in business operations or regulatory requirements.

### Assurance readiness

Prepare for increasing assurance requirements by maintaining robust documentation of calculation methodologies, data sources and assumptions, progressing from limited to reasonable assurance over time.

1. Australian Accounting Standards Board (2024) Australian Sustainability Reporting Standard AASB S2 Climate-related Disclosures.

2. Greenhouse Gas Protocol (2011) Corporate Value Chain (Scope 3) Standard.

3. Insurance Council of Australia (2024) Climate Change Roadmap Towards a Net-Zero and Resilient Future: 2024 Update.



## 2. Introduction

### Purpose and context

**The Insurance Council of Australia’s landmark Climate Change Roadmap, ‘Towards a Net-Zero and Resilient Future’<sup>1</sup>, was released in November 2022 and provides a framework for general insurers to achieve net-zero by 2030 for their operations, and work towards achieving net-zero across their investments, supply chain and underwriting no later than 2050. The roadmap is updated annually to ensure it reflects the latest insights on climate action for the general insurance sector.<sup>2</sup>**

To help insurers achieve progress against the roadmap, the Insurance Council engaged Andefena to develop a Scope 3 Guide for the Australian general insurance industry. The purpose of the guide is to:

- Outline the overarching processes aligned with the requirements of the Australian Sustainability Reporting Standard AASB S2 Climate-related Disclosures (‘AASB S2’)<sup>3</sup>
- Provide possible and best practice approaches to Scope 3 emissions boundary setting
- Provide materiality guidance across Scope 3 emissions categories relevant to the Australian general insurance industry

- Establish calculation methods for insurance claims emissions

Ultimately, this guide seeks to support general insurers to determine a meaningful, best practice-aligned approach to Scope 3 measurement, management and reporting to accelerate Australia’s net-zero transition.

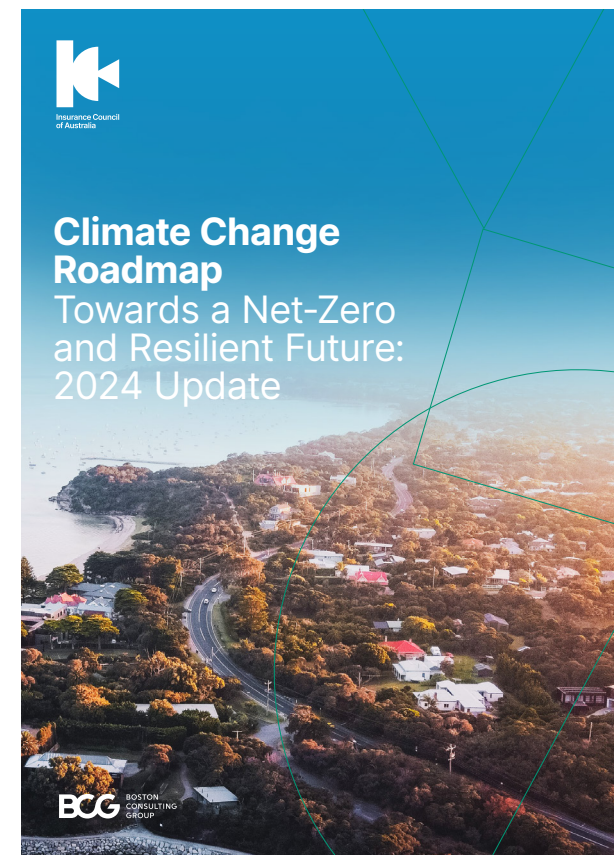
To be useful across the whole general insurance industry, this guide focuses on:

- Providing guidance that is specific but flexible to reflect the differing structures and significant emissions sources of general insurers

- Providing guidance that is specific to the Australian general insurance industry and its most material sources of Scope 3 emissions, with a focus on home and motor claims
- Identifying and addressing common challenges and recommendations for future collaborative work

This guide is not:

- A standard or binding protocol
- Intended to align general insurers emissions boundaries
- Company specific guidance on emissions accounting and boundary setting



1. Insurance Council of Australia (2024) Climate Change Roadmap Towards a Net-Zero and Resilient Future: 2024 Update.

2. Insurance Council of Australia (2024) Australia’s Insurance Industry Snapshot – July 2024.

3. Australian Accounting Standards Board (2024) Australian Sustainability Reporting Standard AASB S2 Climate-related Disclosures.



2. Introduction cont.

Regulations, standards and guidelines

This guide has been written at a time when many relevant regulatory and voluntary standards and guidelines are still under development. The guidance therein may therefore be superseded in future – for example, if the Partnership for Carbon Accounting Financials (PCAF) develop a standard for Insurance Associated Emissions (IAE) for homes. The following is a brief overview of key standards and their status at the end of 2024.

Australian Sustainability Reporting Standards AASB S2<sup>1</sup>

The Australian Accounting Standards Board (AASB) issued final standards AASB S1 and S2 in September 2024, aligning closely with the International Sustainability Standards Board's (ISSB) IFRS S1 and S2. Australia's "climate-first" approach mandates reporting against AASB S2 – Climate-related Disclosures – for Group 1 entities from 1 January 2025. Scope 3 emissions must be disclosed from the second reporting year, with limited assurance required initially and reasonable assurance from the fourth year.

AASB S2 permits a proportionality test for Scope 3 emissions, requiring disclosures based on "reasonable and supportable information available at the reporting date without undue cost or effort." Reported Scope 3 emissions include absolute emissions across upstream, downstream, and financed activities for entities in asset management, commercial banking, or insurance.

Australian Institute of Company Directors: Principles for Setting Climate Targets: A Guide for Australian Boards<sup>2</sup>

Developed in collaboration between the Australian Institute of Company Directors and the Insurance Council, this report uses the general insurance industry as a case study to outline a better practice approach to setting carbon targets, with a foundational principle being the need to collect reliable baseline data that is verifiable and assurable.

United Nations Environment Program Forum (UNEP) Forum for Insurance Transition to Net-Zero (FIT): Closing the Gap Report<sup>3</sup>

The Forum for Insurance Transition to Net-Zero ('FIT') convened by the United Nations Environment Program (UNEP), is a multistakeholder platform aimed at accelerating voluntary climate action within the insurance industry. In November 2024, UNEP FIT released its Closing the Gap Report. The report addresses gaps in guidance for integrating transition plans across insurers' underwriting and investment portfolios and outlines emerging global policies, regulations, and recommendations for embedding sustainability into insurance transition plans.

Partnership for Carbon Accounting Financials (PCAF) – Financed Emissions and Insurance-Associated Emissions<sup>4</sup>

PCAF provides methodologies for measuring and disclosing emissions linked to financial and insurance activities.

Its insurance-associated emissions (IAEs) methodology covers personal motor and commercial underwriting (Part C) but does not yet include home insurance or other lines of business. PCAF also offers guidance for financing emissions, including motor vehicle loans and mortgages. Future methodologies will address additional insurance-related activities.

Greenhouse Gas Protocol ('GHG Protocol')<sup>5</sup>

The GHG Protocol provides a comprehensive framework for measuring and managing greenhouse gas emissions, with the Corporate Value Chain (Scope 3) Accounting and Reporting Standard specifically focused on accounting for indirect emissions in a company's value chain, helping organisations identify and reduce their overall carbon footprint. The GHG Protocol is in the process of convening technical groups with the intention of updating the suite of corporate standards (including Scope 3 guidance).

Science Based Targets Initiative (SBTi) – Insurance Underwriting Industry Brief<sup>6</sup>

The SBTi has published a new Insurance Underwriting Industry Brief as a first step towards the development of a Financial Institutions Net-Zero Insurance Standard. This sets the foundation for exploring the development of an SBTi standard for re/insurers underwriting portfolios including provision of an overview of existing work around net-zero for insurance underwriting portfolios.

1. Australian Accounting Standards Board (2024) Australian Sustainability Reporting Standard AASB S2 Climate-related Disclosures.  
2. Australian Institute of Company Directors and the Insurance Council of Australia (2024) Principles for setting climate targets: A guide for Australian boards.  
3. United Nations Environment Program Forum (UNEP) Forum for Insurance Transition to Net Zero (FIT) (2024) Closing the Gap: The emerging global agenda of transition plans and the need for insurance-specific guidance.  
4. Partnership for Carbon Accounting Financials (PCAF) (2022) The Global GHG Accounting and Reporting Standard for the Financial Industry.  
5. Greenhouse Gas Protocol (2011) Corporate Value Chain (Scope 3) Standard.  
6. Science Based Targets (2023) SBTi Kickstarts Net-Zero for Insurance Underwriting with New Industry Brief.



2. Introduction cont.

Scope 3 emissions

The GHG Protocol Corporate Accounting and Reporting Standard<sup>1</sup> defines three scopes of emissions. These are:

- **Scope 1 emissions:** direct emissions from owned or controlled sources.
- **Scope 2 emissions:** indirect emissions from the generation of purchased energy.
- **Scope 3 emissions:** all indirect emissions (not included in Scope 2) that occur in the value chain of the reporting company, including both upstream and downstream emissions. They are classified into a further 15 categories set out in Exhibit 1.

While indirect and therefore inherently more difficult to measure and manage, Scope 3 emissions typically represent over 90 per cent of an organisation's total emissions footprint (and as high as 99 per cent for the insurance industry). This represents a critical area of focus for delivering a transition to net-zero emissions.

Despite their materiality, due to the complex nature of Scope 3 emissions, a single source of industry best practice guidance across all Scope 3 categories is yet to be developed by the general insurance industry.

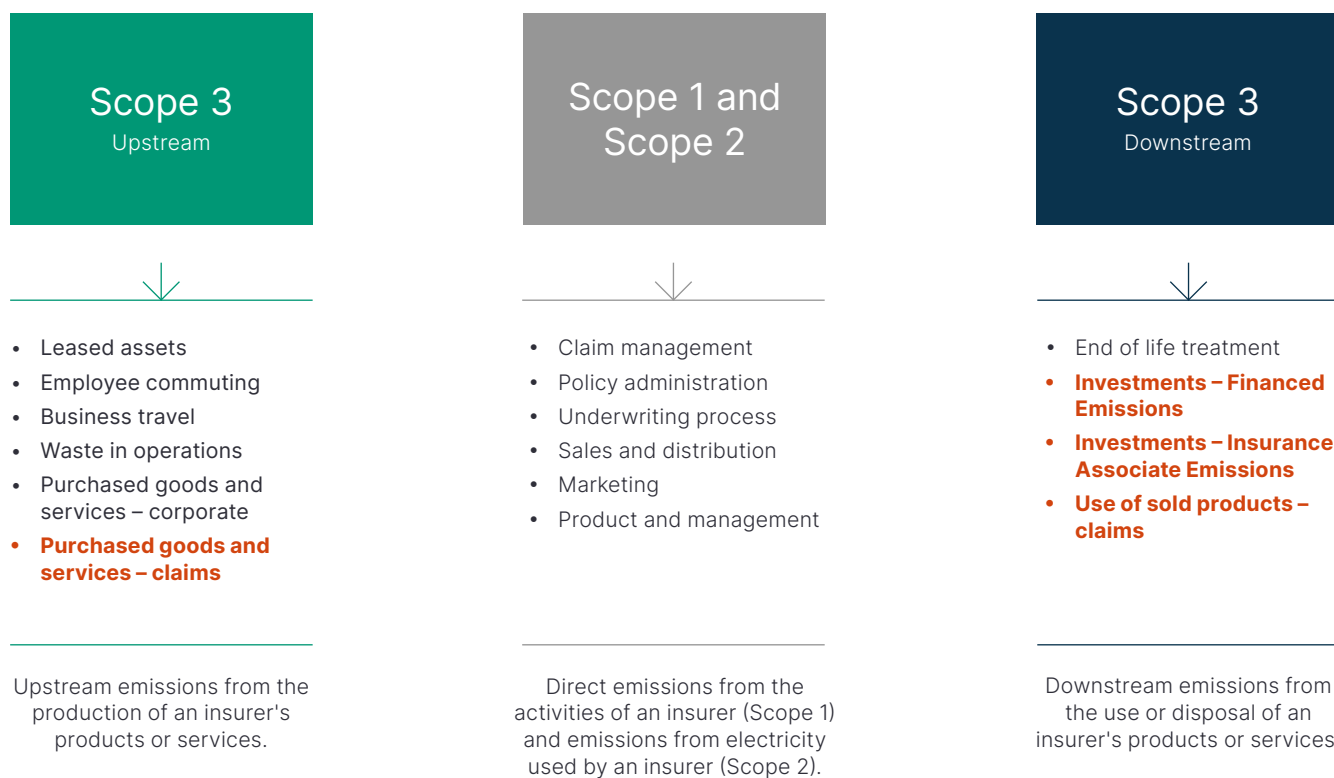
1. Greenhouse Gas Protocol (2011) Corporate Value Chain (Scope 3) Standard.

Exhibit 1 – The 15 Scope 3 emissions categories<sup>1</sup>

	Category	Description
UPSTREAM	<b>1. Purchased goods and services</b>	Extraction, production, and transportation of goods and services purchased or acquired by the reporting company in the reporting year, not otherwise included in Categories 2–8
	<b>2. Capital goods</b>	Extraction, production, and transportation of capital goods purchased or acquired by the reporting company in the reporting year
	<b>3. Fuel and energy distribution</b>	Extraction, production, and transportation of fuels and energy purchased or acquired by the reporting company in the reporting year, not already accounted for in Scope 1 or Scope 2
	<b>4. Upstream transport and distribution</b>	Transportation and distribution of products purchased by the reporting company between a company's tier 1 suppliers and its own operations (in vehicles and facilities not owned or controlled by the reporting company)
	<b>5. Waste generated</b>	Disposal and treatment of waste generated in the reporting company's operations in the reporting year (in facilities not owned or controlled by the reporting company)
	<b>6. Business travel</b>	Transportation of employees for business-related activities during the reporting year (in vehicles not owned or operated by the reporting company)
	<b>7. Employee commuting</b>	Transportation of employees between their homes and their worksites during the reporting year (in vehicles not owned or operated by the reporting company)
	<b>8. Upstream leased assets</b>	Operation of assets leased by the reporting company (lessee) in the reporting year and not included in Scope 1 and Scope 2 – reported by lessee
DOWNSTREAM	<b>9. Downstream transportation and distribution</b>	Transportation and distribution of products sold by the reporting company in the reporting year between the reporting company's operations and the end consumer (if not paid for by the reporting company), including retail and storage (in vehicles and facilities not owned or controlled by the reporting company)
	<b>10. Processing of sold products</b>	Processing of intermediate products sold in the reporting year by downstream companies (e.g., manufacturers)
	<b>11. Use of sold products</b>	End use of goods and services sold by the reporting company in the reporting year
	<b>12. End-of-life treatment of sold products</b>	Waste disposal and treatment of products sold by the reporting company (in the reporting year) at the end of their life
	<b>13. Downstream leased assets</b>	Operation of assets owned by the reporting company (lessor) and leased to other entities in the reporting year, not included in Scope 1 and Scope 2 – reported by lessor
	<b>14. Franchises</b>	Operation of franchises in the reporting year, not included in Scope 1 and Scope 2 – reported by franchisor
	<b>15. Investments</b>	Operation of investments (including equity and debt investments and project finance) in the reporting year, not included in Scope 1 or Scope 2

## 2. Introduction cont.

## Exhibit 2 – Scope 3 emissions for the insurance sector



For the re/insurance industries the most significant Scope 3 emissions are highlighted in orange



# 3. Significant sources of Scope 3 emissions for insurers

## Estimating emissions at an insurance sector level

The Insurance Council's Climate Change Roadmap<sup>1</sup> notes that *"Scope 3 emissions constitute the largest portion of an insurer or reinsurer's GHG footprint but are typically the most complex to measure and address"*.

It is well established that the three most significant Scope 3 emissions categories for general insurers are related to:

1. Claims
2. Investments (insurance-associated emissions) and
3. Investments (financed emissions)

However there have been no attempts to quantify these for the general insurance industry at a sector level.

This section seeks to address the lack of emissions estimation at a general insurance sector level. Quantification at a sector level can serve to validate the focus on these emissions categories and provide a point of comparison for individual insurers. Promoting common estimation methods can help insurers reach a greater level of consistency in calculations and disclosures.

This section is not intended to provide guidance specific to any one insurer. Business structures, activities, and relative emphasis on different lines of business can vary significantly between insurers. This will mean that the quantum of emissions, as well as the relative significance of different emissions categories, will also be different for every insurer.



1. Insurance Council of Australia (2024) Climate Change Roadmap Towards a Net-Zero and Resilient Future: 2024 Update.

3. Significant sources of Scope 3 emissions for insurers cont.

Insurer Scope 3 emissions

The three most significant Scope 3 emissions categories for general insurers are related to:

- 1. Claims
- 2. Investments (insurance-associated emissions) and
- 3. Investments (financed emissions)

However, the amount of emissions from these categories will vary between individual insurers, depending on the variance in the three categories as well as the type of activity in each category.

In monetary terms, claims is typically 3–17 per cent of the total monetary value of the three categories, investments (insurance-associated emissions) is 17–44 per cent and investments (financed emissions) is 40–75 per cent<sup>1</sup>. This variance in monetary value for each category between insurers is likely to result in similar variance in emissions for each category between insurers, as such each insurer would need to calculate their own emissions rather than rely on industry benchmarks.

The following provides guidance for calculating section emissions for these three emission categories.

Investments (financed emissions)

For investments (financed emissions), PCAF requires Scope 1 and Scope 2 emissions at a minimum, and have a phased approach for the inclusion of Scope 3 emissions based on the sector invested in<sup>2</sup>. The phased approach ends in 2025 and Scope 1, Scope 2 and Scope 3 should be reported from 2025.

The calculation for investments (financed emissions) is:

$$\frac{\text{Outstanding amount}}{\text{Total equity + debt}} \times \text{Customer Scope 1 and Scope 2 emissions}$$

Investments (insurance-associated emissions)

For investments (insurance-associated emissions), PCAF requires the inclusion of the customer’s Scope 1 and Scope 2 emissions. For commercial lines, insurers should also “take into account Scope 3 to the extent that such numbers are available and represent reasonable and verifiable emissions”<sup>3</sup>.

PCAF calculates the attribution factor for insurance-associated emissions from commercial lines by using the ratio between the premium for the customer and revenues generated by that customer.

The calculation for investments (insurance associated emissions) for commercial lines is:

$$\frac{\text{Premium}}{\text{Revenue}} \times \text{Customer Scope 1 and Scope 2 emissions (including Scope 3 if possible)}$$

PCAF calculates the attribution factor for insurance-associated emissions for personal motor lines based on the share of the premium in the total cost of ownership of running a vehicle including parking, fuel, maintenance, repairs etc. The emissions to be attributed to the insurer is only the Scope 1 and Scope 2 of the use of the car during the period the insurance is in place.

The calculation for investments (insurance associated emissions) for personal motor lines is:

$$\frac{\text{Premium}}{\text{Total cost of ownership}} \times \text{Vehicle Use Scope 1 and Scope 2 emissions}$$

Claims

For claims there is no standard or protocol for calculating claims related emissions. As such, its recommended insurers apply to claims-related activities the same methodologies that an insurer would adopt for purchasing a good or service or selling a product. In treating claims-related emissions in this way, the full upstream emissions of the claim should be included within the emission calculation (Scope 1, 2 and 3).

1. APRA (2024) Quarterly general insurance performance statistics.  
2. Partnership for Carbon Accounting Financials (PCAF) (2022) The Global GHG Accounting and Reporting Standard for the Financial Industry.  
3. Partnership for Carbon Accounting Financials (PCAF) (2022) The Global GHG Accounting and Reporting Standard for the Financial Industry.



3. Significant sources of Scope 3 emissions for insurers cont.

Insurance-associated emissions for personal motor

The PCAF methodology for calculating insurance-associated emissions for personal motor insurance multiplies the attribution factor for the motor vehicle insurance with the emissions associated with the insured motor vehicle.

Attribution factor of portfolio
X
Emissions of insured vehicles within portfolio

For the attribution factor, PCAF proposes the use of the global weighted average (industry) attribution factor for personal motor line insurance, which they have calculated at 6.99 per cent. While insurers can choose to calculate an individual attribution factor, it is common to use the global attribution factor.

Emissions from insured vehicles within an insurer’s motor portfolio can be calculated in a variety of ways depending on the availability of data regarding the insured vehicles. PCAF provides methodologies and a data quality score for the different methods of calculating insured vehicle emissions. Companies should aim for as high a data score as possible with the data available and aim to improve the data score over time.

The attribution factor does not change across the emission calculations and data quality scores.

PCAF provides three options for the calculation of emissions from the insured vehicles within the portfolio:

- Option 1 – Actual vehicle-specific emissions:** this option is unlikely to be possible for most insurers as personal motor vehicle owners are unlikely to collect and report their vehicle emissions.
- Option 2 – Estimated vehicle-specific emissions and local distance driven averages:** this option should typically be possible for all insurers as the only information required is the vehicle’s make and model. The distance travelled can be estimated from publicly available data<sup>1</sup> and the vehicle emissions can be obtained from publicly available data sources such as the Australian Government Green Vehicle Guide<sup>2</sup>.
- Option 3 – Estimated vehicle-unspecific emissions and continental distance driven averages:** this option is possible using publicly available data<sup>3</sup> and the number of vehicles in the portfolio.

Exhibit 3 – General description of data quality score for personal motor insurance (score 1 = highest data quality; score 5 = lowest data quality)

Data quality	Options to estimate insurance-associated emissions	When to use each option (what data should be available)		
		Emission data/calculation		
		Vehicle usage data		Emission intensity
Score 1	Option 1: actual vehicle-specific emissions	1a	Actual fuel consumption	Emission intensity of the fuel type
		1b	Actual distance travelled	Emission intensity of the actual vehicle or of the vehicle's make and model
Score 2	Option 2: estimated vehicle-specific emissions and local distance driven averages	2a	Estimated distance travelled of an average vehicle type (cars, vans, motorcycles) on the province/state/country	
Score 3		2b	Estimated distance travelled of an average vehicle on the for the province/state/country	
Score 4	Option 3: estimated vehicle-unspecific emissions and continental distance driven averages	3a	Estimated distance travelled of an average vehicle on the subcontinent/continent	Emission intensity of an average vehicle type (cars, vans, motorcycles) and/or fuel type (fossil fuel, hybrid, electric)
Score 5		3b		Emission intensity of an average vehicle

Exhibit 4 – Option 3 example

Attribution factor
6.99 per cent
X
Australian distance driven average
12,100kms per car per year
X
Vehicle emissions
0.132 kgCO<sub>2</sub>-eq/km (VW Golf)
Insurance-associated emissions = 111.6 kgCO<sub>2</sub>-eq/year/vehicle

1. Australian Bureau of Statistics (2020) Survey of Motor Vehicle Use.  
2. Australian Government (2024) Green Vehicle Guide.  
3. UK Government (2024) Greenhouse Gas Reporting: Conversion Factors.

### 3. Significant sources of Scope 3 emissions for insurers cont.

#### Insurance-associated emissions for personal motor cont.

PCAF's Insurance-Associated Emission standard<sup>1</sup> sets the emission calculation methodology for commercial insurance lines, including commercial motor vehicles. These are outlined in Exhibit 5.

For personal underwriting, PCAF has created calculation methodologies for personal motor vehicles only, stating that it will develop methodologies for other personal insurance lines in the future. With the volume of home insurance being significant in Australia it is likely that insurers will need to calculate the insurance-associated emissions of this category before PCAF releases its calculation methodology. Exhibit 6 provides some consideration for approaching the calculation of insurance-associated emissions for this category.

The PCAF methodology for underwriting of personal motor insurance lines could be adopted to suit home insurance lines through adapting the calculation to suit household emissions.

As mentioned earlier, the calculation for personal motor lines is:

##### Insurance-associated emissions – Personal motor

Premium

Total cost of ownership

X
Vehicle Use Scope 1 and Scope 2 Emissions

Where the emissions are calculated from the fuel or electricity used in the operation of the vehicle while the insurance policy is in place, and as the attribution factor is at a national level, it would be appropriate to use national level averages for Scope 1 and Scope 2 emissions for each insurance holder.

The motor vehicle calculation could be adapted to suit home insurance. The attribution methodology would be consistent (premium/total cost of ownership), with the emissions adapted to be home energy use.

##### Insurance-associated emissions – Home insurance

Premium

Total cost of ownership

X
Household Scope 1 and Scope 2 Emissions

The following page provides guidance for information only on how the PCAF methodology for personal motor vehicle insurance could be applied to personal home insurance.

#### Exhibit 5 – PCAF commercial lines and personal lines

	Industry 5-year average gross		
Underwriting excluding inwards reinsurance	Written Premium	Proportion of total premium revenue	PCAF approach to calculated insurance related emissions
Commercial Underwriting			
Employers' liability	\$2,011,400,000	5%	IAEs Commercial Lines
Professional indemnity	\$2,663,200,000	6%	IAEs Commercial Lines
Public and product liability	\$2,790,600,000	6%	IAEs Commercial Lines
Mortgage	\$986,800,000	2%	IAEs Commercial Lines
Consumer credit	\$165,000,000	0%	IAEs Commercial Lines
Commercial Real Asset Underwriting			
Commercial motor vehicle	\$2,940,600,000	7%	IAEs Commercial Lines
Fire and industrial special risks (ISR)	\$5,811,600,000	13%	IAEs Commercial Lines
Marine and aviation	\$822,600,000	2%	IAEs Commercial Lines
Personal Underwriting			
Compulsory third party (CTP) motor vehicle	\$3,437,000,000	8%	IAEs Personal Motor Lines
Travel	\$700,200,000	2%	Out of scope of current version of the Standard
Domestic motor vehicle	\$10,849,600,000	25%	IAEs Personal Motor Lines
Houseowners and householders	\$10,233,000,000	24%	Out of scope of current version of the Standard

1. Partnership for Carbon Accounting Financials (PCAF) (2022) The Global GHG Accounting and Reporting Standard for the Financial Industry.



### 3. Significant sources of Scope 3 emissions for insurers cont.

## Insurance-associated emissions for homes

This section provides an example on how to estimate home insurance-associated emissions.

Attribution factor of portfolio

X

Emissions of insured homes within portfolio

### Attribution factor calculation

In the absence of PCAF published attribution factors, insurers will need to calculate or estimate their own attribution factor for home insurance. Exhibit 6 is provided as an example calculation for information only.

There are five main elements that can make up the total cost of ownership:

1. Mortgage cost (interest and repayment)
2. Utility costs (heating and electricity)
3. Insurance premiums
4. Maintenance and repairs
5. Property taxes

Using Australian Bureau of Statistics (ABS) data reveals that the average total cost of ownership to be \$803 per week<sup>1</sup> in Australia, with the insurance premium being \$38 per week or an attribution factor of 4.8 per cent<sup>2</sup>.

### Exhibit 6 –Option 3 example

Attribution factor

4.8 per cent

X

Australian home energy average

5,470 kWh Electricity + 25.3 GJ of Gas

X

National emission factors

Electricity x 0.64kgCO<sub>2</sub>-eq, Gas x 51.3kg CO<sub>2</sub>-eq/GJ

Insurance-associated emissions = 230 kgCO<sub>2</sub>-eq/year/home

### Household emissions

Emissions from homes could be calculated in several ways – extrapolating PCAF data quality score calculations from personal motor insurance to homes insurance would provide the following options:

- **Option 1: Actual home-specific emissions:** this option is unlikely to be possible for most insurers as homeowners are unlikely to collect and report their home energy use.
- **Option 2: Estimated home-specific energy use (size and type) and local emission factors for electricity:** this option should typically be possible for all insurers as the only information required is the homes size and type i.e. apartment/town home/single dwelling. The emission factors can be obtained from publicly available data<sup>3</sup>.
- **Option 3: Estimated home-unspecific energy use (regardless of size and type) and continental emission factors for electricity:** this option is possible using publicly available data<sup>4</sup> and just the number of homes in the portfolio.

### Owner-occupier versus owner-lessor

An added complexity of assessing home insurance-associated emissions is the different types of occupation and the different types of insurance. In the absence of guidance from PCAF, the following is recommended for attribution:

#### Owner-occupier

Premium

Total cost of ownership

#### Owner-lessor

Premium

Net revenue

### Apartments

Although the insurance of an apartment building is very different from a single dwelling, the majority of the emissions will be from the apartment rather than the common area. As such the same attribution methodology for owner-occupier or owner-lessor could be applied.

1. Australian Bureau of Statistics (ABS) (2023) Housing.  
2. Australian Bureau of Statistics (ABS) (2023) Housing.  
3. Australian Government (2023) National Greenhouse Accounts Factors.  
4. Frontier Economics (2020) Residential energy consumption benchmarks.

### 3. Significant sources of Scope 3 emissions for insurers cont.

## Claims emissions

PCAF<sup>1</sup> and the GHG Protocol<sup>2</sup> do not provide specific guidance on calculating an insurer’s claims-related emissions. As such, this guide recommends treating claims-related activities with the same methodologies that a company would adopt for purchasing a good or service. In treating claims-related emissions in this way, the full upstream emissions of the claim should be included within the emission calculation (Scope 1, 2 and 3).

In calculating emissions from a purchased good or service the GHG Protocol<sup>2</sup> requires the calculation of emissions "upstream" of the purchase. For example, if a claim included the replacement of a headlight on a motor vehicle the emission calculation would include the energy associated with fitting the headlight at the mechanics, as well as the emissions transporting the headlight to the mechanics,

the energy in assembling the headlight at the manufacturers, the transportation of the parts to the manufacturer, the process of the materials into the parts and on until the point of extraction of all raw materials. The calculation of emissions for complex elements such as vehicle parts is time and resource intensive – as such companies typically rely on lower quality data estimates.

Whilst PCAF quality scores are for finance-related emissions, it is becoming common place to adopt PCAF data quality scores and methodologies to non-finance related emissions – using this approach provides a series of alternatives for the calculation of claims-related emissions.

### Exhibit 7 – Option 3 example: motor vehicle claims

Claims amount		Emission factor
\$1,750	X	0.145 kgCO <sub>2</sub> -eq/\$ (Motor vehicle repairs and maintenance)
Claim emissions = 253 kgCO <sub>2</sub> -eq/year		

- Option 1: Actual product and supplier-specific emissions:** this option is unlikely to be possible for most insurers as there is unlikely to be product specific data for all parts of a motor vehicle repair or home repair.
- Option 2: Estimated product and supplier-specific emissions and process-based emissions data using material quantity emissions factors:** this option may be possible for home repair claims for elements such as timber or steel but would require additional work to be undertaken for motor vehicle repair to calculate emissions per headlight, car door etc.

- Option 3: Estimated product and supplier-unspecific emissions and input-output emissions data using dollar value emissions factors:** this option is possible using publicly available data<sup>3</sup> which requires some processing, or Climate Active which requires registered consultant access and the total claim value.

For insurers where total claims paid in a year is less than the total value of investments or underwriting, Option 3 will likely provide a sufficient data quality level in the near term.

In Australia, Climate Active<sup>4</sup> provides a good database of input-output emission factors that companies can use to calculate purchased good and services emissions. The database provides a range of emission factors for different sectors and industries.

The emission factors are associated with a dollar spent in that activity, for example if a motor vehicle repair was undertaken the Climate Active emission factor could be used to convert the total cost of that repair to total emissions of the repair.

For claims-related emissions, an insurer may consider “motor vehicle repairs and maintenance” for motor vehicle claims and “residential building construction” for home repair claims.

1. Partnership for Carbon Accounting Financials (PCAF) (2022) The Global GHG Accounting and Reporting Standard for the Financial Industry.

2. Greenhouse Gas Protocol (2011) Corporate Value Chain (Scope 3) Standard.

3. Industrial Ecology Virtual Laboratory (2025).

4. Climate Active (2019).



3. Significant sources of Scope 3 emissions for insurers cont.

Insurance industry average claims emissions

Initial estimate of claims-related emissions could be undertaken using insurance industry average data. The following provides an analysis of a five-year period (2018–2022) using insurance data from APRA<sup>1</sup> and emission factors from Climate Active<sup>2</sup>.

At an industry level, the percentage of claims by class of business doesn’t vary significantly year-on-year even though the total claim changes. Applying the spend data emission calculation methodology to the industry level claims data provides an industry level spend data emission factor that can then be used by insurers in the initial estimate of their claims-related Scope 3 emissions. Insurers should seek to improve the data quality estimate over time if they do choose the industry average initially.

Exhibit 8 – Estimating claims-related Scope 3 emissions

Net insurance claims in \$AUD	X	Climate Active emission factors for motor vehicle repair, house repair etc	=	Emissions from claims in tonnes CO <sub>2</sub> -eq	
Class of business	Annual claim <sup>3</sup>	Total claim	Emission factor (kgCO <sub>2</sub> -eq/\$) <sup>4</sup>	Annual emissions <sup>5</sup>	Total emissions
Domestic motor vehicle	\$6,154,400,000	40%	0.145	889,000 tCO <sub>2</sub> -eq	33.71%
Home	\$4,953,000,000	32%	0.219	1,084,000 tCO <sub>2</sub> -eq	41.11%
Compulsory third party (CTP) motor vehicle	\$1,820,600,000	12%	0.145	263,000 tCO <sub>2</sub> -eq	9.97%
Commercial motor vehicle	\$1,568,000,000	10%	0.145	227,000 tCO <sub>2</sub> -eq	8.61%
Other accident	\$325,800,000	2%	0.219	71,000 tCO <sub>2</sub> -eq	2.69%
Marine and aviation	\$353,400,000	2%	0.145	51,000 tCO <sub>2</sub> -eq	1.93%
Travel	\$296,800,000	2%	0.174	52,000 tCO <sub>2</sub> -eq	1.97%
Average 5-year emission factor			0.156		

1. APRA (2024) Quarterly general insurance performance statistics.

2. Climate Active (2019).

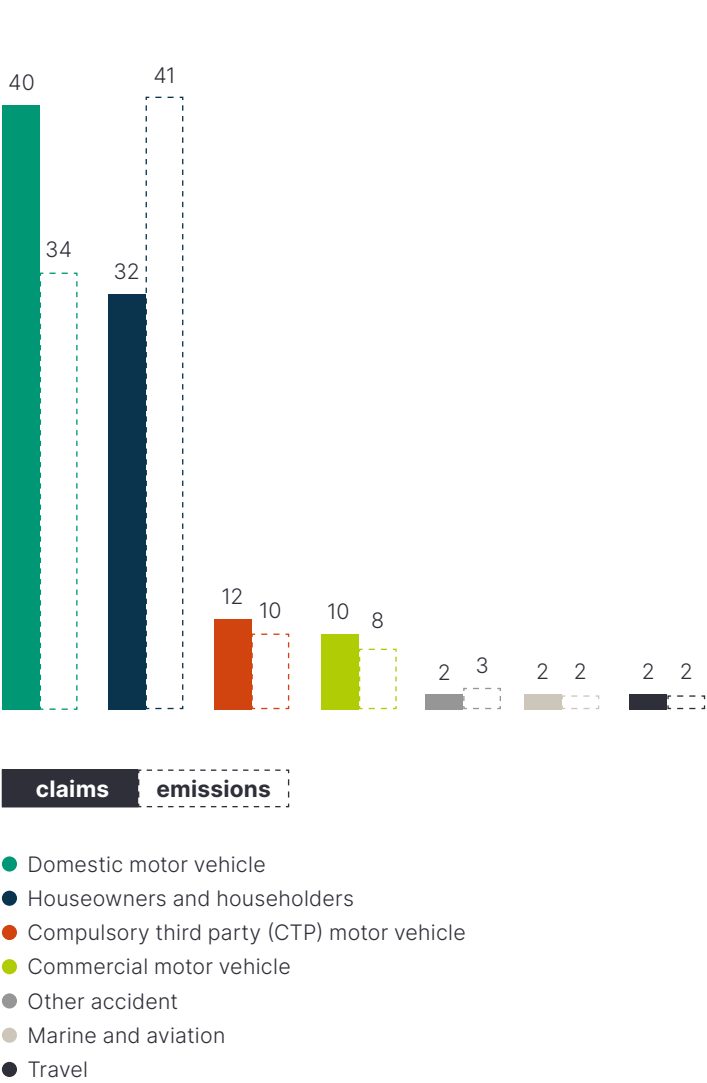
3. Annual claim = Net insurance claims in \$AUD.

4. Emission factor (kgCO<sub>2</sub>-eq/\$) = Climate Active emission factors for motor vehicle repair, house repair etc.

5. Annual emissions = Emissions from claims in tonnes CO<sub>2</sub>-eq.

6. APRA (2024) Quarterly general insurance performance statistics.

Exhibit 9 – Annual claims and emissions averages (%) 2018–2022<sup>6</sup>



3. Significant sources of Scope 3 emissions for insurers cont.

Interaction of insurance-associated emissions and claims-related emissions

As mentioned earlier, the PCAF Standard for insurance-associated emissions provides guidance on the calculation of insurance-associated emissions for commercial lines and personal motor lines. Other insurance lines will be added by PCAF in the future.

PCAF considers an “enabler philosophy” for attributing emissions to insurers for non-commercial lines of insurance. The attribution of insurance-associated emissions for personal motor lines are determined by the ratio of the insurer’s revenue received from the insured (i.e. the insurance premium) to the revenues of all other factors that are part of a vehicle’s ownership, known as the attribution factor. The attribution factor includes the full cost of ownership, which according to the PCAF standard includes the cost of maintenance which is cited as tow services, wreckers, repair shops. As such the cost of claims is included within the attribution factor.

However, and most importantly for this guide, the emissions used in the calculation of insurance-associated emissions for personal motor vehicles are purely Scope 1 and Scope 2 emissions used in the operation of the vehicle and NOT the emissions associated with tow services, wreckers, repair shops if a claim has been made in the year.

As such, the emissions associated with claims during a reporting period will need to be assessed and included separately from the insurance-associated emissions calculations.

Exhibit 10 – Comparison of insurance-associated emissions and claims-related emissions

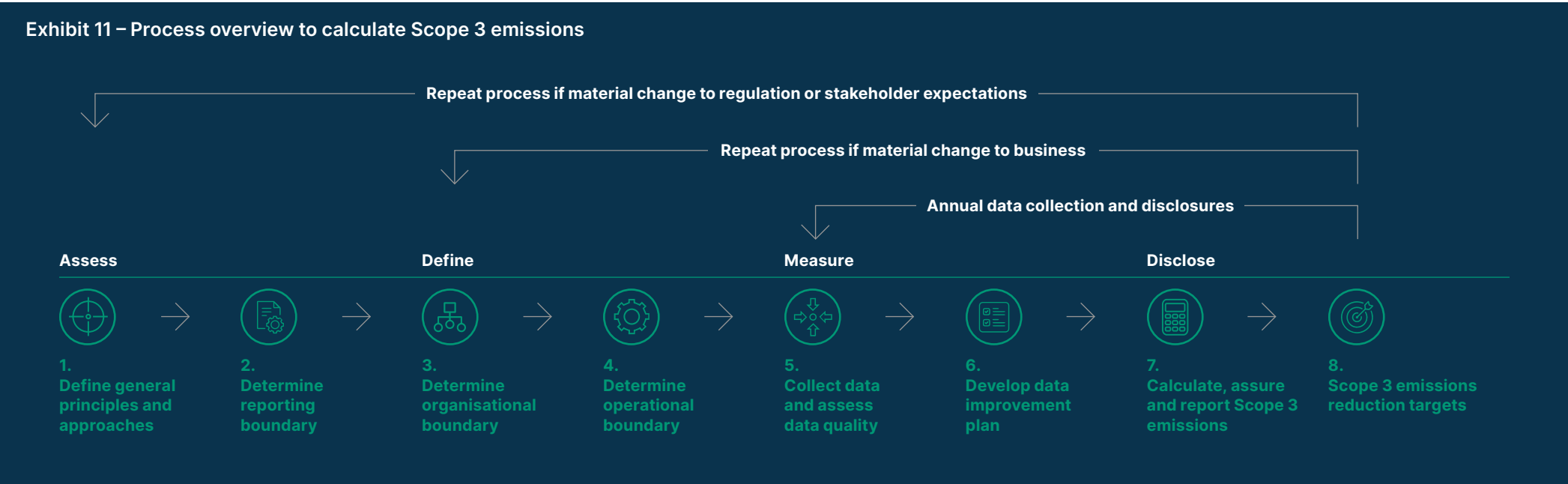
Insurance-associated emissions and claims: Comparison		Vehicle depreciation cost	Fuel cost	Insurance premiums	Maintenance			Other: Parking, tolls etc
					Tow services	Wreckers	Repair shops	
Insurance-associated emissions (Scope 3 – Category 15)	Included in the attribution factor	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Included in the emission calculation	No	Yes	No	No	No	No	No
Claims-related emissions (Scope 3 – Category 1 or Category 11)					Yes (Tow Service Scope 1, Scope 2 and Scope 3)	Yes (Wreckers Scope 1, Scope 2 and Scope 3)	Yes (Repair Shop Scope 1, Scope 2 and Scope 3)	

# 4. Calculating organisational Scope 3 emissions

## Introduction

This section provides a step-by-step process to work through the calculation of an insurer’s Scope 3 emissions. Breaking the process down into stages is designed to provide a structured approach and help reduce the complexity of the process for insurers.









- Exhibit 11 provides an outline of the eight stages in the process:
- **Assess – Stage 1 and Stage 2:** An insurer assesses the purpose of its Scope 3 reporting through defining the principles and the reporting boundary.
  - **Define – Stage 3 and Stage 4:** Determining the organisational and operational boundary. Insurers can also draw on the sector level estimation processes in the previous section to help during this definition stage.
  - **Measure – Stage 5 and Stage 6:** Collect data, assess its quality and develop a data improvement plan.
  - **Disclose – Stage 7 and Stage 8:** Calculate, assure and report Scope 3 emissions. Set targets for emissions reduction if required.
- The first time an insurer discloses its Scope 3 emissions they should complete all eight stages (noting that this may take multiple years to complete). In subsequent years, the insurer would repeat stage 5 to stage 8 on an annual basis. An insurer need only repeat other stages if there are material changes. The first two stages should be repeated if a material change to regulation or stakeholder expectations occurs. Likewise, stage 3 and stage 4 need only be repeated if there is a material change in the business (including change in structure, acquisitions/divestments or changes in emissions generating activities).



The following page provides more detail on each of the stages including objectives, considerations and outcomes at each point in the process. A full description of each stage is then provided in the subsequent pages.





# Overview

Repeat process if material change to regulation or stakeholder expectations																
Repeat process if material change to business																
Annual data collection and disclosures																
Assess		Define		Measure		Disclose										
STAGE		→		→		→		→		→		→		→		
	1. Define general principles and approaches		2. Determine reporting boundary		3. Determine organisational boundary		4. Determine operational boundary		5. Collect data and assess data quality		6. Develop data improvement plan		7. Calculate, assure and report Scope 3 emissions		8. Scope 3 emissions reduction targets	
OBJECTIVE	Define principles and approaches for emission calculation and reporting		Define the purpose of reporting		Define the operations or entities that are included in the insurer's emission consolidation for the selected reporting boundaries		Define which emission causing activities should be included across Scope 1, Scope 2 and Scope 3 for the selected reporting and organisational boundaries		Identify what level of data quality can be achieved with current systems and processes		Set out a data quality improvement plan to increase the quality of reporting over time		Provide robust, consistent and assured Scope 1, Scope 2 and Scope 3 disclosures in public reports		Set and track performance against near-term and long-term emission reduction targets appropriate to the reporting boundary	
CONSIDERATIONS	Regulatory or voluntary standards Stakeholder expectations Resources available for task		What is your level of control or influence? What would the financial effect be to the insurer – Direct or Indirect?		Level of control of each business entity Economic reality of the insurer		Direct and indirect activities Applicable categories		Maturity of the insurer and supply chain Resources available for the task Availability of data		Maturity of the insurer and supply chain Resources needs for future		Requirements for limited and reasonable assurance Appropriate location of disclosures – Sustainability or Financial Reports		Consider indirect emission reduction targets for Impact Reporting Set science aligned targets for Financial Reporting emissions	
OUTCOME	Identify requirements and expectation of emission calculations and reporting		Identify full Impact of the insurer on the world Identify financial effects of the Impacts		Selection of equity, financial control or operational control boundary		Identify activities that generate emissions and assign to categories		Data inventory and quality score		Prioritised and time bound actions that improves data quality		Gross and intensity Scope 3 emissions disclosure ready		Appropriate Scope 3 emission targets	

4. Calculating organisational Scope 3 emissions cont.

Stage 1 and Stage 2: Assess purpose and determine reporting boundary

Exhibit 13 – Assess		
Stage	 1. Define general principles and approaches	 2. Determine reporting boundary
Objective	Define principles and approaches for emission calculation and reporting	Define the purpose of reporting
Considerations	Regulatory or voluntary standards Stakeholder expectations Resources available for task	What is your level of control or influence? What would the financial effect be to the insurer – direct or indirect?
Outcome	Identify requirements and expectation of emission calculations and reporting	Identify full Impact of the insurer on the world Identify financial effects of the impacts

Objective

Define the principles and approaches that will inform the emissions calculation and reporting.

Overview

Over the past few years, there has been heightened attention to how organisations define and report their emissions boundaries. Climate-related financial reporting standards have emphasised financial consolidation to align with financial reporting, while governmental regulations have prioritised operational control approaches to minimise double counting. Establishing appropriate boundaries is crucial to ensure accurate emissions reporting without overstatement or understatement.

Insurers should first clearly define their emissions reporting objectives. Key considerations include:

- Compliance with regulatory requirements (e.g., National Greenhouse and Energy Reporting Scheme)<sup>1</sup> noting that ASRS S2<sup>2</sup> reporting requirements are likely to be a key driver for Australian insurers from 2025.
- Meeting stakeholder expectations regarding environmental impact disclosure.
- Addressing investor requirements for climate-related financial risk reporting.

These distinct objectives may necessitate different emission boundaries. While using a single boundary approach for all stakeholders might seem simpler, it could result in misleading representations of emissions for different stakeholders.

The following page provides an overview of standards, stakeholder and resource considerations.

1. Clean Energy Regulator (2024) National Greenhouse and Energy Reporting Scheme.

2. Australian Accounting Standards Board (2024) Australian Sustainability Reporting Standard AASB S2 Climate-related Disclosures.

4. Calculating organisational Scope 3 emissions cont.

Stage 1: Define general principles and purpose

To commence the process of measuring and reporting a Scope 3 emissions inventory, it is recommended that an insurer first define the general principles and approaches of measuring and disclosing Scope 3 emissions. This will include an assessment of the regulatory or voluntary standards applicable to the insurer, the insurer’s internal and external stakeholder expectations, and an assessment of the resources available for the task.

Exhibit 14 – Assessing standards, stakeholder expectations and resources

Regulatory or voluntary standards	Stakeholder expectations	Resources available for the task	
<p><b>Regulatory standards – AASB S1 and S2<sup>1</sup></b></p> <p>Australia’s mandatory climate reporting outlines what is required of reporting entities when reporting on climate-related risks and opportunities, including the need to disclose Scope 3 emissions. This includes reporting in alignment with the Greenhouse Gas Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard (2011)<sup>2</sup> and, for insurers, additional information about Category 15 emissions (financed emissions).</p> <p>The standard states that an entity's climate-related financial disclosures shall be for the same reporting period as the related financial statements.</p>	<p><b>Voluntary standards – GHG Protocol<sup>3</sup></b></p> <p>An overview of voluntary standards that may be relevant is provided in the introduction section of this document.</p> <p>The overarching voluntary standard that many others are built on is the Greenhouse Gas Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard (2011)<sup>4</sup>. It provides comprehensive guidance for companies in defining principles and methodologies to measure, manage, and disclose Scope 3 emissions across 15 categories ranging from Purchased Goods and Services and Employee Commute to Financed Emissions and End-of-life Treatment of Sold Products.</p>	<p><b>Double materiality</b></p> <p>Entities conducting a double materiality assessment can leverage this process to define their Scope 3 emissions reporting boundary by considering both financial and environmental impacts. Double materiality assesses not only how environmental, social, and governance (ESG) factors affect the company’s financial performance but also the company’s impact on the environment and society.</p> <p>By identifying which Scope 3 emissions are most material to stakeholders and the business itself, insurers can prioritise and set boundaries for reporting that reflect the most relevant sources across their value chain.</p> <p>This approach ensures that the Scope 3 reporting boundary aligns with areas of highest impact and relevance, supporting comprehensive and transparent emissions disclosure.</p> <p>ASRS S2<sup>5</sup> does not require double materiality assessment to be undertaken, however with the influence of international standards and stakeholder expectations it is increasingly coming to be seen as good practice.</p>	<p><b>Regulatory standards – AASB S1 and S2<sup>6</sup></b></p> <p>As part of defining general principles and approaches, an insurer should consider the resources available to it for the task.</p> <p>AASB S1 and S2<sup>7</sup> note that an entity is required to use all reasonable and supportable information that is available to it at the reporting date without undue cost of effort. Entities are not expected to disclose against all 15 Scope 3 categories. Instead, consideration should be given to those categories which are material to the entity and those for which data is readily available.</p>

1. Australian Accounting Standards Board (2024) Australian Sustainability Reporting Standard AASB S2 Climate-related Disclosures.

2. Greenhouse Gas Protocol (2011) Corporate Value Chain (Scope 3) Standard.

3. Greenhouse Gas Protocol (2011) Corporate Value Chain (Scope 3) Standard.

4. Greenhouse Gas Protocol (2011) Corporate Value Chain (Scope 3) Standard.

5. Australian Accounting Standards Board (2024) Australian Sustainability Reporting Standard AASB S2 Climate-related Disclosures.

6. Australian Accounting Standards Board (2024) Australian Sustainability Reporting Standard AASB S2 Climate-related Disclosures.

7. Australian Accounting Standards Board (2024) Australian Sustainability Reporting Standard AASB S2 Climate-related Disclosures.



4. Calculating organisational Scope 3 emissions cont.

Stage 2: Determine reporting boundary

The International Integrated Reporting Framework, established in 2013 and subsequently incorporated into the International Financial Reporting Standards (IFRS) Foundation, provides organisations with a comprehensive methodology for communicating their sustainability performance and objectives. This framework serves as a vital bridge between traditional financial reporting and sustainability disclosure requirements.



In the context of reporting boundaries, sustainability reporting discloses the company’s most significant impacts on society, environment and the economy. Integrated reporting discloses material sustainability and ESG issues that may cause a financial impact to the company in the short, medium, or long term. Double materiality considers both what would be disclosed in an integrated report and what would be disclosed in a sustainability report. The following graphic depicts how different purposes of reporting interrelate with different standard guidance and boundaries.

Exhibit 15 – Overview of sustainability, integrated and financial reporting



4. Calculating organisational Scope 3 emissions cont.

Stage 3 and Stage 4: Define boundaries

Exhibit 16 – Define		
Stage	 <b>3. Determine organisational boundary</b>	 <b>4. Determine operational boundary</b>
Objective	Define the operations or entities that are included in the insurer’s emission consolidation for the selected reporting boundaries	Define which emission causing activities should be included across Scope 1, Scope 2 and Scope 3 for the selected reporting and organisational boundaries
Considerations	Level of control of each business entity Economic reality of the insurer	Direct and indirect activities Applicable categories
Outcome	<b>Selection of equity, financial control or operational control boundary</b>	<b>Identify activities that generate emissions and assign to categories</b>

Objective

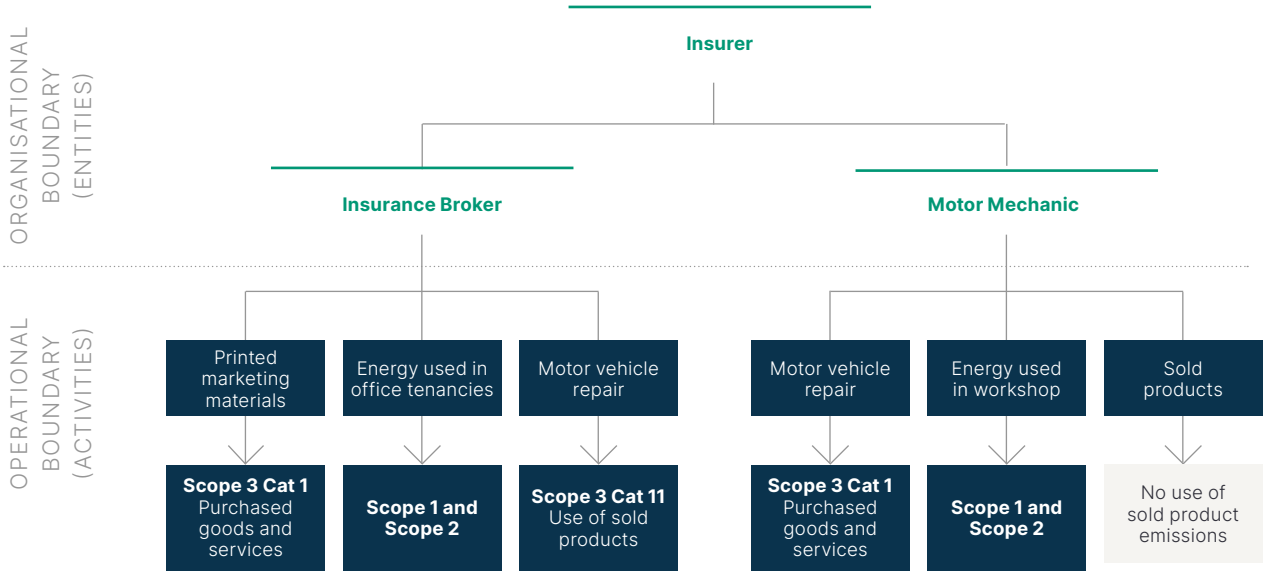
Define the operations or entities that are included in the insurer’s selected emission reporting boundaries. Define which emission causing activities should be included across Scope 1, Scope 2 and Scope 3 for the selected reporting and organisational boundaries.

Overview

The GHG Protocol<sup>1</sup> uses two boundaries for the calculation, measurement and consolidation of emissions. The organisational boundary defines which operations and entities are included in your emission inventory, while the operational boundary defines which emission causing activities are included within your inventory as well as defining the emissions as Scope 1, Scope 2 or Scope 3.

The organisational boundary is required to be applied consistently throughout your entire organisation, whereas the operational boundary may be different to reflect the emission causing activities of each entity. In the example below, the emission causing activity “motor vehicle repair” could be categorised as “Category 11: Use of Sold Products” for an insurance broker, but as “Category 1: Purchased Goods and Services” for a motor mechanic entity.

Exhibit 17 – Examples of different emissions reporting boundaries



1. Greenhouse Gas Protocol (2011) Corporate Value Chain (Scope 3) Standard.

4. Calculating organisational Scope 3 emissions cont.

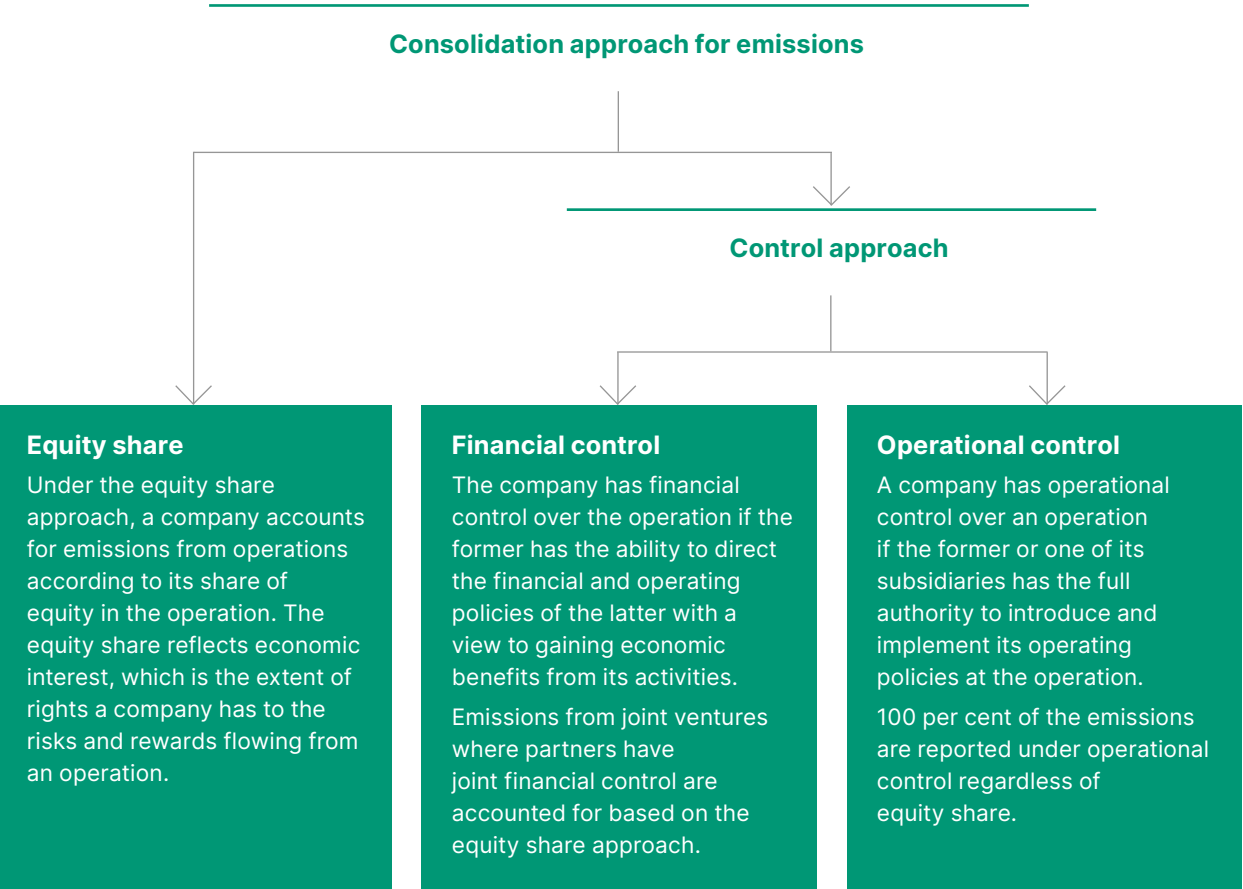
Stage 3: Determine organisational boundary

The GHG Protocol<sup>1</sup> provides guidance to companies in choosing an organisational approach for consolidating emissions, with the choice being equity share or control approach. Equity share is typically more appropriate for financial institutions such as superannuation companies who typically don't have financial control over the companies they invest in. For all other types of organisations who have financial or operational control over the entities they own, or have investment in them, the control approach would be more appropriate.

If the control approach is adopted, the secondary choice is between financial control and operational control. Operational control is typically more appropriate for companies where the majority of emissions occur from activities that they operate, such as construction companies and manufacturers. Financial control is more appropriate for companies where the majority of emissions occur from activities stemming from the financial decisions that are made, such as owning and leasing assets and selling end products.

An insurers first approach to determining its organisational boundary should be a discussion with internal stakeholders, such as the legal and finance teams, to understand the consolidation approach from a financial reporting perspective. Exhibit 18 describes the difference in organisational boundary approaches from an emissions reporting perspective.

Exhibit 18 – Description of consolidation approaches for emissions



1. Greenhouse Gas Protocol (2011) Corporate Value Chain (Scope 3) Standard.



4. Calculating organisational Scope 3 emissions cont.

Determining emissions consolidation approach

Some questions that could be considered as part of the discussion with internal stakeholders when determining organisational boundary are listed below. The questions provided are indicative only and should not be used as a definitive guide.

Exhibit 19 – Questions to help determine emissions consolidation approach

Equity share		Financial control		Operational control	
<b>1. Equity ownership:</b> What percentage of equity does your company hold in the entity or activity?	This determines if the equity share approach is relevant, as it is based on the extent of ownership and economic interest.	<b>1. Ownership percentage:</b> What is the percentage of ownership your company holds in the entity or activity?	This helps establish the extent of influence your company may have based on its share of equity.	<b>1. Authority over operating policies:</b> Does your company or any of its subsidiaries have the full authority to introduce and implement operating policies of the entity or activity?	This is a key indicator of operational control as it reflects the ability to manage daily operations.
<b>2. Control over financial and operating policies:</b> Does your company have the authority to direct the financial and operating policies of the entity or activity?	The control approach, either financial or operational, is based on your company's ability to govern these policies.	<b>2. Control over financial and operating policies:</b> Does your company have the ability to direct the financial and operating policies of the entity or activity?	Financial control is typically established if your company can direct policies with a view to gaining economic benefits from the entity's activities.	<b>2. Operating licenses:</b> Does your company hold any operating licenses for the entity or activity?	Holding an operating license generally signifies control over the operation's compliance and management.
<b>3. Economic benefits and risks:</b> Does your company receive the majority of economic benefits or bear the majority of economic risks from the entity or activity?	Understanding this helps in deciding between equity share and financial control, as both consider economic interest.	<b>3. Economic benefits:</b> Is your company entitled to the majority of the economic benefits generated by the entity or activity?	Financial control often implies that the company retains the majority of risks and rewards associated with the ownership.	<b>3. Contractual:</b> Are there any contractual agreements where your company operates the entity or activity on behalf of other owners?	Understanding contractual arrangements helps clarify who controls the actual operations despite ownership structures.
<b>4. Operational authority:</b> Does your company or its subsidiaries have the authority to implement and manage operating policies at the entity or activity?	This is crucial for determining operational control.	<b>4. Consolidation in financial accounts:</b> Is the entity or activity fully consolidated in your company's financial statements?	If an entity is considered a subsidiary and fully consolidated in financial accounts, it is usually under financial control.	<b>4. Management and decision-making power:</b> Does your company have the ability to determine management and board-level decisions for the entity or activity?	Decision-making power at the management and board level is indicative of operational control.
<b>5. Consistency with financial accounting:</b> How do you consolidate financial statements for these entities or activities? Is it based on equity share, financial control, or operational control?	Aligning emissions reporting with financial reporting can simplify processes and improve consistency.	<b>5. Voting rights and decision-making power:</b> Does your company hold a majority of the voting rights or decision-making power in the entity or activity?	Voting rights can influence financial control if they allow your company to direct decisions.	<b>5. Setting environmental, health and safety policies:</b> Does your company set and enforce environmental, health, and safety policies at the entity or activity?	The authority to set and enforce such policies is a strong indicator of operational control.
<b>6. Management and performance tracking:</b> How does your management track and assess performance of the entity or activity?	If performance is tracked based on control, it might be more practical to use the control approach.	<b>6. Contractual agreements:</b> Are there any contractual agreements that grant your company control over the financial and operational policies of the entity or activity?	Contracts can sometimes establish control even if the equity share is less than 50%.	<b>6. Daily operations:</b> Who is responsible for the day-to-day operations of the entity or activity?	Responsibility for daily operations often signals operational control.
<b>7. Commercial reality reflection:</b> Which approach, equity share or control, better reflects the commercial reality of your business operations and economic interests?	This ensures the reporting approach accurately represents your company's actual involvement in emissions.	<b>7. Reporting requirements:</b> Are you required to report the emissions of the entity or activity under any regulatory or compliance frameworks?	Understanding reporting obligations can help clarify whether your company has recognised control over emissions.		

4. Calculating organisational Scope 3 emissions cont.

Organisational boundary impacts on climate disclosures

The selected organisational boundary should consider the flow-on impacts to climate-related disclosures, including the disclosure of emissions, the setting of targets, and how the disclosed information will be used by stakeholders.

Climate-related disclosures

The Australian climate-disclosure standard (AASB S2)<sup>1</sup> provides important context for choosing organisational boundaries – it considers only the material **financial** impact of climate, allows for proportionality in measuring and disclosing Scope 3 emissions and sets out that targets are forward looking statements and should be made on reasonable grounds.

Exhibit 20 – Australian climate-disclosure standard (AASB S2) context for choosing organisational boundaries



ASRS S2 Materiality

- The AASB considers information to be material **"if omitting, misstating, or obscuring it could reasonably be expected to influence decisions"** of the primary users. Material information needs to be disclosed to ensure that the Financial Statements and Notes provide a true and fair view of the financial position and performance of the organisation.
- This test of ‘materiality’ is not a ‘bright line’ quantitative rule. It requires consideration of qualitative factors, including external factors such as the industry in which the entity operates. Investor expectations may make certain risks, including climate-related risks, ‘material,’ which may warrant disclosure.



ASRS S2 Proportionality

- The proportionality test in ASRS S2 applies to the following disclosures:
  - The identification of climate-related risks and opportunities;
  - Disclosing the anticipated future effects on an entity’s financial performance, position, and cash flows;
  - Measuring and disclosing Scope 3 emissions and identifying the scope of the value chain;
  - The amount and percentage of assets or business activities vulnerable to physical and transition risks, and aligned with climate-related opportunities; and
  - Applying climate-related scenario analysis.



ASRS S2 Reasonable Grounds

- Representations as to future matters will be deemed misleading or deceptive if, as at the time they are made, there were not reasonable grounds for making them.
- There is currently no legislative formula for what ‘reasonable grounds’ look like in the context of climate. Given that uncertainty, directors should consider issues such as:
  - **The robustness of the internal processes** and assumptions on which the conclusion of reasonableness is based;
  - **Input from relevant experts**, and whether it is reasonable to rely on those particular experts (i.e., do they have the relevant expertise?); and
  - **Whether disclosures** relating to the material assumptions, dependencies, caveats, or uncertainties associated with the forward-looking information should be made (equivalent to ‘significant judgments’ or ‘sources of estimation uncertainty’ in the notes to the Financial Statements).

Flow-on impacts

The knock-on effects of the selection of an organisational boundary may include:

- **Use of the information:**  
When choosing an organisational control boundary, it is important to consider what purpose it is being used for by a report user. A broad boundary of emissions may result in a user applying a financial impact to emissions that may not directly create a financial impact to the insurer.
- **Dependence on others for data availability and quality:**  
Setting a broad boundary can result in high dependency on others providing Scope 3 data in a timely and assurable manner. Direct financial control may reduce these dependency risks.
- **Target setting should be made on reasonable grounds:**  
If there is too much reliance on contingencies, the target may not be reasonable. These risks will likely appear for emissions that fall outside of direct financial control (and could be better suited to engagement targets rather than emissions reduction targets).

1. Australian Accounting Standards Board (2024) Australian Sustainability Reporting Standard AASB S2 Climate-related Disclosures.

4. Calculating organisational Scope 3 emissions cont.

Stage 4: Determine operational boundary

Once the organisational boundary has been set, the next stage is to define the operational boundary – that is, which emission causing activities result in direct emissions and indirect emissions.

Due to the operational variability between insurers, the organisational boundary should be assessed on an insurer-by-insurer basis. If there are other non-insurance related entities associated with and within an insurer’s operational control, such as motor repair or roadside assistance, an operational boundary should be established for each separate entity.

Emissions inventory

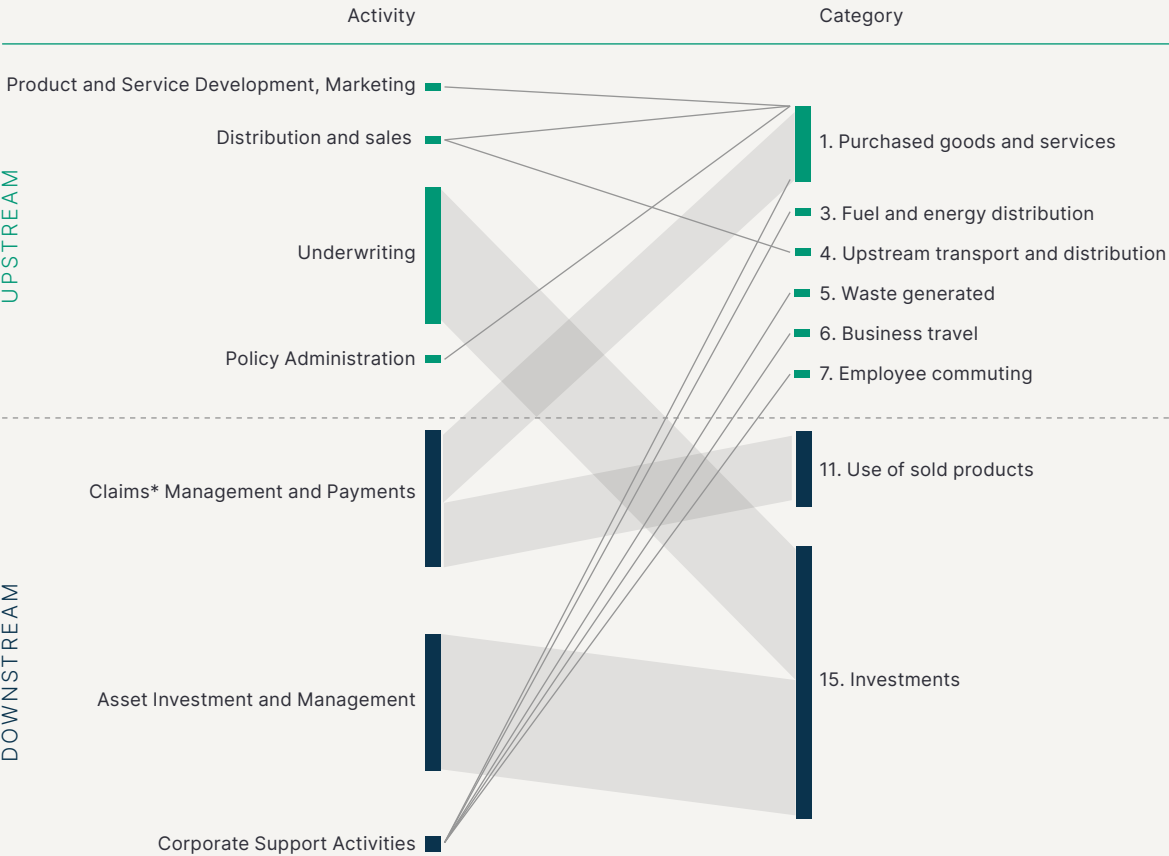
Once the operational boundary has been defined, an insurer should move on to defining its emission inventory, starting with ruling out what categories are not applicable to its business and establishing a rationale for why that is the case. For example, an insurer is unlikely to be selling products that require “processing of sold products”, which typically result from manufacturing, such as emissions from manufacturing cement.

The second stage in developing the emissions inventory is to consider the likely significance of each Scope 3 category within the overall carbon footprint of the insurer, to refine the focus of the next stages in assessing data availability and quality. Assessing significance of emissions should initially be done using qualitative processes or high-level estimation tools. The previous section of this Guide provides sector level guidance that can be drawn upon for this stage (p.14).

For most insurers, Category 15 (including financed emissions and insurance-associated emissions) is likely to be the most material emissions category, with insurance claims being the next most significant (which can be categorised as either Category 1 or Category 11).

Exhibit 21 provides an indicative example of how emissions from business activities may be connected to Scope 3 categories.

Exhibit 21 – Typical insurance activities and the connection to different Scope 3 emissions categories



\* Claims should be either Category 1 or Category 11 – not both.



4. Calculating organisational Scope 3 emissions cont.

Likely significance of Scope 3 emissions

Exhibit 22 – Guidance on the likely significance of emissions across the 15 Scope 3 emissions categories<sup>1</sup>

	Category	Description	Likely applicable to insurers	Likely significance
UPSTREAM	1. Purchased goods and services	Extraction, production, and transportation of goods and services purchased or acquired by the reporting company in the reporting year, not otherwise included in Categories 2–8	Yes, from corporate activities or direct control of insurance claims	High (if used for claims)
	2.Capital goods	Extraction, production, and transportation of capital goods purchased or acquired by the reporting company in the reporting year	Yes, for large goods sitting on balance sheet such as fleet vehicles, caravan parks	Low (excluding non-insurance activities)
	3. Fuel and energy distribution	Extraction, production, and transportation of fuels and energy purchased or acquired by the reporting company in the reporting year, not already accounted for in Scope 1 or Scope 2	Yes, from use of electricity and gas	Low
	4. Upstream transport and distribution	Transportation and distribution of products purchased by the reporting company between a company's tier 1 suppliers and its own operations (in vehicles and facilities not owned or controlled by the reporting company)	Possibly from delivery of goods	Low
	5. Waste generated	Disposal and treatment of waste generated in the reporting company's operations in the reporting year (in facilities not owned or controlled by the reporting company)	Yes, from corporate activities or direct control of insurance claims	Low
	6. Business travel	Transportation of employees for business-related activities during the reporting year (in vehicles not owned or operated by the reporting company)	Yes	Low
	7. Employee commuting	Transportation of employees between their homes and their worksites during the reporting year (in vehicles not owned or operated by the reporting company)	Yes	Low
DOWNSTREAM	8. Upstream leased assets	Operation of assets leased by the reporting company (lessee) in the reporting year and not included in Scope 1 and Scope 2 – reported by lessee	Possibly but unlikely	Low
	9. Downstream transportation and distribution	Transportation and distribution of products sold by the reporting company in the reporting year between the reporting company's operations and the end consumer (if not paid for by the reporting company), including retail and storage (in vehicles and facilities not owned or controlled by the reporting company)	No	–
	10. Processing of sold products	Processing of intermediate products sold in the reporting year by downstream companies (e.g., manufacturers)	No	–
	11. Use of sold products	End use of goods and services sold by the reporting company in the reporting year	Yes, if used for claims	High (if used for claims)
	12. End-of-life treatment of sold products	Waste disposal and treatment of products sold by the reporting company (in the reporting year) at the end of their life	Yes, if direct control of insurance claims	Low
	13. Downstream leased assets	Operation of assets owned by the reporting company (lessor) and leased to other entities in the reporting year, not included in Scope 1 and Scope 2 – reported by lessor	No	–
	14. Franchises	Operation of franchises in the reporting year, not included in Scope 1 and Scope 2 – reported by franchisor	Not for insurance activities	Low
	15. Investments	Operation of investments (including equity and debt investments and project finance) in the reporting year, not included in Scope 1 or Scope 2	Yes, including Financed Emissions and IAEs	Very High

1. Greenhouse Gas Protocol (2011) Corporate Value Chain (Scope 3) Standard.

4. Calculating organisational Scope 3 emissions cont.

Claims-associated emissions

Based on discussions with local and international stakeholders, there are two possible categorisations of claims-associated emissions: “Category 1 – Purchased Goods and Services” or “Category 11 – Use of Sold Product”<sup>1</sup>. Currently, there is limited consensus on which categorisation is preferred by stakeholders. Additional guidance from standards bodies on the treatment of claims emissions is expected to be released in the near term. In the absence of explicit guidance, insurers may choose the categorisation that best aligns with their approach to emissions calculation and reporting. Below are some considerations and notes on the implications of each category to assist an insurer with this decision.

Exhibit 23 – Considerations when choosing a category for claims-associated emissions

Considerations	Category 1 – Purchased goods and services	Category 11 – Use of sold product
May be more appropriate when...	Insurers have a high degree of control over their claims settlement supply chain.	Insurers have a very little control over their claims settlement supply chain.
Justification	The significant emissions associated with settlement of claims is related to the purchasing of goods and services.	Emissions associated with claims are only incurred when a customer of an insurance product ‘uses’ this product – that is, incurs costs that lead to a claim. This provides a neat division between Category 1 corporate type emissions (e.g. purchased consultancy services) and claims emissions which would be treated as Category 11.
Stream	Upstream – services and good procured on behalf of a policy holder.	Downstream – integral part of the insurance policy and premium paid.
Emissions coverage	Emissions calculated are those related to the purchase of goods and services that occurred within the reporting year.	Emissions calculated are those related to the ‘use of the sold product’ (the insurance policy) – over the lifetime of the sold product. For homes and motor insurance, the lifetime of the sold product is typically 12 months. Scope 3 Calculation Guidance <sup>1</sup> states “In category 11, companies are required to include direct use-phase emissions of sold products. Companies may also account for indirect use-phase emissions of sold products and should do so when indirect use-phase emissions are expected to be significant.”
Temporal considerations	Have occurred in the past reporting year.	Guidance for Category 11 requires reporting of current or future year emissions <sup>2</sup> . For most non-insurance organisations, emissions that are calculated will occur in the future. For settlement of claims the emissions occur in the settlement year and should therefore be reported in the current year of the sold product (i.e. the immediate past reporting year). This also aligns with the short lifetime of insurance products (which are often sold on an annual basis).
Exclusions		Direct purchase of replacement (vehicle, home etc.) would remain in Category 1.
Calculation considerations		Reporting of emissions is not pro-rated (i.e. if a company reporting year is July-June and a policy begins in March with a claim being raised in May of the first year, the full value of the emissions are calculated in the first reporting year, not pro-rated across the 12 months. This is because the effort to pro-rate does very little to improve accuracy or actionability of the data (but would greatly increase effort).

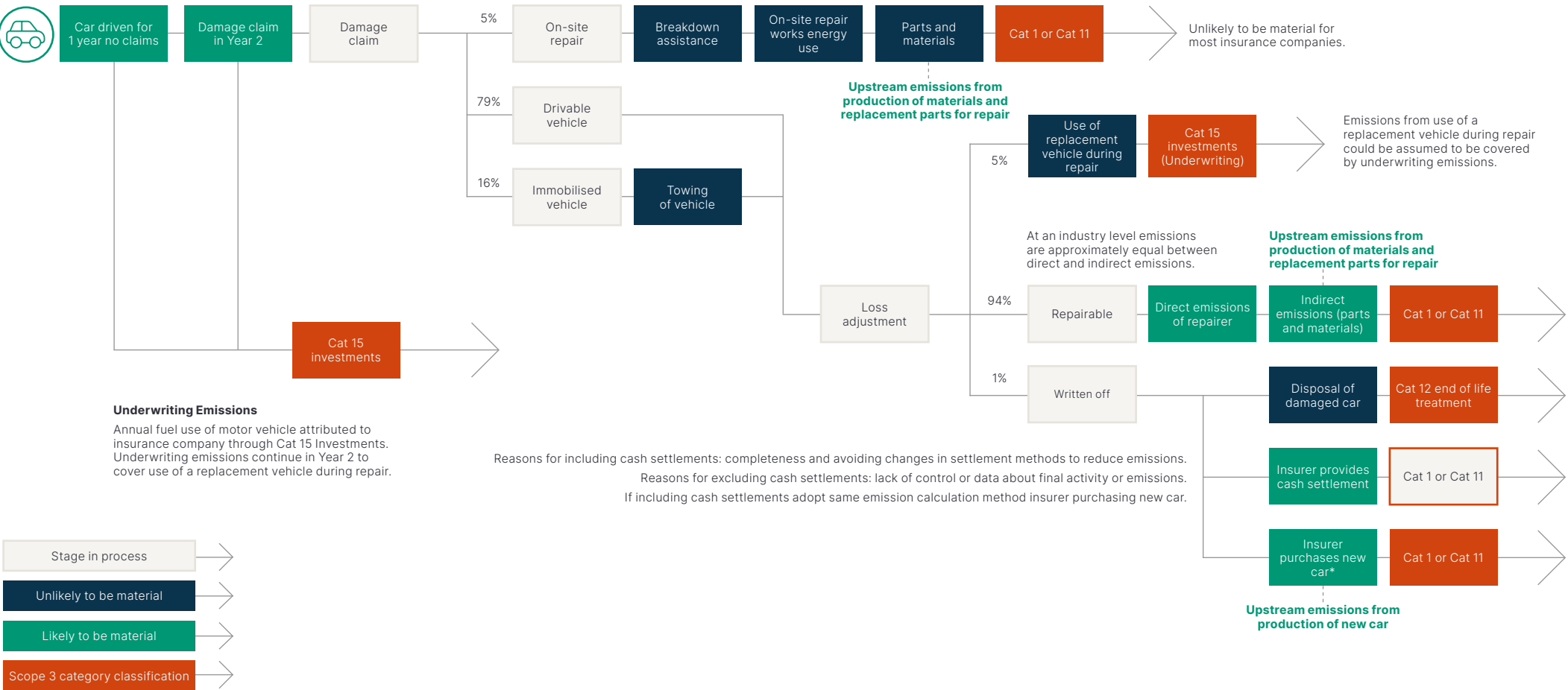
1. Greenhouse Gas Protocol (2011) Corporate Value Chain (Scope 3) Standard.  
2. Greenhouse Gas Protocol (2011) Corporate Value Chain (Scope 3) Standard.

4. Calculating organisational Scope 3 emissions cont.

Motor claims

The diagram below provides an overview of the activities occurring within different motor claim scenarios and how the resulting emissions would be categorised. The percentages alongside the orange arrows give an indication of the industry wide emissions associated with different claim types and are taken from the Insurance Council's Motor Vehicle Claims Decarbonisation – Member Guide<sup>1</sup>.

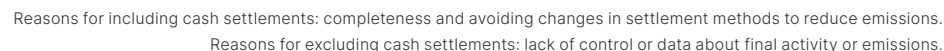
Exhibit 24 – Overview of activities occurring within different motor claim scenarios and how resulting emissions can be categorised



1. Insurance Council of Australia (2023) Motor Vehicle Claims Decarbonisation – Member Guide.

## Home repair claims



**Exhibit 25 – Overview of activities occurring within different home repair claim scenarios and how resulting emissions can be categorised**





4. Calculating organisational Scope 3 emissions cont.

Stage 5 and Stage 6: Measure

Exhibit 26 – Measure		
Stage		
	5. Collect data and assess data quality	6. Develop data improvement plan
Objective	Identify what level of data quality can be achieved with current systems and processes	Set out a data quality improvement plan to increase the quality of reporting over time
Considerations	Maturity of the insurer and supply chain Resources available for the task Availability of data	Maturity of the insurer and supply chain Resources needs for future
Outcome	Data inventory and quality score	Prioritised and time bound actions that improves data quality

Objective

- Identify what level of data quality can be achieved with the current systems and processes.
- Set out a data quality improvement plan to increase the quality of reporting over time.

Overview

The previous stages will have defined the organisational and operational boundary (or boundaries if multiple boundaries are required for different reporting purposes). The insurer should also have a high-level assessment of the significance of different emissions categories.

The focus of Stage 5 is then to collect more accurate data. More accurate data may require investment of significant effort and its important that data collection efforts are justified. Likewise, it is important that the impact of decarbonisation can be measured.

Important considerations for data collection include:

- The significance of the emissions in comparison to other Scope 3 emissions sources.
- The degree of control over the emissions generating activity.
- Whether stakeholders or voluntary standards expect a target will be set over the emissions.
- Feasibility of gathering data in terms of ‘proportionality’ test under AASB S2<sup>1</sup>.

It will be important to keep good records of all data sources and any data transformation that occurs for example, data extrapolation to fill gaps to “annualise” information or making estimations where there are data gaps.

The data quality assessment and improvement plan should align with the ASIC Regulatory Guide for Sustainability Reporting<sup>2</sup> (currently under consultation). This guide emphasises record-keeping obligations, maintaining adequate records, and implementing systems to ensure prompt access for auditors or ASIC. It is currently proposed that this should include such things as:

- Minutes or board or committee meetings
- Internal reports of analysis
- Reports commissioned by third parties
- Emission inventories
- Source documentation and extracts from the general ledger evidencing climate-related impacts
- Working papers or documents evidencing inputs for, and assumptions used in, the sustainability report
- Any assessment undertaken for the purposes of making the statement under s296B (1)<sup>3</sup>

1. Australian Accounting Standards Board (2024) Australian Sustainability Reporting Standard AASB S2 Climate-related Disclosures.

2. Australian Securities & Investments Commission (ASIC) (2024) Sustainability Reporting.

3. Corporations Act (2001) s296B Contents of climate statements--statement about there being no financial risks or opportunities relating to climate.

4. Calculating organisational Scope 3 emissions cont.

Stage 5: Collect data and assess quality

Key fundamentals of high quality and collection process include completeness, accuracy, validity, consistency, timeliness and uniqueness of data. This underpins the ability for high quality calculation and reporting of Scope 3 emissions reporting under AASB S2 requirements<sup>1</sup>.

PCAF provides a framework for data quality scores within its Global GHG Accounting and Reporting Standard Part C – Insurance Associated Emissions<sup>2</sup> and the GHG Protocol in its Technical Guidance for Calculating Scope 3 Emissions<sup>3</sup>. The table below summarises both frameworks and includes additional elements relevant to material emissions within the Australian insurance sector.

An insurer’s focus should be to obtain high certainty and high quality data points for its material emissions while limiting any undue cost or effort.

Exhibit 27 – Overview of PCAF data scores

	PCAF scores <sup>4</sup>	Data type	Description	Example data types
High quality/ certainty data  Most prioritised	1	Reported emissions	Directly measured or recorded data at the location of and from the emissions generating activity is prioritised. These data may be owned and controlled or provided to the reporting entity. They represent the specific emissions generating activity.	<ul style="list-style-type: none"><li>• Near real time measured data</li><li>• Directly measured/metered</li><li>• Data collated through invoices/billing</li><li>• Location/asset specific</li><li>• Verified data</li></ul>
	2/3	Reported or physical activity based emissions	A calculated metric, that uses measured/recorded or estimated data to fill data gaps and generates activity data. They represent the specific emissions generating activity closely. This data may be owned and controlled or provided to the insurer by a third party.	<ul style="list-style-type: none"><li>• Uses alternative temporal/geographic data</li><li>• May be used to fill data gaps/forecasted</li></ul>
Low quality/ certainty data  Least prioritised	4	Economic-activity based emissions	A calculated metric, that uses industry data to generate activity data. They represent the specific emissions generating activity closely. These data may be owned and controlled or provided to the reporting entity by a third party.	<ul style="list-style-type: none"><li>• Usually estimated by taking known data, normalised for location/typology multiplied by known location/typology attribute (e.g. floor area/hours worked)</li><li>• May be used to fill data gaps/forecasted</li><li>• Should be typology and location relevant</li></ul>
	5		An estimated metric using various sources, either measured/recorded at the industry, region, or activity level. This method is used primarily where there is no available activity data and therefore uses a closest representative sample to generate an estimate.	<ul style="list-style-type: none"><li>• Should be used conservatively to reflect actual practice and account for industry-level variability</li><li>• Estimated based on industry known principles/guidelines/insurer portfolio metrics</li><li>• Often generic</li><li>• May only account for part of the benchmark</li><li>• Should be used conservatively and tested</li></ul>

Where measured or calculated data is used, it is important to ensure that the data is complete, accurate and with appropriate governance and evidence retention applied to ensure data quality. Where data is not complete, or has a higher level of uncertainty, the insurer may consider using industry benchmarks and follow the guidance outlined in Stage 6 to progress toward increased data quality over time.

1. Australian Accounting Standards Board (2024) Australian Sustainability Reporting Standard AASB S2 Climate-related Disclosures.

2. Partnership for Carbon Accounting Financials (PCAF) (2022) The Global GHG Accounting and Reporting Standard for the Financial Industry.

3. GHG Protocol (2013) Technical Guidance for Calculating Scope 3 Emissions.

4. Note PCAF scores are self assessed in line with PCAF framework and should be disclosed in line with best practice. Third Party Assurers may review application of criteria as part of their assurance procedures.

4. Calculating organisational Scope 3 emissions cont.

Stage 6: Develop data improvement plan

It is expected that insurers will have to improve data quality over time with a focus on significant emissions sources and emissions that the insurer has the ability to control or influence. Assessing current data quality and showing a plan for improvement will be an important stage within the auditing process.

For data quality improvement to be successful, cross-function collaboration and engagement is required on an ongoing basis. Key considerations of a data improvement plan will include:



- Defining current data quality (see Stage 5 for more guidance on this step)
- Assessing current capability of systems and technologies that are available for data gathering
- Engaging with key stakeholders and building capability around data collection
- Embedding data quality into processes and controls including assigning rules and mandatory fields to ensure that data is complete
- Establishing governance mechanisms to check data quality against the business rules
- Setting clear timelines to ensure the frequency of data collection and quality checks meet reporting and assurance timelines

Exhibit 28 – Key data quality considerations and mitigation strategies

Data quality considerations	Mitigation strategies
Completeness	<ul style="list-style-type: none"><li>• Assign data quality rules and mandatory fields to ensure that data created by users is complete</li><li>• Implement review processes at the point of data creation for required or mandatory fields needed in order to calculate relevant Scope 3 Category</li><li>• Implement proactive data quality review controls with ongoing data quality checks against specific business rules for completeness e.g. using quality dashboards and reports, sign off reviews</li></ul>
Accuracy	<ul style="list-style-type: none"><li>• Implement review processes at the point of data creation to ensure accuracy of data entering for relevant Scope 3 Category</li><li>• Implement proactive data quality review controls with ongoing data quality checks against specific business rules for accuracy e.g. using quality dashboards and reports, sign off reviews</li><li>• Where possible use AI and other automation technologies to reduce human error relating to data entering</li><li>• Perform sensitivity analysis – particularly for data that has noted sources of uncertainty</li></ul>
Validity	<ul style="list-style-type: none"><li>• Assign data validity rules</li><li>• Implement validation checks at the point of data collation to ensure values collected conform with the data type and emission source</li></ul>
Consistency	<ul style="list-style-type: none"><li>• Implement controls to ensure that consistent data sources and calculation methods, data inputs, units, conversions etc. are used where appropriate</li></ul>
Timeliness	<ul style="list-style-type: none"><li>• Ensure data is regularly captured, reviewed and cut-off periods are set to capture changes after reporting dates. Examples could include increasing data capture and internal reporting from annual to quarterly</li></ul>
Uniqueness	<ul style="list-style-type: none"><li>• Assign consistent and unique naming conventions and codes where applicable to reduce risk of duplication</li><li>• Implement processes and controls to identify duplicates within a single data set and across data sets. Data cleansing and de-duplication activities can be undertaken to remediate the duplicated records</li></ul>

4. Calculating organisational Scope 3 emissions cont.

Stage 7 and Stage 8: Disclose

Exhibit 29 – Disclose		
Stage	 7. Calculate, assure and report Scope 3 emissions	 8. Scope 3 emissions reduction targets
Objective	Provide robust, consistent and assured Scope 1, Scope 2 and Scope 3 disclosures in public reports	Set and track performance against near-term and long-term emission reduction targets appropriate to the reporting boundary
Considerations	Requirements for limited and reasonable assurance  Appropriate location of disclosures – Sustainability or Financial Reports	Consider indirect emission reduction targets for impact reporting  Set science aligned targets for financial reporting emissions
Outcome	Gross and Intensity Scope 3 emissions disclosure ready	Appropriate Scope 3 emission targets

Objective

- Provide robust, consistent and assured Scope 1, Scope 2 and Scope 3 disclosures in public reports.
- Set and track performance against near-term and long-term emissions reduction targets that are appropriate to the reporting boundary.

Overview

Calculation of emissions should be based on the best available data with consideration for how “assurable” the data is. The five key criteria that underpins assurance opinions for non-financial related information (including sustainability reporting) per ASAE 3000<sup>1</sup> are:

- 1. Relevance:** relevant criteria that assists and contributes to the decisions made by intended users.
- 2. Completeness:** relevant factors and data that could affect the conclusions in the context of the report are not omitted.
- 3. Reliability:** reasonably consistent evaluation or measurement that is based on reputable standards and guidelines.
- 4. Neutrality:** criteria is free from bias.
- 5. Understandability:** criteria and disclosures contribute to conclusions that are clear, comprehensive, and not subject to significantly different interpretations.

In addition to the above criteria, insurers should ensure ‘consistency’ both year on year and with industry best practice standards for comparability between reporting years and industry peers. Where methodologies evolve over time this should be clearly disclosed. Assurance should, at a minimum, be aligned with the incoming regulatory requirements. Insurers may also seek to achieve assurance levels ahead of the minimum regulatory requirements to ensure they are prepared and that any assurance issues are picked up ahead of the reporting deadlines. The table below shows the suggested reporting and assurance timelines based on reporting year.

Exhibit 30 – Reporting and assurance timelines based on reporting year

Disclosure topic area	Reporting year			
	1st	2nd	3rd	4th
Governance and Strategy – Risks and Opportunities				
Scope 1 and Scope 2 emissions				
Climate Scenario Analysis and Transition Plans				
Scope 3 emissions				

No assurance
Limited
Reasonable

1. Auditing and Assurance Standards Board (2014) Standard on Assurance Engagements ASAE 3000 Assurance Engagements Other than Audits or Reviews of Historical Financial Information.



4. Calculating organisational Scope 3 emissions cont.

Stage 7: Calculate, assure and report

The previous section provides some guidance on calculation across various emissions categories. This calculation guidance should be implemented in the context of the assurance requirements for the disclosures.

The following table provides an overview of the key differences between limited and reasonable assurance to help insurers prepare disclosures. These differences are general in nature and an insurer should seek to engage with their assurer early in the reporting timeframe to understand and align with their methodologies and expectations.

Exhibit 31 – Overview of limited assurance and reasonable assurance

Limited assurance	Reasonable assurance
<p><b>Negative opinion</b> – “Nothing came to our attention to indicate that the metric is materially misstated”.</p>	<p><b>Positive opinion</b> – “Based on the procedures performed, in our opinion, the metric is reasonably stated/not materially misstated”.</p>
<p><b>Testing procedures:</b></p> <p>Performing some procedures to come to an opinion (however the nature, timing and extent of these are far less than reasonable). Procedures usually include:</p> <ul style="list-style-type: none"><li>• Walkthrough procedures</li><li>• Review of Basis of Preparation (BoP) and uncertainty of calculation methodologies</li><li>• Analytical procedures</li><li>• Test of details (limited sample size)</li></ul>	<p><b>Testing procedures:</b></p> <p>Extensive testing procedures are performed in order to come to a positive conclusion (including test of controls). Procedures usually include:</p> <ul style="list-style-type: none"><li>• Walkthrough procedures</li><li>• Test of controls</li><li>• In depth review of Basis of Preparation (BoP) and uncertainty of calculation methodologies</li><li>• Analytical procedures</li><li>• Test of details (large sample size)</li></ul>

The format of disclosures will be dictated by the relevant standards and the needs of an insurer’s stakeholders.

Disclosures should be accompanied by a Basis of Preparation (BoP) that documents the emission inventory calculation methodology, process for data gathering, quality assurance processes and controls as well we the accountabilities. The GHG Protocol<sup>1</sup> uses the term “Data Management Plan” (DMP) for this document. The BoP or DMP should be provided to assurers as part of the assurance process.

While there should be alignment between the Basis or Preparation and the Data Quality Improvement Plan the two are separate documents. The former is focused on documenting current processes whereas the latter includes action plans for improvement in the future time.

The GHG Protocol – Corporate Value Chain Accounting Reporting Standard<sup>2</sup> states that:

“At a minimum the data management plan should contain:

- Description of the Scope 3 categories and activities included in the inventory
- Information on the entity(ies) or person(s) responsible for measurement and data collection procedures
- Data collection procedures
- Data sources, including activity data, emission factors and other data, and the results of any data quality assessment performed
- Calculation methodologies including unit conversions and data aggregation
- Length of time the data should be archived
- Data transmission, storage and backup procedures
- All quality assurance/quality control procedures for data collection, input and handling activities, data documentation and emissions calculations.”

1. Greenhouse Gas Protocol (2011) Corporate Value Chain (Scope 3) Standard.  
2. Greenhouse Gas Protocol (2011) Corporate Value Chain (Scope 3) Standard.

4. Calculating organisational Scope 3 emissions cont.

## Stage 8: Emission reduction targets

The inclusion of climate related financial disclosures in regulatory requirements has led to a marked shift in target setting expectations. There is a general move away from targets as high-level ambitions and a move towards sustainability targets as forward-looking statements that are required to be underpinned by validated and appropriately detailed implementation plans. There are a number of established standards and guidelines that can be considered when an insurer is setting emissions reduction targets. These are outlined below, including key points of guidance or requirements.

### Exhibit 32 – Key standards and guidance on emission reduction target setting

Guideline or Standard	Key points for target setting
<b>Australian Institute of Company Directors – Principles for Setting Climate Targets: A Guide for Australian Boards<sup>1</sup></b>	<p>Key principles:</p> <ul style="list-style-type: none"> <li>Consider how the latest international agreement on climate change, including Australia's climate commitments, have informed the climate target</li> <li>Targets need to be ambitious but achievable with a credible pathway to delivery</li> <li>As targets are forward-looking statements, under Australian law they must be underpinned by reasonable grounds and be verifiable</li> <li>Dependence on unknown contingencies should be limited, where possible, and clearly disclosed</li> <li>Boards should consider when and how progress towards the targets will be tested</li> <li>Targets do not need to cover the entirety of an organisation, at least initially. Instead, a starting point for target setting could be the identification of a particular segment (e.g. a specific product or service, asset class, type of emission, geographic location), that could reasonably meet a future target</li> </ul>
<b>Science Based Targets Initiative (SBTi) – Insurance Underwriting Industry Brief</b>	<p>The Science Based Targets Initiative (SBTi), in partnership with the UN Environment Programme (UNEP), developed this industry brief to provide the initial foundations for re/insurers to set science-based targets that align their insurance underwriting portfolios with a 1.5°C pathway. This paper will be the foundation to explore the development of a future SBTi standard on this topic. In approaching near-term target setting, the SBTi currently recognises three methods that link Financial Institution's investment and lending portfolios with the objectives of the Paris Agreement (SBTi, 2022b):</p> <ul style="list-style-type: none"> <li>Emissions-based targets – Sectoral Decarbonisation Approach (SDA)</li> <li>Portfolio alignment targets – Portfolio Coverage Approach (PCA) and Temperature Rating Approach (TRA)</li> </ul>
<b>Net-Zero Asset Owners Alliance Target Setting Protocol 4th edition<sup>3</sup></b>	<p>The Net-Zero Asset Owners Alliance (NZAOA) targeting setting protocol provides guidance on:</p> <ul style="list-style-type: none"> <li>Level of ambition for reduction of emissions by 2030</li> <li>Scope of emissions targets</li> <li>Recommended baseline and target intervals</li> <li>Approach to four categories of targets: engagement targets, sector targets, sub-portfolio targets and climate solutions investment targets</li> </ul>
<b>United Nations Environment Program Forum (UNEP) Forum for Insurance Transition to Net-Zero (FIT): Closing the Gap Report</b>	<p>The inaugural UNEP FIT report provides guidance specific to the insurance industry for development of robust transition plans – with a focus on underwriting activities. In particular, Table 1 provides insurance-specific guidance related to types of targets that should be disclosed.</p>

1. Australian Institute of Company Directors and the Insurance Council of Australia (2024) Principles for setting climate targets: A guide for Australian boards.

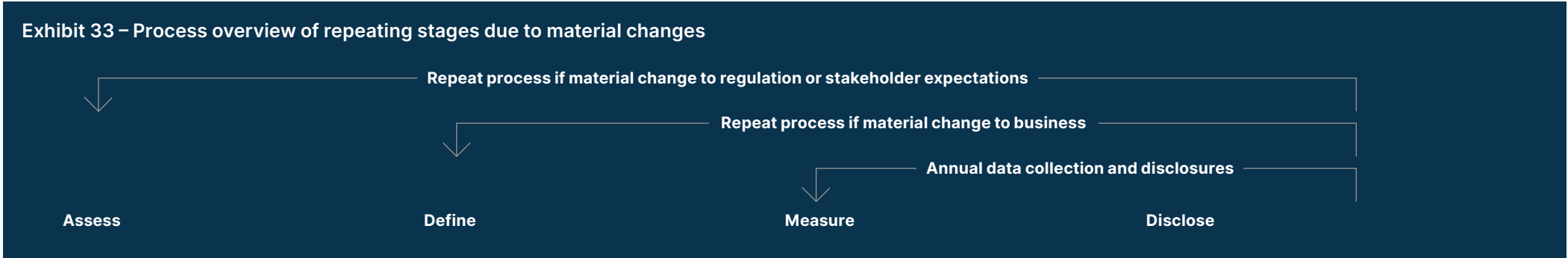
2. Science Based Targets (2023) SBTi Kickstarts Net-Zero for Insurance Underwriting with New Industry Brief.

3. Net-Zero Asset Owner Alliance (2024)NZAOA Target-Setting Protocol Fourth Edition.

4. United Nations Environment Program Forum (UNEP) Forum for Insurance Transition to Net Zero (FIT) (2024) Closing the Gap: The emerging global agenda of transition plans and the need for insurance-specific guidance.

4. Calculating organisational Scope 3 emissions cont.

Material changes: repeating stages



The processes of gathering and reporting data will need to be repeated based on annual disclosure timelines. There may also be a requirement to revisit boundary setting and the overall purpose based on material changes to either the business or regulation/stakeholder expectations.

Annual disclosures

Stages 5 to Stage 8 should be repeated annually in order to recalculate, assure, disclose and validate emissions reduction progress against targets. These annual changes should include monitoring for updates to calculation guidance from organisations such as UNEP-FIT and PCAF.

Material change to business

Stage 3 and Stage 4 should be repeated when there is a material change to the businesses’ activities. This could include:

- Acquisitions leading to new lines of businesses or divestments
- Restructure of ownership or control
- Significant changes in investment strategies
- Significant changes in business strategy

Any of these changes may lead to a need to reconsider either, or both, the organisational and operational boundary.

Material change to regulation or stakeholder expectations

Stage 1 and Stage 2 should be repeated when there are material changes to either regulation or expectations from stakeholders. Relevant stakeholders could include investors and shareholders, rating agencies, policy makers, civil society, clients and customers, and employees.

Stakeholder expectations can be monitored through double materiality assessments, investor surveys, shareholder meetings and through interactions with customers. The evolution of existing voluntary standards or development of new standards could also affect stakeholder’s expectations.

Regulatory changes are likely to be infrequent, however additional guidance on interpretations of AASB S2<sup>1</sup> requirements may occur following its implementation in January 2025.

1. Australian Accounting Standards Board (2024) Australian Sustainability Reporting Standard AASB S2 Climate-related Disclosures.

4. Calculating organisational Scope 3 emissions cont.

A note on materiality

This section provides guidance on materiality that can help insurers to interpret what is a ‘material’ change in the context of their organisation. What is, and is not, considered a material change will vary depending on each insurers size, risk tolerances and stakeholders. Below is some general guidance that can be used to assess the materiality of a change.

Material changes to regulation or stakeholder expectations

When there is a material change to regulation or stakeholder expectations within the environment an entity operates, it is recommended that the entity redefines its general principles and approaches for emission calculation and reporting and redetermines its reporting boundary.

Material changes to regulation

This may include the expansion of existing regulation, such as if Scope 3 emissions were made reportable under NGER<sup>1</sup>; the mandating of previously voluntary reporting, such as TCFD<sup>2</sup>, or; the introduction of a price on carbon within an entity’s value chain. Although there is no method to quantitatively assess the materiality of such a change, an insurer may consider the AASB guidance<sup>3</sup> whereby if omitting, misstating, or obscuring information could reasonably be expected to influence decisions made by primary users, that information is material.

Material changes to stakeholder expectations

Stakeholder expectations for emissions reporting may evolve due to improvements in how emissions data is disclosed and rising standards for these reports. These changes may also be driven by external factors, such as new regulations or specific events, such as requirements for regular double materiality assessments. Under the EU Corporate Sustainability Reporting Directive (‘CSRD’)<sup>4</sup>, it’s recommended that companies undertake Double Materiality Assessments every two to three years, unless major internal or external events dictate a more frequent review.

As companies conduct these assessments, they might find that they need to expand the scope of their reporting. This change generally occurs as companies become aware of broader and newer expectations from both their internal teams and external stakeholders.

1. Clean Energy Regulator (2024) National Greenhouse and Energy Reporting Scheme.

2. Task Force on Climate-related Financial Disclosures (2023).

3. Australian Accounting Standards Board (1995) AASB 1031 Materiality.

4. European Commission (2024) Corporate sustainability reporting.



4. Calculating organisational Scope 3 emissions cont.

A note on materiality cont.

Material changes to business

When there is a material change to an insurer's business profile, it is recommended that a reassessment of the organisational and operational boundaries occurs. Although there is no definitive answer to what constitutes a material change, AASB<sup>1</sup> and the SBTi<sup>2</sup> both provide guidance for the consideration of quantitative and qualitative assessments to determine whether a change to the business is material.

AASB S1 and S2 – qualitative

AASB S1<sup>3</sup> and AASB S2<sup>4</sup> state that an entity shall disclose material information about the climate-related risks and opportunities that could reasonably be expected to affect the entity’s prospects. In the context of climate-related financial disclosures, information is material if omitting, misstating or obscuring that information could reasonably be expected to influence decisions that primary users of general purpose financial reports make on the basis of those reports, which include financial statements and climate-related financial disclosures and which provide information about a specific reporting entity. This test of materiality is only related to the financial impact of climate-related risks and opportunities. It is likely to set a higher bar for materiality than those tests related to the quantity of GHG emissions alone.

SBTi – quantitative

SBTi provides some guidance on whether an organisation needs to undertake recalculations based on any of the following changes having occurred:

- The consolidation approach chosen for the emission inventory has changed.
- Exclusions in the inventory or target boundary have changed significantly and/or exceeded allowable exclusion limits (more than 5 per cent of Scope 1 and 2 emissions and/or more than 33 per cent of Scope 3 emissions).
- Significant changes in company structure and activities that would affect the company’s target boundary or ambition (e.g., acquisitions, divestitures, mergers, insourcing or outsourcing, shifts in product or service offerings).

- Adjustments to data sources or calculation methodologies that resulted in significant changes to the organisation’s total base year emissions or to the target boundary base year emissions (e.g., the discovery of significant errors or several cumulative errors that are collectively significant).
- Other significant changes to projections/assumptions used in setting your science-based target<sup>5</sup>.

1. Australian Accounting Standards Board (1995) AASB 1031 Materiality.

2. Science Based Targets (2023) SBTi Kickstarts Net-Zero for Insurance Underwriting with New Industry Brief.

3. Australian Accounting Standards Board (2024) AASB S1 General Requirements for Disclosure of Sustainability-related Financial Information.

4. Australian Accounting Standards Board (2024) Australian Sustainability Reporting Standard AASB S2 Climate-related Disclosures.

5. Getting started Guide for Science-based Target Setting, March 2024.



# Part B

1	Executive summary	41
2	Introduction	42
3	Process overview	44
4	References	62

# Decarbonisation Supply Chain Engagement Roadmap



# 1. Executive summary

This roadmap provides a structured approach for general insurers to engage with their supply chains on decarbonisation. With Scope 3 emissions constituting the largest portion of insurers' greenhouse gas emissions and increasing regulatory and stakeholder expectations around emissions reporting and reduction, effective supply chain engagement is becoming critical.

The roadmap outlines a five-stage process for general insurers to develop and implement supply chain engagement strategies:

1. **Define approach and prioritise:**  
Insurers must first assess their own maturity level (foundational, maturing, or advanced) regarding sustainability and procurement capabilities. This assessment, combined with analysis of emissions significance across the supply chain, helps determine the initial scope and prioritisation of engagement activities.
2. **Supplier maturity and decarbonisation potential:**  
This stage involves evaluating suppliers' capabilities and the technical feasibility of emissions reduction in their operations. This assessment helps tailor engagement approaches and expectations appropriately.

3. **Internal consultation and planning:** Before external engagement begins, insurers should map internal stakeholders, understand existing supplier relationships and procurement cycles, and develop clear objectives and timeframes for engagement.
4. **Engage and monitor:** Implementation involves aligning supplier incentives with decarbonisation objectives and establishing appropriate monitoring mechanisms. The roadmap emphasises the importance of continuous improvement and adjustment based on supplier feedback.
5. **Review and improve:** Regular review of engagement outcomes helps identify successful approaches and areas requiring modification, ensuring the engagement strategy remains effective and aligned with evolving requirements.

The roadmap acknowledges that claims supply chains, particularly in motor and home insurance, represent significant emissions sources requiring specific focus. For motor claims, key decarbonisation opportunities include repairer energy use, parts procurement and repair versus replacement decisions. For property claims, opportunities focus on operational energy efficiency improvements and material choices.

## Key recommendations

- Industry collaboration:** Insurers should work together on common challenges such as:
- Developing standardised taxonomies for claims emissions
  - Joint advocacy for energy efficiency improvements in claims processes
  - Coordinated efforts to enhance supplier capabilities
  - Industry-wide minimum standards for suppliers
- Some of these types of collaboration may require regulatory approval.

**International developments:** The Australian general insurance industry should actively monitor and engage with emerging international standards and methodologies for claims emissions measurement and management.

The roadmap emphasises that engagement approaches must be tailored to each insurer's circumstances, considering their maturity level, available resources, and supply chain characteristics. It also highlights the importance of balancing ambitious decarbonisation objectives with practical implementation challenges and the need for continuous improvement as methodologies and technologies evolve.

For successful implementation, insurers should ensure appropriate governance structures are in place, align engagement activities with existing supplier relationships and procurement processes, and maintain focus on data quality and verification requirements that will support future regulatory reporting obligations.

## 2. Introduction

### Purpose and scope

#### Purpose

The purpose of this roadmap is to outline a structure and approach to effective engagement with an insurer’s supply chain for decarbonisation. This includes strategies, tools and examples that individual insurers can leverage to implement emission reduction measures.

#### Scope

The scope of this roadmap is emissions embedded within an insurer’s supply chain – their Scope 3 emissions. There is a particular focus on claims supply chains as this is an area where guidance has previously been lacking. For the Australian general insurance industry, the claims supply chain is dominated by home and motor claims.

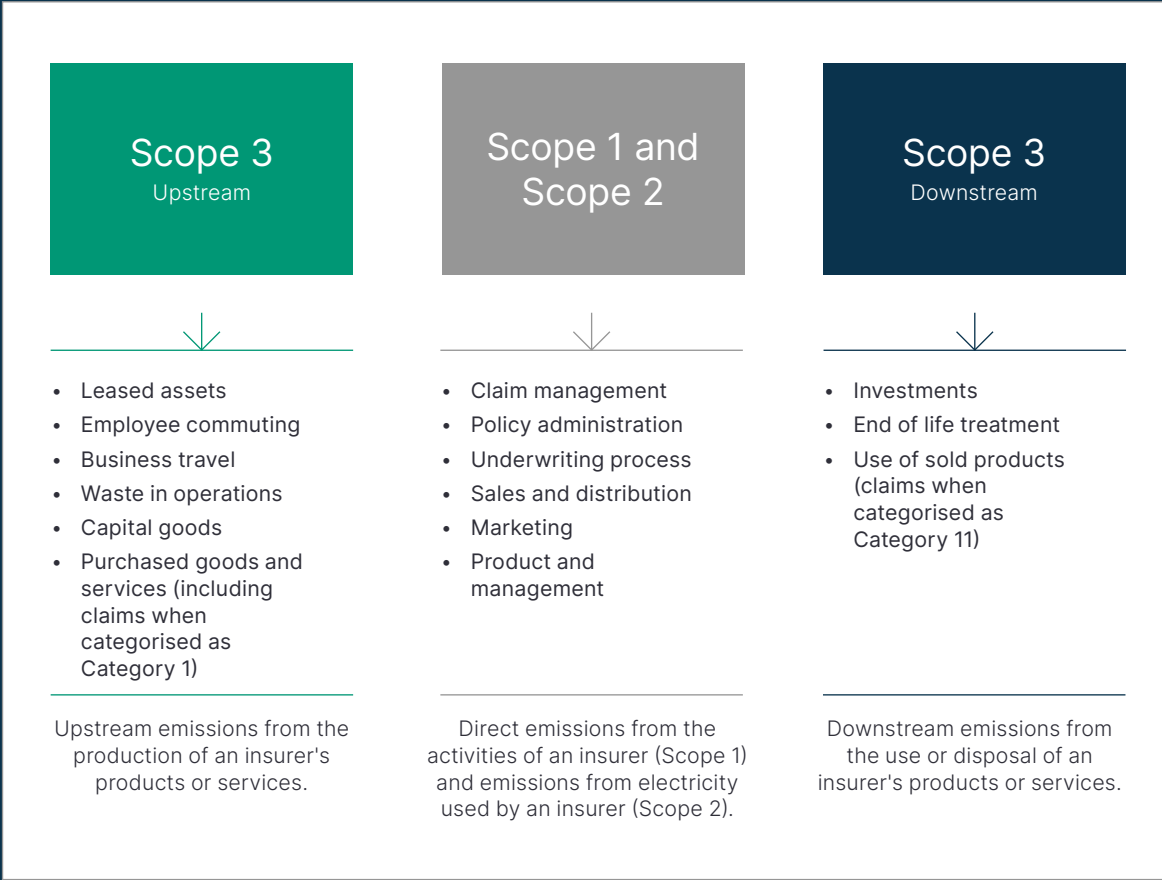
The roadmap addresses the whole supply chain of organisations, not just direct suppliers. This is important as an insurer may not have a direct financial or operating relationship with the emissions causing activity but can still have an important role in decarbonisation. For example, a motor repair shop will not directly produce steel used in replacement parts, but by sourcing components from steel manufacturers with lower embodied carbon or by using second-hand parts they can help reduce emissions across the supply chain.

The roadmap does not address Scope 3 Category 15 – Investments<sup>1</sup>, as significant guidance already exists for this emissions category and investment emissions.

#### Supplier engagement for Scope 1 and Scope 2 emissions

While this roadmap is focused on Scope 3 emissions it could also be used to engage suppliers that provide goods or services that fall into an insurers Scope 1 and Scope 2 emissions. For example, an insurer may currently run a fleet of vehicles with internal combustion engines which contributes to its Scope 1 emissions. Designing a process to engage with suppliers on the speed and feasibility of transitioning to electric vehicles may be informed by this roadmap.

### Exhibit 1 – Overview of Emissions



1. Greenhouse Gas Protocol (2011) Corporate Value Chain (Scope 3) Standard.



2. Introduction cont.

Defining engagement

**Supply chain engagement** is the proactive sharing of information between an insurer and its supply chain. A **supply chain engagement plan** is a set of activities and tactics that support the exchange of information between an insurer and its supply chain. A **supply chain roadmap** recognises that engagement with a supply chain will change over time and so seeks to provide a forward-looking plan to continually improve supply chain engagement.

A supply chain roadmap may be influenced by internal or external factors including:

- New regulatory requirements
- Updated stakeholder expectations on decarbonisation and management of suppliers
- New voluntary or sector-based guidance at a national or international level
- Maturity of the insurers procurement and sustainability functions and the resources available to them
- Capability and decarbonisation potential of an insurer's supply chain

Better practice engagement for supply chain decarbonisation should:

- **Clearly articulate the objective** of the engagement
- **Articulate the role** that the supplier or supply chain sector has in the insurer's decarbonisation journey
- **Focus on actionable decarbonisation:** approaches to engagement, data, and targets should support decarbonisation efforts while protecting insurers against greenwashing claims. Targets and data requests should therefore be aligned with the organisation's relationship to the emissions causing activity.
- **Be science aligned:** engagement, data and target setting should focus on emissions reductions rather than offsets and should be considered within the context of emissions reductions required to align with the Paris Agreement.
- **Consider decarbonisation in the context of broader sustainability:** while an insurer might focus their roadmap on decarbonisation potential, it is important to consider related sustainability issues

alongside engagement for decarbonisation. In many cases, engagement activities and data can be leveraged across multiple sustainability issues. For example, supply chain information for modern slavery and Scope 3 emissions may overlap.

- **Focus on integration rather than separation:** engagement with the supply chain should leverage existing relationships, programs and processes to ensure efficient use of resources and strengthen sustainability outcomes.
- **Embed good governance:** clarity over the processes and systems used to engage with suppliers and record information. The roadmap considers the ability to provide verification and current (or future) assurance requirements of claims and data.

A note on suppliers, supply chain categories and supply chain sectors

The scope of this document is the full supply chain of an insurer. The approach adopted by individual insurers may vary. The structuring of engagement activities can be done at a supplier, supplier category or supply chain sector level.

Supplier level

It may be appropriate to focus on individual suppliers where an insurer's organisational spend and the associated significant emissions is highly concentrated. This approach will also be more appropriate when an insurer is only focusing on the emissions over which they have control (as defined by operational or financial consolidation approaches).

Supplier category

Insurers may organise suppliers into categories based on logic internal to the insurer. Organising engagement activities at a category level may be preferable when there are multiple suppliers within a category and/or when existing supplier relationships are managed at a category level.

Supply chain sector

Supply chain sectors refer to larger industry groupings. Organising engagement by sector may be preferable when there are a large number of suppliers or when the engagement activity is not within an insurers direct supply chain. This may also be an area where insurance sector level cooperation may be appropriate subject to regulatory approval if necessary.

This roadmap uses all of the above terms but may use just one term when it is appropriate (e.g. only talking about direct suppliers when discussing contract clauses).

# 3. Process overview

To establish an effective and focused engagement roadmap for supply chain decarbonisation, an insurer must first have a good understanding of the greenhouse gas emissions that occur within its supply chain. For this reason, it is recommended that insurers first read and work through the stages outlined in the Scope 3 Guide. The Scope 3 Guide provides information on determining the purpose of Scope 3 reporting, defining boundaries, assessing appropriate data quality, calculation, assurance and target setting. This document is intended to be read after reading the Scope 3 Guide.

<p>This roadmap builds on the understanding of an insurer’s supply chain emissions to provide practical guidance on engagement for decarbonisation with an insurer’s supply chain and suppliers. Exhibit 2 provides an overview of the recommended process which has five key stages:</p> <ol style="list-style-type: none"><li>1. Define approach and prioritise</li><li>2. Supplier maturity and decarbonisation potential</li><li>3. Consult and plan</li><li>4. Implement and monitor</li><li>5. Review and improve</li></ol>	<p>It is recommended that these stages are revisited as the supply chain matures, data improves, disclosure requirements change and/or decarbonisation targets are revised. The appropriate timeline for this will vary depending on the speed of change across any of these aspects.</p> <p>For each of the stages in the process, this roadmap provides further detail including:</p> <ul style="list-style-type: none"><li>• A description of the objective to be achieved</li><li>• Detail of the tasks involved in each stage, including tools or processes that can be used</li><li>• A list of considerations</li><li>• Outcomes from each stage</li></ul>	<p>Additional notes that provide detail on specific issues can be found in call out boxes throughout the roadmap.</p>
---	---	---

## A note on AASB S2<sup>1</sup>:

Australia’s mandatory climate-related financial disclosures commenced on 1st January 2025. This requires large entities to assess and disclose information about their climate-related risks and opportunities.

In the context of this document the AASB S2<sup>2</sup> provides useful guidance on:

**Financial materiality** of climate risks and opportunities including where minimum reportable boundary should be drawn. Emissions within the entities minimum boundary should be supported by the entities transition plan.

**Specification that targets are treated as forward-looking statements** and are accompanied by plans to achieve them. Alignment of engagement plans with targets will be part of demonstrating achievability.

**Assurance requirements** which start with limited assurance and strengthen to reasonable assurance over time. Record keeping and approaches to data gathering from supply chains should keep audit requirements in mind.

1. Australian Accounting Standards Board (2024) Australian Sustainability Reporting Standard AASB S2 Climate-related Disclosures.  
2. Australian Accounting Standards Board (2024) Australian Sustainability Reporting Standard AASB S2 Climate-related Disclosures.

3. Process overview cont.

Process diagram

Exhibit 2 – Process overview for establishing a decarbonisation supply chain engagement roadmap



UNDERSTAND INSURERS GHG EMISSIONS

3. Process overview cont.

Checklist

Supplier engagements should be specific to the insurer’s own maturity and supply chain. It is therefore not possible to provide a one ‘template’ approach that is appropriate across the entire general insurance industry. Instead, the list below provides a checklist to test that a roadmap is designed appropriately for an insurer’s individual circumstances.

Exhibit 3 – Question checklist to test that a roadmap is designed

Question	Yes/No
Does an engagement plan address all significant emissions related to the insurer's activity? If not, has the insurer documented its screening and logic behind focusing on certain areas of the supply chain first?	
Is the relationship between the insurer's control approach, reportable emissions and engagement plans clear?	
Does the roadmap include a plan for continual improvement and expanded supply chain engagement over time? Is the timeline clearly articulated?	
Does the scope of the roadmap match resources available to execute it?	
Have all stakeholders who have a role within the engagement plan been involved or briefed as part of the plan's development?	
Does the engagement plan match public commitments that have been made for emissions reduction?	
Have broader sustainability themes and information needs been considered alongside the requests for information on emissions?	
Does the engagement plan have the sponsorship and endorsement of an appropriate Executive?	
Has governance and reporting been established against the plan's objectives?	
Have unintended consequences of the engagement plan or approach been considered and risks been appropriately managed?	

3. Process overview cont.

Stage 1: Define approach and prioritise

Overview

This stage requires analysis of an insurer’s existing capability and emissions profile. It builds on the current understanding of an insurer’s supply chain emissions that was developed through the implementation of the Scope 3 Guide. It also assumes that an insurer has chosen a consolidation approach which then informs an emissions boundary and materiality assessment of their Scope 3 emissions.

Objective

Define the approach to supplier engagement, prioritise and focus supplier engagement plans.

Task 1.1 – Define approach: emission maturity self-assessment

The primary consideration when defining the overarching approach to supplier engagement should be an insurer’s own resources, capability and maturity across both procurement and sustainability functions. To assess an insurer’s own emissions maturity as it relates to it’s supply chain, the insurer will need to identify and engage with internal stakeholders. This set of stakeholders will be different for in each insurer but may include: category managers, strategic procurement, project or category teams involved in tender evaluation, sustainability and business unit managers.

This stage draws on the principles outlined within the AASB-S2 guidance<sup>1</sup> around considering the skills, capabilities and resources available to the reporting entity when determining the appropriate approach to climate disclosures.

Questions to ask at this stage include:

- Is there an existing understanding of the insurer’s emissions? Have emission reduction targets been communicated internally or externally?
- What financial and/or human resources are available for supply chain engagement?
- What existing programs and budgets could be leveraged?
- What expectations do stakeholders have for supply chain engagement and do the available resources align with this?
- What existing knowledge and experience exists within the insurer around sustainability, decarbonisation and supply chain management?
- How centralised is existing supply chain management? Are the governance systems and processes within supply chain management clear?

Considerations for this stage

Information that will inform this stage includes:

- Emissions inventory, control approach and organisational emissions (and sustainability) targets
- Regulatory or voluntary standards
- Stakeholder expectations
- Resources available for task

A note on engaging with suppliers

The recommended approach and prioritisation of suppliers does not consider an insurer’s level of influence in Stage 1. An insurer may be relatively small compared to its supplier and therefore not be able to significantly influence the terms of a contract or may feel that demands for ambitious targets will not be met by a supplier. For example, an insurer who has a supply agreement with a global cloud and IT provider.

Regardless of level of influence, it is important that if an insurer has control over an emissions generating activity, they can show the efforts they have taken to engage with those suppliers to attempt decarbonisation. There may also be opportunities to switch to a different supplier within the same service/product offering.

It is therefore recommended that suppliers are not de-prioritised due to a perceived or actual lack of influence.

1. Australian Accounting Standards Board (2024) Australian Sustainability Reporting Standard AASB S2 Climate-related Disclosures.



3. Process overview cont.

Stage 1: Define approach and prioritise cont.

Exhibit 4 – Example: Questions to ask internal stakeholders

Question	Example answer
What financial and/or people resources are available for supply chain engagement?	Full-time sustainability team
What existing programs and budgets could be leveraged?	Budget assigned
What expectations do stakeholders have on the insurer's supply chain engagement and do the available resources align with this?	High expectations
What regulatory requirements will supply chain engagement support?	Emerging regulation
What existing knowledge and experience exists within the insurer around sustainability, decarbonisation and supply chain?	Emerging knowledge – supply chain team have not been bought on journey
Outcome	Maturing: focus on high control and begin to broaden in to lower levels of control

This table outlines how answers to the maturity questions on the previous page may position an insurer on the maturity scale as either foundational, maturing, or advanced. The assessment against these maturity levels is inherently qualitative. It is recommended that a selection of cross-disciplinary stakeholders from the sustainability and supply chain functions are engaged for the assessment.

Exhibit 5 – Insurer maturity levels

Maturity Levels	Foundational	Maturing	Advanced
Description	<ul style="list-style-type: none"> <li>Decentralised procurement that lack systems and processes</li> <li>No emissions reduction targets</li> <li>Limited understanding of the insurer's emissions</li> <li>Minimal resources available</li> </ul>	<ul style="list-style-type: none"> <li>Centralised procurement for some major categories</li> <li>Supply chain emissions reduction targets are set, but not consistently communicated externally</li> <li>Some systems and processes with emerging governance are in place</li> <li>Some dedicated sustainability resources exist</li> </ul>	<ul style="list-style-type: none"> <li>Centralised procurement with strong systems and processes</li> <li>Emissions targets and sustainability targets established and communicated to suppliers</li> <li>Existing supplier management processes are in place throughout procurement cycle</li> <li>There is a dedicated sustainability team and good sustainability knowledge throughout the supply chain function</li> </ul>
Approach to engagement	<b>Focus on supply chain within minimum boundary:</b> An insurer at a foundational level should focus first on where they have full control over the emissions generating activity (according to the insurer's emissions consolidation approach under the GHG Protocol <sup>1</sup> when using financial or operational control).	<b>Broaden approach to areas of influence:</b> An insurer at a maturing level should seek to expand approaches into areas where they have influence but not direct control of the emissions generating activity.	<b>Whole of supply chain:</b> An insurer at an advanced level should seek to address all significant emissions sources across their supply chain regardless of their level of control.

1. Greenhouse Gas Protocol (2011) Corporate Value Chain (Scope 3) Standard.

3. Process overview cont.

Stage 1: Define approach and prioritise cont.

Task 1.2 – Prioritise: emissions significance of suppliers or supply chain sectors

Building on the assessment of maturity and defined approach, the next important consideration when prioritising the engagement plan is to identify supply chain emission categories that make a significant contribution to the insurer's emissions. Suppliers or supply sectors that have high significance from an emissions perspective should be the priority for supply chain engagement. Suppliers and sectors with low significance can be deprioritised.

Assessing the significance of suppliers or supply sectors in terms of GHG emissions will directly leverage the work completed by the insurer previously and as outlined in the Scope 3 Guide. The emissions across the insurers supply chain should have already been established at a GHG Protocol category level (e.g. Category 1–15)<sup>1</sup>. Likewise, the degree of financial or operational control over those emissions will also have been established as part of the Scope 3 calculation process.

The task required here is to further segment the insurer's emissions based on supplier or supply category. The data required for this task is likely to be a similar dataset as was used for the initial Scope 3 emissions calculations however it may require additional layers of information at a supplier, category and/or sector level.

The sub-categorisation chosen by an insurer should seek to align with internal approaches to procurement segmentation and, if possible, external stakeholder expectations on emissions reporting. See also the note on page [41] regarding when it may be appropriate to focus at a supplier, supply chain category or sector level.

Having identified the suppliers or supply categories that are the source of significant emissions, the supply chain engagement plan can then be focused on these areas. In Exhibit 6 this is demonstrated in dark green.

To improve the likelihood of making a meaningful impact on emissions in the shortest period of time, suppliers categories and/or sectors that have low emissions significance (the light green section in Exhibit 6) should not be prioritised for engagement.

They can be addressed through low-effort activities such as minimum standards in contracts and pre-qualification criteria in procurement processes.

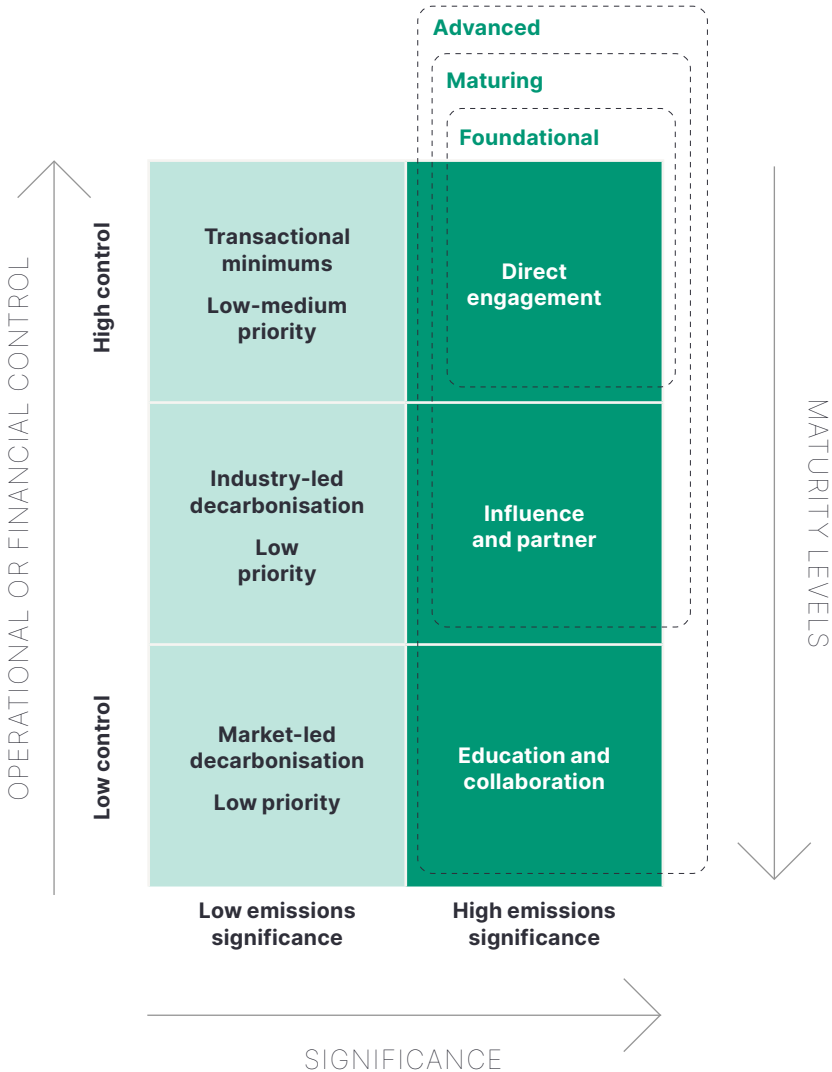
Combining emissions significance with the degree of control an insurer has over those emissions generating activities will give direction to the engagement types, target type and information requested. More detail on engagement approaches across high significance sectors and suppliers is provided on the next page.

Outcomes

The outcome of Stage 1 should be:

- Identify the insurer's supply chain and sustainability maturity to inform the overarching approach to supply chain engagement
- Prioritise supply chain areas for engagement based on significance of emissions and maturity of insurer

Exhibit 6 – Prioritisation of emissions and definition of approach based on control, significance of emissions and insurers maturity



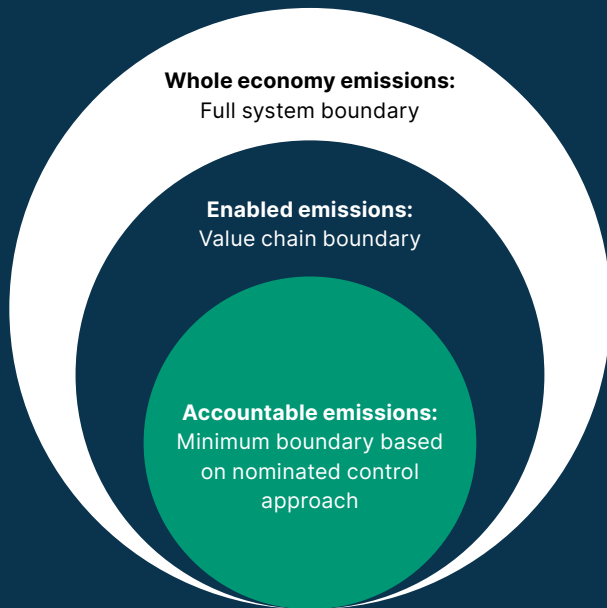
1. Greenhouse Gas Protocol (2011) Corporate Value Chain (Scope 3) Standard.

### 3. Process overview cont.

## Stage 1: Engagement across different control types

Focusing on significant emissions sources, Exhibit 8 shows how engagement across the supply chain should change as the level of influence and control reduces. While this framework should set the initial expectation for engagement, Stage 2 incorporates further information on a supplier's maturity and decarbonisation potential that should also inform engagement type and information requests.

### Exhibit 7 – Example of relationship to emissions causing activity



### Exhibit 8 – Engagement across different control types

	Engagement type	Purpose of engagement	Alignment with boundary	Target type examples	Examples of engagement mechanisms	Data type	Example
<p>Direct relationship to emissions causing activity</p> <p>Disclosed emissions under regulatory requirements</p>	<b>Direct</b>	Reduce insurers transition risk and/or directly contribute to insurer achieving own emission targets	Minimum boundary based on nominated control approach	Absolute and intensity reductions	Direct engagement, contractual requirements, pre-qualification criteria	Actual activity data, Industry benchmarks, targeting PCAF quality scores 1–2 over time <sup>1</sup>	Supplier X must reduce the emissions intensity per supplied unit by 5% year on year over the supply contract
	<b>Influence and partner</b>	Reduce non-direct transition risks, reputational risk and meet stakeholder expectations	Value chain boundary	Engagement targets, screening	Collaboration and influence, non-binding contractual clauses	Industry or economy level benchmarks, targeting PCAF quality score 3–4 over time <sup>2</sup>	% of suppliers within category that agree to implement a selection of predefined emissions reductions actions
<p>No control or direct influence</p> <p>Whole economy emissions</p>	<b>Education and collaboration</b>	Enable transformation and innovation through aligning multiple stakeholders	Full system boundary	Disclosure of activities, advocacy and education	Advocate and educate (may require sector level engagement rather than individual supplier level engagement)	Description of examples of activities	A description of current and planned engagement and collaborative activities with membership bodies, industry associations, industry counterparts

1. Partnership for Carbon Accounting Financials (**PCAF**) (2022) The Global GHG Accounting and Reporting Standard for the Financial Industry.
2. Partnership for Carbon Accounting Financials (**PCAF**) (2022) The Global GHG Accounting and Reporting Standard for the Financial Industry.

3. Process overview cont.

Stage 2: Supplier capability and decarbonisation potential

Overview

The second stage seeks to understand the decarbonisation potential of supply chain categories and suppliers as well as their maturity level.

Objective

Refine the approach to supply chain engagement based on current supplier or sector maturity and decarbonisation potential.

**Task 2.1 – The initial supplier assessment can be undertaken against two key criteria: decarbonisation potential and supplier capability.**

Decarbonisation potential:

This is the proven technologies and solutions that are available to decarbonise the emissions generating activity. It may be possible for some activities to almost completely decarbonise while others may be in “harder to abate” sectors.

Decarbonisation potential can be assessed through a combination of desktop review and, if required, high-level discussions with industry bodies. Detailed supplier discussions should be saved for later stages in the engagement process.

Decarbonisation potential will also become more difficult in “deeper” supply chains. That is, where the activity generating the majority of carbon emissions are embedded within Tier 2, Tier 3 and beyond, such as indirect suppliers and subcontractors. This creates a dependency on others in the supply chain to achieve decarbonisation.

**Supplier capability:** Supplier decarbonisation capability will be a combination of factors. Size of the supplier is often a key determinant as larger suppliers may have more resources available for innovation. The maturity of the supplier on their sustainability journey will also be a key factor. Other considerations could include maturity of existing systems and processes and internal resourcing. At this stage, the assessment of capability should be done at a high level, as further refinement of supplier capability can occur as engagement progresses.

As in Stage 1, a range of internal stakeholders can be involved in this assessment. Exhibit 9 combines decarbonisation potential with supplier capability to show how these two concepts together define the approach to engagement.

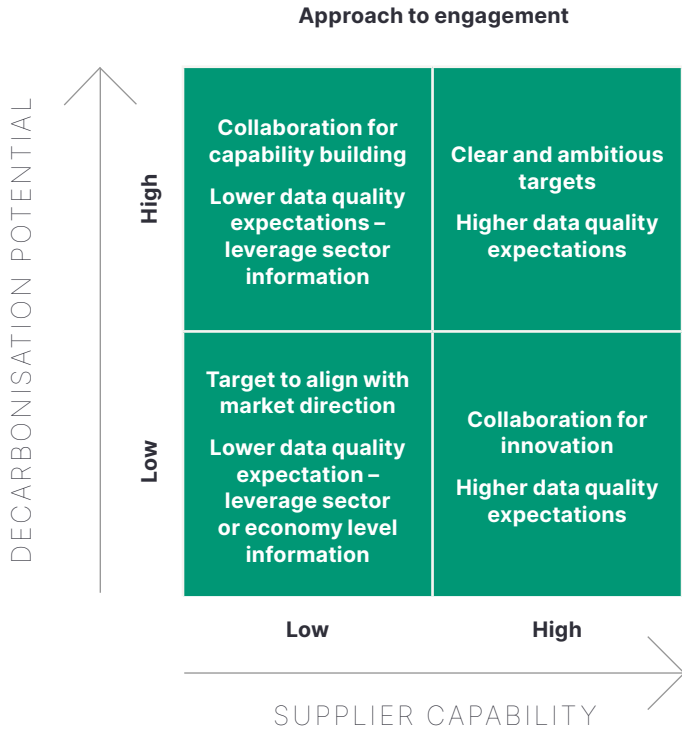
Outcomes

Qualitative assessment that prioritises the timing and type of engagement appropriate for suppliers and supply chain.

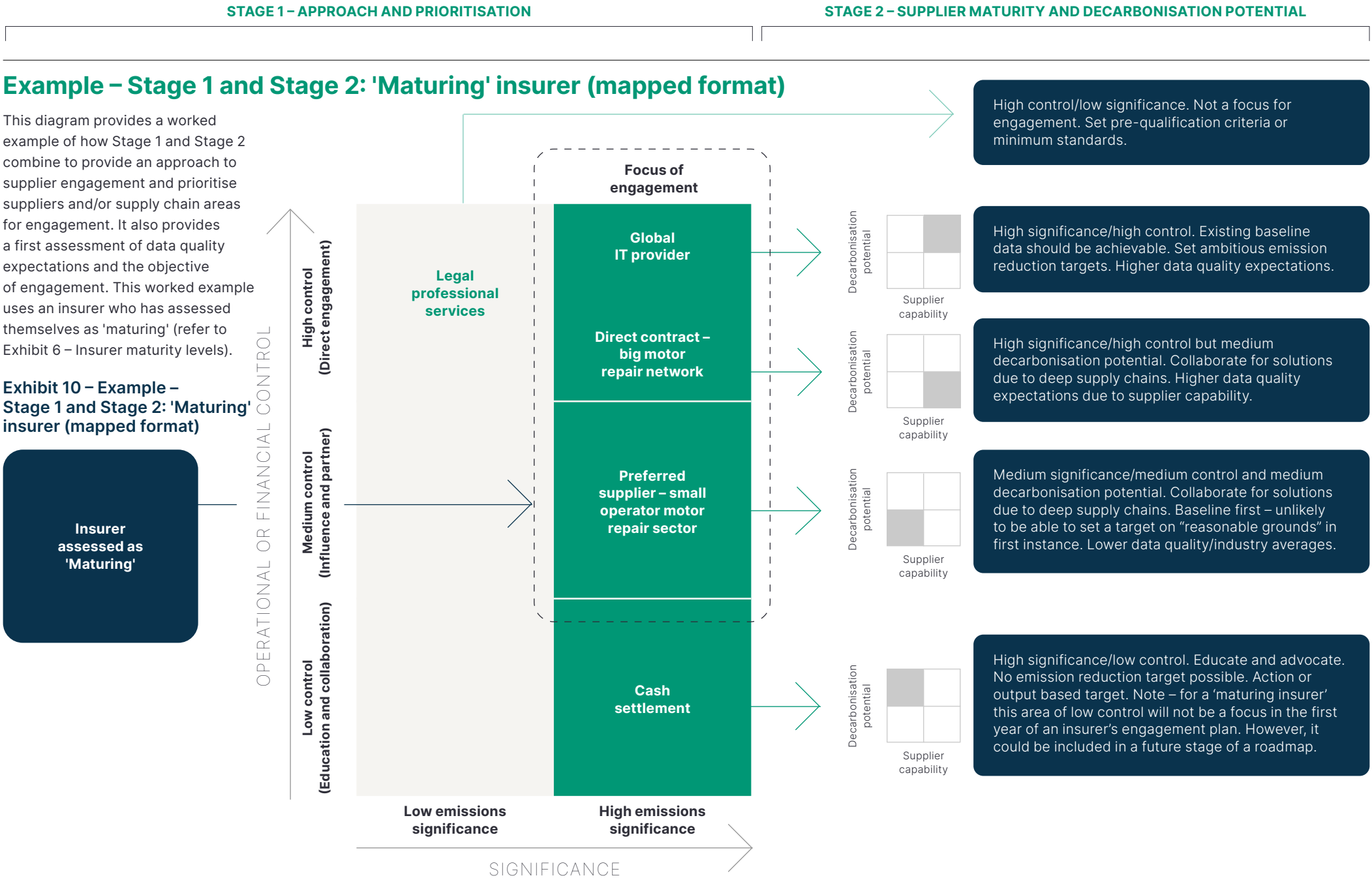
Considerations for this stage

- Industry level decarbonisation plans
- Maturity mapping of suppliers/supply chain
- Existing supplier knowledge and emissions information
- Publicly available information on size and sustainability commitments

Exhibit 9 – Approach to engagement based on supplier capability and supplier decarbonisation potential



3. Process overview cont.





3. Process overview cont.

Example – Stage 1 and Stage 2: 'Maturing' insurer (table format)

Exhibit 11 – Example – Stage 1 and Stage 2: 'Maturing' insurer (table format)

Stage 1: Approach and prioritisation				Stage 2: Supplier capability and decarbonisation potential		
Supplier	Significance	Financial or operational control	Outcome	Decarbonisation potential	Supplier capability	Outcome
CATEGORY 1 – PURCHASED GOODS AND SERVICES	Professional Services	Low	High	Low engagement solution	Not prioritised for engagement due to low significance	Set pre-qualification criteria or minimum standards.
	Global IT Provider	High	High	Focus of engagement	Low	High Existing baseline achievable. Set ambitious emission reduction targets. Higher data quality expectations.
	Direct contract – big motor repair network	High	High	Focus of engagement	Low	Low Collaborate for solutions due to deep supply chains. Higher data quality expectations due to supplier capability.
	Preferred supplier – small operator motor repair sector	High	Lower	Broader focus of engagement	Low	Low Collaborate for solutions due to deep supply chains. Baseline first – unlikely to be able to make a target on “reasonable grounds” in first instance. Lower data quality/industry averages.
	Cash settlements	High	Low	Not prioritised within the first year/s of roadmap		Include in later years of Roadmap. Educate and advocate. No emission reduction target possible. Action based target.

3. Process overview cont.

Stage 3: Internal consultation and planning

Overview

The first two stages in this process will have established an overarching approach and prioritisation of suppliers and/or sectors for emissions reduction engagement, according to the maturity of the insurer, the maturity of the supply chain, decarbonisation potential, significance of emissions and control of the emissions generating activity.

Stage 3 begins the process of internal consultation to understand existing engagement owners, contractual relationships, stages of procurement cycle and overlap with other information requests to the supply chain.

To the extent possible, decarbonisation should be aligned with, and leverage, existing measures. This can ensure that data can be shared between sustainability areas (where useful) and requirements of suppliers are streamlined.

Examples of initiatives or data gathering exercises that could be leveraged include:

- Supply chain information gathered for modern slavery reporting purposes
- Data gathering on social impact initiatives implemented through supply chain
- Existing strategic supplier engagement programs

For insurers that were assessed at a “foundational” level in Task 1.1, there may not be many existing processes to leverage. Regardless, it will be important to understand the context of procurement within the insurers own organisation before engaging externally.

Objective

Gather information internally to leverage and integrate within existing approach to supply chain engagement including existing management and governance processes.

Task 3.1 – Internal stakeholder identification

While internal stakeholders will have been engaged from earlier in the process, this task is to identify stakeholders in line with the prioritised approach and suppliers, supply chain categories or sectors. The purpose is to understand the role of internal stakeholders who are involved in supply chain engagement across the insurer and have a clear understanding of their roles and responsibilities. While each insurer will be structured differently, the following list of internal stakeholders should be considered:

- Category managers
- Strategic procurement
- Project or category teams involved in tender evaluation
- Sustainability
- Business unit managers
- Compliance or legal functions
- Risk
- Accounting or finance
- Government relations

Considerations for this stage

- Current contractual arrangements
- Points of intervention within procurement cycle
- Types of engagement in place and roles and responsibilities within business functions
- Other material sustainability issues

A note on existing vs. new suppliers

The tasks outlined in this stage assume that the insurer is largely focused on existing suppliers and supply chain to decarbonise. There may also be opportunities for insurers to switch suppliers where assessment of decarbonisation potential can play a role in initial tender evaluation processes. To do this effectively insurers can consider a variety of approaches depending on the sector including pre-qualification criteria or weighted evaluations. Suppliers could also be given the opportunity to provide performance-based solutions (rather than respond to prescriptive criteria) to encourage innovation.

3. Process overview cont.

Stage 3: Internal consultation and planning cont.

Once identified, the role of internal stakeholders relative to the supply chain should be established. Sometimes this is clearly documented within an insurer, but it often involves investigation and discussions with stakeholders to provide full detail. Having mapped roles and responsibilities, a plan can be made to assign the appropriate resourcing at each stage of the supply chain engagement. Although internal stakeholders will have been engaged earlier, at this stage an owner or sponsor of the engagement plan should be nominated – ideally at an Executive level. Clear governance of the plan should be confirmed with the relevant stakeholders.

**Task 3.2 – Implemented engagements and procurement cycles**

Before developing an engagement plan there needs to be a thorough understanding of an insurer’s existing supply chain relationships and procurement cycles. This ensures that the engagement plan is aligned with points of leverage and decision-making processes within the insurer. For example, if a supplier has recently been signed up to a two-year contract and the terms of the contract can’t be changed, engagement should focus on non-contractual points of influence.

For the priority suppliers or supply chain categories it is prudent to understand:

- The type of contract in place (if any)
- The stage in the procurement cycle that the supplier is at
- The key points of intervention where targets could be implemented, or data requests be made

- Which leverage points exist within the current arrangements to encourage alignment or collaboration
- The teams and key persons that make the final decision about suppliers and the evaluation criteria they use
- Other data requests (both sustainability and non-sustainability related) being made of the supplier
- Other KPIs the supplier is having to meet and how are these managed

Any planned changes to contracts will require early engagement with internal legal resources. Contractual clauses are effective mechanisms when requiring specific actions such as the provision of data in certain formats and at certain time intervals. Another key consideration is whether the contract format is determined by the insurer or by the supplier. The note to the right outlines considerations where the ability to influence contractual terms or data requirements is limited.

A note on high capability suppliers

If supplier capability is very high, it may be possible that they already publicly disclose all the relevant emissions data and information within an Annual/Sustainability Report, ESG Databook, Basis of Preparation, or transition plan. Engagement for the purposes of data gathering or confirming their emissions reductions targets may therefore be limited.

If the supplier is also a large organisation, an insurer may feel they do not have the ability to require the supplier to report on emissions. If this is the case, and the supplier is a significant source of emissions, their public disclosures can be taken into account when considering the objectives of engagement. For example, if data is readily accessible then there may be no need to engage on this issue. Instead, there may be opportunities to undertake innovative pilots or track more meaningful metrics, e.g. energy per unit of service and/or product rather than just renewable electricity purchased.

Note – it is unlikely that a large supplier, who has the power to dictate terms to an insurer, declines the request to provide information on its emissions.

3. Process overview cont.

Stage 3: Internal consultation and planning cont.

Task 3.3 – Planning engagement

After establishing the relevant internal roles and responsibilities and an insurer’s relationships to its supply chain, a plan for engagement can begin to be made.

The plan should reflect the approach and prioritisation that was undertaken in Stage 1 and Stage 2. The previous stages provide a high-level assessment that will be refined based on the feedback gathered through the engagement process.

The plan for engagement should provide an initial approach across the following criteria:

- **Set clear objectives for the engagement:** An insurer should be clear on the objectives they are trying to achieve through engagement. These objectives should be tailored according to the control and influence the insurer has over the supply chain area as well as the maturity of the insurer and the supplier or sector. Examples of potential objectives or information that is being sought as part of engagement is included in the call out box to the right.

- **Provide timeframes:** The requests of the supplier should then be broken down into achievable components with timeframes provided for each. Aligned with the principle of continual improvement, the engagement plan should not be a single one-off engagement but a timebound roadmap of improvement. These timebound requests may be documented in terms of KPIs within communications to suppliers or within contracts, if appropriate.
- **External stakeholder identification:** Based on those objectives, an appropriate stakeholder within the supply chain should be identified. For example, if you are seeking innovation and collaboration then a supplier’s R&D department and/or product experts may need to be involved. If you are seeking improved data quality, sustainability or financial analysts should be engaged.

This initial plan for engagement is only a starting point. After engagement has begun the plan will need to be adjusted based on feedback from suppliers that could include the feasibility of objectives, timeframes and further information provided by the supply chain.

Outcomes

Once Stage 3 is complete, an insurer will have a plan for supply chain engagement that considers:

- Initial approach and prioritisation (information from Stage 1)
- Supplier capability and decarbonisation (information from Stage 2)
- Internal stakeholders, existing supplier relationships and the objectives for engagement

Example objectives of engagement and types of information:

- Training and upskilling on measurement of emissions or setting of targets
- Implementation of an emissions reduction initiative
- Reduction in emissions intensity per unit of good or service
- Increased share of renewable energy in total energy consumption
- Reduction in absolute emissions
- Increased proportion of low environmental impact products or services provided
- Collaboration for innovative solutions to hard-to-abate emissions generating activities





3. Process overview cont.

Stage 4: Engage and monitor cont.

Task 4.2 – Monitor

An insurer should seek to monitor progress against the objectives and/or KPIs that were established as part of the engagement plan. This serves to improve accountability and to encourage continual improvement. The appropriate monitoring mechanisms will vary depending on the objectives of engagement and other incentives that are in place.

Some examples of monitoring include:

- Requirements to maintain certifications
- Audits – either by the insurer or a third-party
- Supplier scorecards or ratings
- Supplier self-assessments

As well as tracking the objectives and/or KPIs agreed previously, an insurer should also check that the engagement process and requests of suppliers have not caused any unintended consequences. For example, reporting requirements that are overly onerous and difficult for a supplier to complete.

When monitoring and reporting on supply chain engagement activities, insurers should also keep in mind the Forum for Insurance Transition to Net-Zero Closing the Gap Report<sup>1</sup>. The Report’s Transition Plan Taskforce Disclosure Framework provides sub-categories for reporting of engagement in transition reporting. Full guidance on recommended reporting of engagement activities can be found in Table 1 of the report.

Outcomes

- Supply chain decarbonisation plans are put into action.
- Ongoing engagement and progress against targets is tracked.

A note on industry collaboration

Collaboration between insurers will be important to overcome barriers to decarbonisation within the supply chain. Areas that are well suited for collaboration could include:

- Industry agreement on a ‘taxonomy’ for claims emissions including common definitions of decarbonisation solutions.
- Industry advocacy to government to support energy efficiency improvements as part of major homes claims or appliance replacements.
- Industry efforts to increase capability of suppliers and/or invest in automation of data collection from suppliers for insurers.
- Industry cooperation on minimum standards or transition plans for suppliers.

Some of these types of collaboration may require regulatory approval.

1. United Nations Environment Program Forum (UNEP) Forum for Insurance Transition to Net Zero (FIT) (2024) Closing the Gap: The emerging global agenda of transition plans and the need for insurance-specific guidance.







### 3. Process overview cont.

## Home claims decarbonisation

Alongside motor claims, home repair claims make up a large proportion of claims activity in the Australian market. The residential building market is a difficult sector to decarbonise due to:

- Fragmentation of the home builder and repairer market
- A diverse policy environment
- Complexity of buildings with a multitude of different products (including key “hard to abate” sectors such as concrete and steel)

Data may also be difficult for insurers to access due to poor record keeping regarding materials used (e.g. contracts are lump sum amounts inclusive of labour and materials) and energy used in the construction process being billed to the homeowner through their domestic contract. Additionally, given the current electricity grid mix, the embodied and construction emissions related to homes repair work is likely to be outweighed by emissions produced in the operation of homes<sup>1</sup>.

Given this context, it may be appropriate to focus on decarbonisation engagement in the homes claims supply chain that enables solutions beyond direct repair activity. This could include:

- Advocacy to government to enable energy efficiency improvements that are currently limited by ‘like-for-like’ requirements
- Incentives for electrification as part of replacement of appliances
- Incentives and advocacy regarding onsite renewable energy
- Incentives for selecting energy efficient appliances
- Incentives to improve thermal performance of the building
- Consideration of resilience in home repairers to minimise the ‘whole of life’ GHG emissions associated continual repair
- Repair over replacement whenever possible
- Reducing wastage

As with motor claims, there may also be opportunities for insurer industry level collaboration in this space.



1. Green Building Council Australia (2021) Embodied Carbon & Embodied Energy in Australia's Buildings.

3. Process overview cont.

Stage 5: Review and improve

Objective

Review success of the plan, record lessons and develop a plan for improvement or maintenance of activity.

Task 5.1 – Review and improve

The results of the engagement and monitoring process should be reviewed regularly against the objectives that were set at the beginning of engagement.

Review processes should include a cross-section of stakeholders. It may be useful to refer back to the internal stakeholders that were first identified in Stage 3 when considering who to involve.

Improvement plans should focus both on what the insurer may need to change as well as noncompliant supplier actions or supply chain progress that is not maintaining pace with the engagement roadmap plans.

Depending on the aspects that are falling short, improvement plans could include:

- Developing quantifiable, timebound targets and milestones to bring suppliers back into compliance
- Providing information on actions that can be taken to address gaps in progress
- Changes in the targeted external stakeholders
- Changes in incentives
- Adjustments to data requests or further clarity around data boundaries and calculation approaches

Any lessons learnt should be documented to ensure continuity of knowledge if personnel engaged in the roadmap process change roles.

The engagement plan should also be reviewed in light of any changes in regulation, stakeholder expectations, voluntary guidance or material change in business activities. These changes could in turn impact the requests on suppliers and the supply chain.

Outcomes

Documented areas of success or improvement used to revise engagement plan and roadmap, and sustain engagement with supply chain.

Considerations for this stage

- Changing supply chain relationships or contract types
- Lessons learnt
- Economic reality of the insurer

A note on international examples and standards

Desktop review and stakeholder consultation with international standard setting organisations and international insurers demonstrated that there is significant interest in developing consistent methodologies for claims emissions to inform approaches to supply chain engagement. Despite this interest, there is currently little agreement or case study examples of better practice in this space.

As mentioned earlier, UNEP-FIT has released transition planning guidance that is relevant to claims and supply chain engagement<sup>1</sup>. There are plans for additional guidance in 2025.

The Insurance Council will continue to monitor international developments.

1. United Nations Environment Program Forum (UNEP) Forum for Insurance Transition to Net Zero (FIT) (2024) Closing the Gap: The emerging global agenda of transition plans and the need for insurance-specific guidance.

## 4. References

- 
- [APRA \(2024\) Quarterly general insurance performance statistics](#)  
[Auditing and Assurance Standards Board \(2014\) Standard on Assurance Engagements](#)  
[Australian Accounting Standards Board \(1995\) AASB 1031 Materiality](#)  
[Australian Accounting Standards Board \(2024\) Australian Sustainability Reporting Standard AASB S2 Climate-related Disclosures](#)  
[Australian Bureau of Statistics \(2020\) Survey of Motor Vehicle Use](#)  
[Australian Bureau of Statistics \(ABS\) \(2023\) Housing](#)  
[Australian Government \(2023\) National Greenhouse Accounts Factors](#)  
[Australian Government \(2024\) Green Vehicle Guide](#)  
[Australian Institute of Company Directors and the Insurance Council of Australia \(2024\) Principles for setting climate targets: A guide for Australian boards](#)  
[Australian Securities & Investments Commission \(ASIC\) \(2024\) Sustainability Reporting](#)  
[Clean Energy Regulator \(2024\) National Greenhouse and Energy Reporting Scheme](#)  
[Climate Active \(2019\)](#)  
[European Commission \(2024\) Corporate sustainability reporting](#)  
[Frontier Economics \(2020\) Residential energy consumption benchmarks](#)  
[Science Based Targets \(2024\) Getting started Guide for Science-based Target Setting](#)  
[Green Building Council Australia \(2021\) Embodied Carbon & Embodied Energy in Australia's Buildings](#)  
[Greenhouse Gas Protocol \(2011\) Corporate Value Chain \(Scope 3\) Standard](#)  
[Industrial Ecology Virtual Laboratory \(2025\)](#)  
[Insurance Council of Australia \(2023\) Motor Vehicle Claims Decarbonisation – Member Guide](#)  
[Insurance Council of Australia \(2024\) Australia's Insurance Industry Snapshot – July 2024](#)  
[Insurance Council of Australia \(2024\) Climate Change Roadmap Towards a Net-Zero and Resilient Future: 2024 Update](#)  
[Net-Zero Asset Owner Alliance \(2024\) NZAOA Target-Setting Protocol Fourth Edition](#)  
[Partnership for Carbon Accounting Financials \(PCAF\) \(2022\) The Global GHG Accounting and Reporting Standard for the Financial Industry](#)  
[Qorus \(2024\) Measuring CO<sub>2</sub> emissions in auto claims management](#)  
[Science Based Targets \(2023\) SBTi Kickstarts Net-Zero for Insurance Underwriting with New Industry Brief](#)  
[Task Force on Climate-related Financial Disclosures \(2023\)](#)  
[UK Government \(2024\) Greenhouse Gas Reporting: Conversion Factors](#)  
[United Nations Environment Program Forum \(UNEP\) Forum for Insurance Transition to Net Zero \(FIT\) \(2024\) Closing the Gap: The emerging global agenda of transition plans and the need for insurance-specific guidance](#)  
[World Business Council for Sustainable Development \(2022\) Incentives for Scope 3 supply chain decarbonization: accelerating implementation](#)  
[World Economic Forum in partnership with the Boston Consulting Group \(BCG\) \(2024\) The Net-Zero Value Chain – Support Hub](#)





Insurance Council  
of Australia

**© Insurance Council of Australia**

The Insurance Council of Australia is the representative body for the general insurance industry of Australia. Our members represent approximately 90 per cent of total premium income written by private sector general insurers, spanning both insurers and reinsurers.

General insurance has a critical role in the economy, insulating individuals and businesses from the financial impact of loss or damage to their insured assets.

Our work with our members, consumer groups and all levels of government serves to support consumers and communities when they need it most.

We believe an insurable Australia is a resilient Australia – and it's our purpose to be the voice for a resilient Australia.

**[insurancecouncil.com.au](https://insurancecouncil.com.au)**