Department of Climate Change
Energy, the Environment and Water

# Net Zero Business Guide

March 2025

NSW GOVERNMENT

# Acknowledgment of Country

Department of Climate Change, Energy, the Environment and Water acknowledges the traditional custodians of the land and pays respect to Elders past, present and future.

We recognise Australian Aboriginal and Torres Strait Islander peoples' unique cultural and spiritual relationships to place and their rich contribution to society.

Artist and designer Nikita Ridgeway from Aboriginal design agency – Boss Lady Creative Designs, created the People and Community symbol.

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**Net Zero Business Guide**

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# Contents

# About the Net Zero Business Guide

The Net Zero Business Guide (the Guide) can help you identify actionable steps to transition to net zero emissions and assess your progress in this journey.

The Guide brings together frameworks, resources, and processes to help set and support your organisation's net zero goals. It also offers practical steps for transitioning to net zero that apply to businesses across the economy. It can prompt discussions to start your organisation's net zero journey, help identify gaps in established net zero plans or provide direction on the potential next steps.

This Guide:

- draws upon the experiences of over 50 businesses
- uses a holistic and systematic approach
- incorporates the relevant national and international frameworks[1]
- is informed by consultations with industry experts and businesses.

The Guide does not represent any official government policy or requirements. It serves as a roadmap to support businesses on their path to net zero emissions.

### What is net zero?

Net zero refers to the condition in which human-caused residual Greenhouse Gas emissions are balanced by human-led removals. This balance occurs over a specified period and within specified boundaries, as outlined in the ISO Net Zero Guidelines. For businesses, achieving net zero may require an overhaul in the way they operate, including how they manufacture and transport products, and how customers consume them.

### How to use the Guide

The Guide can be used to best suit your needs — either as step-by-step net zero readiness assessment, or to focus on the elements you need more information and guidance.

[1] This Guide is a living document. It was last cross-checked against the relevant national initiatives in February 2025.

# Key actions of the Net Zero Business Guide

Below is a brief description of the 9 elements covered in the Guide and their key actions.

**1. Strategy**

A net zero strategy gives senior managers and stakeholders (internal and external) a clear business rationale for investing in net zero technologies, management systems and practices. An effective strategy should also identify and address the climate change business risks and opportunities for a holistic approach to net zero planning.

*Key actions:*

1.1. Identify and assess climate-related risks and opportunities

1.2. Consider business model implications of a net zero commitment

1.3. Develop a high-level net zero policy

1.4. Define how to engage with other Environmental, Social, and Governance (ESG) initiatives and activities

1.5. Periodically review and update the net zero strategy

**2. Governance**

Having clear governance structures supports an organisation's transition to net zero by ensuring executives and stakeholders (internal and external) are kept informed, accountable and responsible for achieving net zero goals.

*Key actions:*

2.1. Assess the organisation's governance structure in relation to net zero

2.2. Ensure executive leadership accountability for overseeing and reporting on net zero initiatives.

2.3. Allocate and communicate accountability and responsibility for net zero at all levels of the organisation

2.4. Periodically review and update governance practices

## 3. People and capability

People who are part of an organisation make decisions that contribute to organisation's net zero goals, so it is important there are measures in place to scale people capability, skills and shared knowledge of business net zero goals.

*Key actions:*

3.1. Assess the organisation's net zero capability needs and identify gaps

3.2. Upskill staff and increase capability to support the net zero goal

3.3. Align staff remuneration and incentives with the organisation's net zero goals

3.4. Communicate the organisation's net zero goal, build culture and increase awareness

3.5. Periodically review and update staff upskilling, communication and incentive programs

## 4. Data

Data is essential to measuring and managing emissions, setting a net zero target, enabling businesses to identify emissions reduction opportunities, tracking progress and communicating performance. Identifying the necessary data and data collection systems should be done well in advance of implementation to allow time needed for establishing baselines and ensure data is being collected as soon as emissions reduction actions begin.

*Key actions:*

4.1. Scope and plan the organisation's emissions inventory

4.2. Identify and calculate the organisation's Greenhouse Gas (GHG) emissions

4.3. Customise the organisation's approach to identifying, assessing and accounting for scope 3 emissions

4.4. Establish the organisation's emissions data management processes and metrics

4.5. Verify your GHG emissions inventory

4.6. Periodically track and report progress towards net zero

## 5. Targets

Net zero targets provide an agreed and measurable goal for an organisation to strive for and articulate the organisation's intention to its stakeholders. Although the ultimate goal is net zero emissions, it is essential for organisations to establish clear timelines and near-term milestones for achieving the final goal.

*Key actions:*

5.1. Consider the organisation's approach to setting net zero targets

5.2. Set near-term and long-term emissions reduction targets

5.3. Periodically review and update the organisation's emissions reduction targets

5.4. Consider disclosing the organisation's commitment and progress towards achieving the emissions reduction targets

## 6. Action plan

A net zero action plan provides an organisation with a structured approach to achieve net zero. The action plan should include a list of practical actions the organisation will undertake to reduce its scope 1, 2, and 3 emissions. An action plan demonstrates credibility and achievability of the organisation's net zero targets.

*Key actions:*

6.1. Develop a long-term net zero action plan to achieve net zero

6.2. Develop mid-term and short-term action plans

6.3. Periodically review and update the net zero action plans

## 7. Finance

Organisations need sufficient capital to fund initiatives that progress their net zero targets. Understanding the financial implications, opportunities, and available funding options is crucial for maximising the outcomes.

*Key actions:*

7.1. Consider the financial impacts of the organisation's net zero goal

7.2. Identify financing options

7.3. Budget for net zero financial planning

7.4. Periodically review and update your financial plans

## 8. Stakeholder engagement

Stakeholder engagement builds relationships between the business and its partners to deliver emissions reductions. This is important for reducing scope 3 emissions that fall beyond the operational boundaries of an organisation. This requires collaboration across a broad group of stakeholders, including suppliers and customers, wider industry, government, and civil society.

*Key actions:*

8.1. Engage with the organisation's value chain

8.2. Engage with the wider industry

8.3. Engage with government and civil society

8.4. Periodically review and update your stakeholder engagement activities

## 9. Reporting

Reporting is essential to track and communicate performance for transparency and accountability. Reporting can be voluntary or mandatory.

*Key actions:*

9.1. Assess if the organisation would be subject to mandatory reporting and disclosure

9.2. Assess if the organisation will report and disclose voluntarily

9.3. Assess disclosing commitment and progress towards achieving emissions reduction targets

# Strategy

# 1. Strategy

A net zero strategy gives senior managers and stakeholders (internal and external) a clear business rationale for investing in net zero technologies, management systems and practices. An effective strategy should also identify and address the climate change business risks and opportunities for a holistic approach to net zero planning.

## 1.1 Identify and assess climate-related risks and opportunities.

### 1.1.1 Set out an approach to identify, assess and manage climate-related risks and opportunities.

i. Define the purpose of a risk and opportunity assessment and the approach.

   a. Check if your organisation is required to report under the Australian Government's mandatory climate-related financial disclosure regime. *For more information, see Strategy note 1a*.

   b. In case of mandatory climate-related financial disclosures, a formal structured assessment following the Australian Sustainability Reporting Standards (ASRS) will be necessary to ensure compliance. ASRS consists of a voluntary AASB S1 *General Requirements for Disclosure of Sustainability-related Financial Information* and mandatory AASB S2 *Climate-related Disclosures standard*. *For more information, see Strategy note 1b*.

   c. For a formal voluntary assessment, Australian organisations should follow ASRS.

   d. For an informal assessment, organisations should consider the purpose and context, such as informing the executive leadership or value chain, when international standards apply in other operating countries. Your organisation may consider following ASRS or the International Sustainability Standards Board's (ISSB) International Financial Reporting Standards (IFRS).

ii. Define the scope of the risks and opportunities to be assessed.

   a. Climate-related risks refer to the following potential negative effects of climate change on an organisation.

      - Physical risks:
        - Acute physical risks, such as cyclones, hurricanes, or floods.
        - Chronic physical risks, such as the increased risk of severe weather or sea level rise.

- Transition risks:
  - Policy and legal risks, such as policy actions that limit efforts to address climate change or promote adaptation. For example, increased operating costs due to new or amended climate-related regulations. Legal risks increase as the value of loss and damage due to climate change grow.
  - Technology risks can affect the competitiveness of certain organisations, their production and distribution costs, and ultimately the demand for their products and services from end users.
  - Market risks, such as shifts in supply and demand for certain commodities, products, and services.
  - Reputation risks refer to how customers or communities view an organisation's role in moving towards a lower-carbon economy, which can affect its reputation.

b. Climate-related opportunities refer to the following potential positive effects.

- Resource efficiency and cost savings. For example, cost savings from products that are needed to combat the effects of climate change, such as insulation.
- Adoption of low-emission energy sources. For example, the installation of solar panels.
- Development of new products and services.
- Access to new markets.
- Building resilience along the supply chain.

iii. Define approach to materiality.

a. Define which climate-related risks and opportunities are material following ASRS or international guidance such as ISSB standards.

- Materiality is an entity-specific aspect of relevance based on the nature or magnitude, or both, of the items to which the information relates, in the context of the entity's climate-related financial disclosures. *For more information, see Strategy note 1c.*

b. Define a threshold or criteria for determining when a risk or opportunity becomes material. This can be based on potential financial impact, relevance to strategic objectives, or stakeholder concerns.

## 1.1.2 Conduct climate-related risk and opportunity identification, assessment and management.

i. Identify risks and opportunities that are relevant to the organisation, by using resources available to you, including:

a. Internal expertise.

b. Marketing intelligence e.g. customer and consumer feedback.

c. Supplier feedback.

d. Specialist expertise.

ii. Conduct a structured climate-related risk and opportunity assessment and develop a risk management plan.

a. Evaluate risk impact as low, medium, high or extreme.

b. Assess the likelihood of the risks.

c. Consider the consequences across different areas. For example, the financial, operational or reputational impact.

d. Conduct a scenario analysis to test business climate resilience reflecting different climate conditions and their impacts.

- Note the uncertainties, estimates and assumptions made when identifying risks and opportunities and carrying out the scenario analysis. *For further information, see Strategy note 1d.*
- For organisations that are required to report under the *Corporations Act 2001 (Cth)* (Corporations Act), it is mandatory to disclose information derived from scenario analysis carried out using both a 'low' (1.5°C) and a 'high' (2.5°C or higher) global warming scenario.

*For further information on scenario analysis, refer to Climate Change Act 2022 (Cth), AASB S2 and IFRS International Sustainability Standards Board's (ISSB) S2 Climate-related disclosures standard.*

iii. Integrate climate-related risks and opportunities within the organisation's business-as-usual (BAU) risk management and business processes.

a. Integrate climate-related risks into the organisation's risk register.

b. Integrate climate-related risks and opportunities into business strategy, and into operational and financial plans.

c. Report climate-related risks and opportunities to management in line with the BAU processes with provisions for out-of-session reporting when required, for example, reporting changes.

## 1.2 Consider business model implications of a net zero commitment.

*To see where this information can be included, see Strategy note 1e.*

### 1.2.1 In the organisation's strategy, set out the key implications of a net zero goal for the organisation's business model.

*For more information, see Strategy note 1f*. The following impacts may be included:

i. Products and services.
   a. Resource allocation, including:
      - Changes to operational and capital expenditure.
      - Acquisitions and divestments. *For more information, see 7 Finance*.

### 1.2.2 Examine how a net zero commitment might impact sourcing of materials, vendor relationships, and overall supply chain management.

This includes potential shifts towards more sustainable suppliers, supplier audits, and potential challenges in sourcing sustainable materials.

### 1.2.3 Consider business model implications of not setting a net zero goal.

Include an explanation in the current business strategy alongside the already mapped implications.

## 1.3 Develop a high-level net zero policy.

### 1.3.1 Establish the stand-alone net zero policy for the organisation by following these steps.

i. Establish the net zero goal by setting out the overarching ambition so the organisation's commitment is clear to staff, investors, customers and other stakeholders.
ii. Document the short- and long-term net zero emissions reductions targets – *see 5 Targets.*
iii. Set out the organisation approach to disclosure – *see 9 Reporting.*
iv. Build net zero into the organisation's brand and values to send a message that decarbonisation is a priority and pave the way for behaviour and cultural change internally. *For more information see 3 People and capability and 8 Stakeholder engagement.*

# 1.4 Define how to engage with other Environmental, Social, and Governance (ESG) initiatives and activities.

### 1.4.1 Determine whether the organisation will consider issues beyond climate mitigation and adaptation, and if so, how they connect with the organisation's net zero goal.

These could include the following considerations.

i. UN Sustainable Development Goals (SDGs). *For further information, see Strategy note 1g.*

ii. Nature-related goals. For example, the Taskforce on Nature-related Financial Disclosures (TNFD). *For further information, see Strategy note 1h.*

iii. Just transition. *For further information, see Strategy note 1i.*

iv. Circular economy.

*v.* Becoming a Certified B Corporation. *For further information, see Strategy note 1k.*

vi. Modern Slavery Initiatives. *For further information see* Global Slavery Index *and Modern Slavery Act 2018* (Cth).

### 1.4.2 Determine whether the organisation will disclose other ESG initiatives and activities.

i. TNFD reporting.

ii. Carbon Disclosure Projects (CDP) Forests and/or CDP Water reporting. *For further information, see Strategy notes 1j and 1k.*

# 1.5 Periodically review and update the net zero strategy.

### 1.5.1 Continuously monitor the external environment for emerging risks and opportunities.

This includes regulatory changes, technological advancements, and market shifts.

### 1.5.2 Establish a feedback mechanism to inform the review of the risk register.

This could be based on the lessons learned, stakeholder feedback, and changing external conditions.

### 1.5.3 Review risks and opportunities periodically in line with BAU processes.

Also allow for out of session review where required, e.g. changing risk or opportunity profile, availability of new data, increasing internal skills.

### 1.5.4 Establish a mechanism to regularly review and update the strategy.

Ensure it remains relevant in the face of evolving risks and opportunities.

# Governance

# 2. Governance

Having clear governance structures support an organisation’s transition to net zero by ensuring executives and stakeholders (internal and external) are kept informed, accountable and responsible for achieving net zero goals.

## 2.1 Assess the organisation's governance structure in relation to net zero by reviewing the following documentation.

### 2.1.1 Constitutional documents, such as articles of association, memorandum of association or equivalent.

### 2.1.2 Existing processes and procedures such as performance metrics, annual reports and sustainability reports.

### 2.1.3 Related policies.

## 2.2 Ensure executive leadership accountability for overseeing and reporting on net zero initiatives.

*For more information, see Governance note 2a.*

### 2.2.1 Establish required arrangements for executive leadership governance and responsibility for net zero.

i. Review, reporting and approval processes.
   a. Establish the relevant governance structure and delegate sub-committee or governing body within the organisation.
   b. Evaluate if decisions require consent from external stakeholders like shareholders or banks.

# 2.3 Allocate and communicate accountability and responsibility for net zero at all levels of the organisation.

### 2.3.1 Establish net zero accountability at all levels of the organisation.

i. Include operational and functional managers from across divisions of the organisation, for example marketing, procurement, finance, and maintenance.

ii. Set out any external assurance that is required in relation to net zero targets and actions, for example, shareholder consent may be needed for some businesses, particularly when targets and actions may impact short-term profits as upfront investment is needed.

### 2.3.2 Establish clear roles and responsibilities.

i. Assign responsibility for driving net zero progress to appropriate team members, for example sustainability manager(s), to drive the organisation.

ii. Allocate responsibilities for new processes covered under this Guide.

### 2.3.3 Communicate the net zero governance structure including roles and responsibilities to the internal team.

# 2.4 Periodically review and update governance practices.

### 2.4.1 Establish a feedback mechanism from all organisational levels to inform governance practices.

### 2.4.2 Establish a mechanism to regularly review and update the governance structure.

The review should include constitutional documents, performance metrics, annual and sustainability reports and other.

# People and capability

# 3. People and capability

People who are part of an organisation make decisions that contribute to organisation's net zero goals, so it is important there are measures in place to scale people capability, skills and shared knowledge of business net zero goals. *For more information, see People and capability note 3a.*

## 3.1 Assess the organisation's net zero capability needs and identify gaps.

### 3.1.1 Assess technical and operational knowledge gaps of the different functional and operational areas with direct responsibility for net zero action.

i. Executive leadership, for example, business risks and opportunities as they relate to net zero and potential legislative requirements.

ii. Finance, for example, options for financing decarbonisation activities. *For further information, see* 7 Finance.

iii. Procurement, for example, scope 3 emissions, understanding of how to update procurement policies and effectively engage with stakeholders that the policies impact.

iv. Human resources (HR), for example, linking employment benefits to net zero related key performance indicators (KPIs).

v. Information technology, for example, using data to inform net zero related decision making and monitor progress.

vi. Operations management, for example, energy efficiency, renewable energy options and energy management systems.

### 3.1.2 Assess general net zero awareness and understanding across the organisation.

i. This can be achieved through internal engagement methods like staff surveys, staff newsletters, internal social channels and more.

# 3.2 Upskill staff and increase capability to support the net zero goal.

### 3.2.1 Establish a training and knowledge sharing program to build knowledge and awareness of the organisation's net zero goal and the skills needed to deliver it.

i. Internal development programs to build internal knowledge and capability on net zero.
   a. For example, create all-staff training about net zero and build the following into onboarding and induction processes.
      - Organisation's net zero goals and net zero plan.
      - Organisation's GHG emissions profile and what can be done to contribute to emissions reductions, for example, how to reduce staff commuting and travel emissions.
   b. Training targeted at operational and functional units across the organisation based on the knowledge gaps identified in 3.1.
   c. Knowledge and information sharing, for example, through a 'net zero steering committee' that includes representatives from all divisions.
   d. Design staff engagement programs.
      - Group activities, for example, engaging staff from across the organisation in net zero projects to enable learning by doing.
      - Individual activities, for example, establishing 'net zero champions' at each site/unit that are responsible for ensuring all staff are aware of the organisation's net zero activities.

ii. External development programs to build knowledge and capability on net zero. *For more information and examples of available external training, see People and capability notes 3b and 3c.*
   a. Training for the executive leadership team to ensure that they are equipped with the skills and knowledge to oversee the delivery of the net zero strategy and associated activities.
   b. Bespoke training for different business areas, for example facilities management, finance, maintenance, and procurement.

iii. Design external knowledge sharing resources and plans.

a. Organisation memberships in the relevant government programs, such as the NSW Sustainability Advantage, which supports organisations to become leaders in sustainability.

b. Organisational subscriptions and memberships to industry associations, for example, Business Council for Sustainable Development of Australia, Business Renewables Centre – Australia, Carbon Market Institute, Clean Energy Council, Energy Efficiency Council and Green Building Council of Australia.

c. Individual staff subscriptions and memberships to professional associations, for example Chartered Accountants of Australia and New Zealand and Engineers Australia.

d. Participation in industry events, forums and community-wide events.

### 3.2.2 Establish a formal change management process to address the skills gap.

*For more information, see People and capability note 3c.*

### 3.2.3 Align recruitment efforts to areas requiring new skills and knowledge.

## 3.3 Align staff remuneration and incentives with the organisation's net zero goals.

### 3.3.1 Assess and document how the executive leadership team and employee performance align with net zero objectives.

i. The type of incentive used, for example, percentage, bonus long-term incentives.

ii. The metrics used to determine salary and other incentives.

iii. The weighting of net zero related metrics in an incentive plan, for example whether achievement of net zero objectives is more or less important than revenue objectives.

### 3.3.2 Align HR policies to the net zero goals.

i. Update relevant documentation, if necessary, to include alignment of remuneration and incentives with net zero objectives.

### 3.3.3 Update individual position descriptions, KPIs and performance review processes to align with HR policies.

## 3.4 Communicate the organisation's net zero goal, build culture and increase awareness.

### 3.4.1 Develop the following internal communications plan to communicate the organisation's net zero goal and build a shared understanding of individual contributions to that goal.

i. Discussions about net zero and/or the organisation's net zero commitment and activities in all-staff/townhall meetings and other regular updates, which could include:
   a. Inviting external speakers.
   b. Inviting the organisation's net zero champions to provide updates on progress at individual sites.
ii. Maintaining a dashboard with data, targets and achievements related to the net zero commitment.
iii. Celebrating net zero related successes, such as the completion of a decarbonisation project. *For more information on decarbonisation projects, see 6 Action plan.*
iv. Display office signage to support onsite decarbonisation activities, for example, turning off the lights when not in rooms.

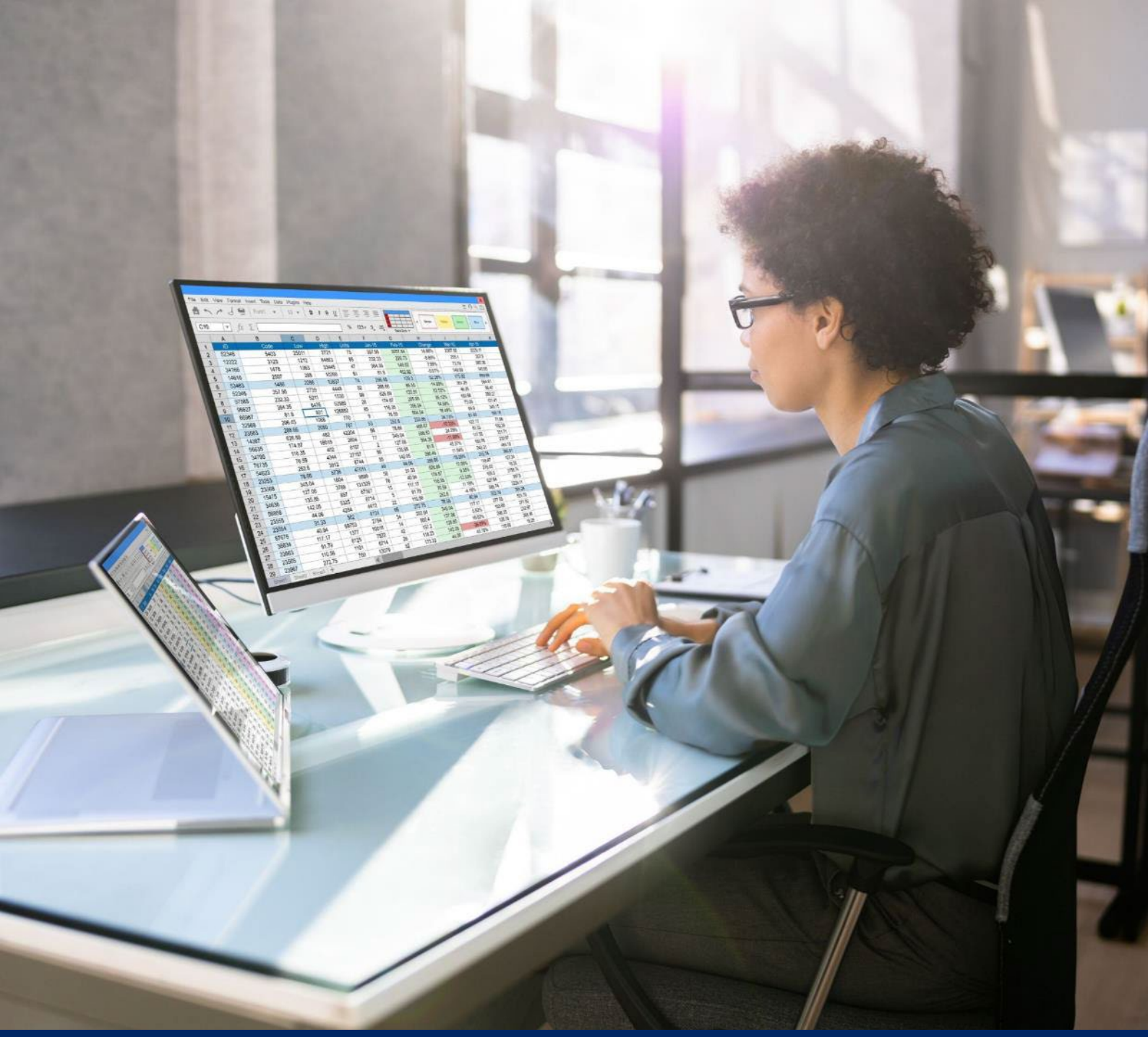
## 3.5 Periodically review and update staff upskilling, communication and incentive programs.

### 3.5.1 Establish processes to assess the organisation's net zero capability needs and gaps periodically.

Determine when change is necessary, for example, onboarding new staff, preparing for an organisational restructure, merger or acquisitions.

i. Monitor staff upskilling communication and incentive programs.
   a. Set up communication channels to enable staff to provide ongoing feedback.

### 3.5.3 Regularly revise and improve staff upskilling, communication and incentive programs.



# Data

# 4. Data

Data is essential to measuring and managing emissions, setting a net zero target, enabling businesses to identify emissions reduction opportunities, tracking progress and communicating performance. Identifying the necessary data and data collection systems should be done well in advance of implementation to allow time needed for establishing baselines and ensure that data collection systems are in place before emissions reduction activities commence.

*For more information on data, see Data note 4a.*

*For more information on alignment with the Greenhouse Gas (GHG) Protocol, see Data note 4b.*

## 4.1 Scope and plan the organisation's emissions inventory.

### 4.1.1 Establish business goals and inventory design.

i. Consider standards for emissions accounting and reporting, such as the GHG Protocol, NGERS, ISO 14064 , GRI 305 or Climate Active.

If your organisation must report the Australian Government's mandatory climate-related financial disclosures, then you need to adhere to the data requirements of ASRS. AASB S2 Climate-related Disclosures require entities to use GHG Protocol methods for measuring GHG emissions, but allows them to use other methods (for example, NGERS) if required by an Australian authority.

*For more information, see Strategy note 1a.*

*For more information on emissions accounting, see Data note 4b.*

*For more information on Climate Active and carbon neutrality, see Data notes 4d and 4e.*

ii. Consider data collection goals, for example, voluntary or mandatory reporting or participation in GHG markets, and requirements in the associated frameworks or standards, such as those published by the Science Based Targets initiative (SBTi) or Global Reporting Initiative (GRI).

iii. Consider the following examples of sector specific initiatives to measure and disclose GHG emissions.

   a. GHG Protocol sector specific guidance.

   b. Partnership for Carbon Accounting Financials (PCAF). *For more information, see Data note 4f.*

### 4.1.2 Set organisational boundaries.

*For more information, see Data note 4g.*

i. Use established guidance to assist with defining the organisational boundary of the company or other entity. The GHG Protocol sets out two approaches with associated guidance. *For more information see GHG Protocol Corporate Standard chapter 3.*

   a. The equity share approach.

   b. The control approach which can mean:

      - Financial control.
      - Operational control.

### 4.1.3 Set operational boundaries to cover Scope 1 and 2 emissions only, or Scope 1, 2 and 3.

i. Consider the following if only mapping Scope 1 and Scope 2 emissions.

   a. Identify emissions associated within the organisation's direct operations and emissions (Scope 1 emissions).

   b. Choose the scope of accounting and reporting for, and emissions associated with, the organisation's indirect emissions (Scope 2 emissions).

ii. Consider the following if mapping Scope 1, 2 and 3 emissions.

   a. Identify emissions associated within the organisation's direct operations and emissions (Scope 1 emissions).

   b. Choose the scope of accounting and reporting for, and emissions associated with, the organisation's indirect emissions (Scope 2 and 3 emissions).

### 4.1.4 Choose a base year and recalculation criteria.

i. Choose a base year for which verifiable emissions are available. *For more information on selecting a base year, see Data note 4h.*

   a. Consider the GHG Protocol's guidance on choosing a base year.

   b. For the purposes of reporting, organisations should explain why the base year has been selected – *see 9 Reporting for further information.*

ii. Consider if and when the base year emissions should be recalculated.

   a. Recalculations are necessary when there are structural changes to an organisation, or changes in a calculation methodology.

      - Consider guidance on tracking emissions over time. *For more information, see 4.6.1 Track emissions over time.*

# 4.2 Identify and calculate the organisation's greenhouse gas emissions.

## 4.2.1 Identify GHG emissions sources.

i. Scope 1 (direct) GHG emissions:
   a. Fugitive emissions: intentional and unintentional releases such as equipment leaks.
   b. Mobile combustion: combustion of fuels in transportation vehicles.
   c. Process emissions: emissions from physical or chemical processes.
   d. Stationary combustion: combustion of fuels in stationary equipment such as boilers and furnaces.

ii. Scope 2 emissions:
   a. Emissions from purchased or acquired electricity, steam, heat and cooling. *For more information, see Data note 4i.*

iii. Scope 3 emissions:
   a. Emissions from all other indirect activities. *For more information, see Data note 4j.*

## 4.2.2 Select a GHG emissions calculation approach.

i. There are two main methods to quantify emissions: direct measurement and calculation. *For more information, see Data note 4k.*
   a. Consider Scope 1 tools and calculation guidance suitable for your industry and region. *For more information see GHG Protocol Calculation Tools and Guidance.*
   b. Consider synergies with NGERS (scope 1 and 2 only).
   c. Consider GHG Protocol Scope 2 Guidance for relevant calculation methods.
   d. Consider national Electricity Accounting Guidance from Climate Active, where relevant.
   e. For Scope 3 emissions calculation guidance, see *4.3.1 Select a GHG emissions calculation approach for scope 3 emissions.*

## 4.2.3 Collect activity data and choose emission factors.

i. Collect activity data on Scope 1 emissions from purchased fuel bills, such as natural gas or heating oil, and use published emissions factors for these fuels, such as those in the National Greenhouse Accounts Factors.
   a. Consider synergies with NGERS (scope 1 and 2 only).

ii. Collect activity data on Scope 2 emissions from electricity bills and supplier-specific, local grid, or other published emission factors such as those in the National Greenhouse Accounts Factors.

iii. Collect activity data on Scope 3 emissions. *For more information on scope 3 emissions, see 4.3 Customise the organisation's approach to identifying, assessing and accounting for scope 3 emissions.*

   a. Consider annual reports from service providers.

### 4.2.4 Apply calculation tools.

i. Consider specific business needs when sourcing or developing a best-fit solution for calculating GHG emissions.

ii. Consider the following GHG emissions calculation tool options.

   a. Use of cross-sector and sector-specific GHG emissions calculation tools available from the GHG Protocol.

   b. Develop an in-house GHG emissions calculation tool.

   c. Use existing software for calculating GHG emissions, such as those already developed by private entities. The following is a non-exclusive list of examples:

      - Cozero – Carbon accounting platform and climate management
      - IBM Sustainability planning and analysis
      - Pathzero - Manage emissions in private markets
      - Persefoni – Net Zero navigator, streamline decarbonisation
      - SimaPro – Life Cycle Assessment (LCA) software
      - Sphera – Corporate Carbon Footprint
      - Trace – helping business reach net zero
      - Watershed – the enterprise climate platform.

### 4.2.5 Roll-up GHG emissions data to corporate level. *For further information, see Data note 4l.*

# 4.3 Customise the organisation's approach to identifying, assessing and accounting for scope 3 emissions.

*For information on the relevance of scope 3, see Data note 4m.*

### 4.3.1 Select a GHG emissions calculation approach for Scope 3 emissions.

i. For a formal, structured assessment, follow a nationally and/or internationally recognised framework, such as the GHG Protocol's Corporate Value Chain (Scope 3) Accounting and Reporting Standard.

ii. The GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard takes a value chain or life cycle approach to GHG accounting at the corporate level – *see GHG Protocol Technical Guidance for Calculating Scope 3 Emissions for further calculation details.*

iii. Consider sector specific requirements and guidance, such as the Airport Carbon Accreditation (ACA).

iv. Ensure that the framework meets the requirements of ASRS or other interrelated standards, such as the International Sustainability Standards Board or the Science Based Targets Initiative (SBTi).

### 4.3.2 Map value chain by considering the following categories.

i. Upstream emissions:
   1. Purchased goods and services
   2. Capital goods
   3. Fuel- and energy related activities (not included in Scope 1 or 2)
   4. Upstream transportation and distribution
   5. Waste generated in operations
   6. Business travel
   7. Employee commuting
   8. Upstream leased assets

ii. Downstream emissions:
   9. Downstream transportation and distribution (transportation of products between the organisation and your customers)

10. Processing of sold products
11. Use of sold products
12. End-of-life treatment of sold products
13. Downstream leased assets
14. Franchises
15. Investments.

iii. Listing purchased goods and services and a list of sold goods and services.

iv. Listing suppliers and other relevant value chain partners (either by name, type, or spend category).

### 4.3.3 Set scope boundary by considering the materiality and relevance of each Scope 3 emissions category using the following criteria.

i. Size: are the emissions attributed to this category large relative to the organisation's Scope 1 and 2 emissions?

ii. Influence: are there potential emissions reductions that could be undertaken or influenced by the organisation?

iii. Risk: do the emissions attributed to this category contribute to the organisation's GHG risk exposure?

iv. Stakeholders: are these activities deemed critical by key stakeholders? For example, customers, suppliers, investors, or civil society.

v. Outsourcing: did a previously outsourced activity contribute significantly to the organisation’s Scope 1 or 2 emissions?

vi. Sector guidance: have these activities been identified as significant by other sector-specific guidance?

### 4.3.4 Collect Scope 3 data.

i. Collect data from stakeholders. *For further information, see 8 Stakeholder engagement.*

### 4.3.5 Understand data types.

i. Activity data, for example, litres of fuel consumed.

ii. Emission factors, for example, kilograms of emissions in terms of carbon dioxide equivalent ($CO_2e$) emitted per litre of fuel consumed. Consider the following and other suitable emissions factors databases:

   a. GHG Protocol Life Cycle Databases

   b. National Greenhouse Accounts Factors

c. Australian National Life Cycle Inventory Database (AusLCI)

d. Department of Business, Energy and Industrial Strategy (BEIS) Emissions Factors

e. Ecoinvent.

iii. This data can take a number of forms, including the following:

a. Primary: from specific activities within an organisation's value chain, for example, activity-specific data from airlines, or

b. Secondary: data that is not from specific activities within an organisation's value chain, for example, estimated distance travelled based on industry-average data.

### 4.3.6 Consider and select data.

i. The availability of primary and secondary data.

ii. The quality of available data.

### 4.3.7 Collect primary data: available data.

i. Primary data may be available through meter readings, purchase records, utility bills, engineering models, direct monitoring, mass balance, stoichiometry or other methods for obtaining data from specific activities in the organisation's value chain. *See Data note 4n for relevant information related to allocation.*

ii. Work with supply chain partners to obtain data. *For more information, see 8 Stakeholder engagement*.

### 4.3.8 Improve Scope 3 data accuracy.

i. Work with the organisation’s value chain to improve data accuracy in line with 8 Stakeholder engagement.

## 4.4 Establish the organisation’s emissions data management processes and metrics.

*For more information on approaches to measure emissions reduction, see Data notes 4o and 4p.*

### 4.4.1 Establish a baseline for Scope 1, 2 and 3 emissions for the base year.

*For information on choosing a base year, see 4.1.4 Choose a base year and recalculation criteria*.

i. Ensure emissions data are captured separately for each scope. *For more information on how to calculate emissions see 4.2 Identify and calculate the organisation’s GHG emissions.*

ii. Capture emissions data for all six GHGs separately in metric tonnes and in tonnes of carbon dioxide equivalent ($CO_2e$). Relevant guidance can be found in chapter 9 of the GHG Protocol.

### 4.4.2 Develop and calculate metrics (including indicators to measure both changes in absolute emissions and ratio indicators) to monitor ongoing performance.

*For more information on the importance of monitoring emissions, see Data note 4q.*

### 4.4.3 Manage and continuously improve inventory quality.

*For more information on the importance of inventory quality, see Data note 4r.*

i. Use existing guidance to implement an inventory quality management system, including defining quality and creating an inventory program framework. Relevant guidance can be found in chapter 7 of the GHG Protocol. Other practical steps to improve data quality and accuracy include:
   a. Expanding energy metering and monitoring systems.
   b. Measuring and Verifying energy savings.
   c. Integrating emissions data into supplier reporting requirements.

## 4.5 Verify your GHG emissions inventory.

### 4.5.1 Consider the level of verification required.

i. Data collection goals, for example, voluntary or mandatory reporting or participation in GHG markets.

ii. Requirements in the associated frameworks or standards, such as the GHG protocol. *For more information details on verification process and selection of a verifier when following the GHG protocol, see chapter 10 of the GHG Protocol.*

### 4.5.2 Establish processes to verify and validate GHG emissions inventory.

# 4.6 Periodically track and report progress towards net zero.

### 4.6.1 Track emissions over time.

i. Track Scope 1, 2 and 3 emissions progress against a base year. *For more information on choosing a base year and tracking emissions over time, see 4.1.4 Choose a base year and recalculation criteria.*

ii. Consider the GHG Protocol Corporate Standard chapter 5 on tracking emissions over time.

### 4.6.2 Conduct periodic internal reporting, for example, quarterly for progress tracking.

### 4.6.3 Consider if voluntary or mandatory periodic external reporting is required.

Consider relevant GHG emissions reporting guidance such as chapter 9 of GHG Protocol Corporate Standard.
*For more information on voluntary and mandatory reporting, see 9 Reporting.*

# Targets

# 5. Targets

Net zero targets provide an agreed and measurable goal for an organisation to strive for and articulate the organisation's intention to its stakeholders. Although the ultimate goal is net zero emissions, it is essential for organisations to establish clear timelines and near-term milestones for achieving the final goal. *For information on alignment with international standards, see Targets note 5a*.

## 5.1 Consider the organisation's approach to setting net zero targets.

### 5.1.1 Define the scope of the emissions reduction targets, including the consideration of the below.

*For more information, see Targets note 5b.*

i. Emissions coverage:
   a. Organisation's own processes (scope 1).
      - Purchased or acquired electricity, steam, heat and cooling (scope 2), and
      - Emissions generated by suppliers and end-users (scope 3).
   b. Consider approach to using carbon offsets. *For more information on offsets, see Targets note 5c.*

ii. Organisational coverage, for example product, site, national and international boundaries.

iii. Consider checking progress of Australian organisations in the Climateworks Centre Net Zero Momentum Tracker.

### 5.1.2 Define the approach to setting emissions reduction targets.

i. Consider nationally and internationally recognised net zero target setting frameworks.
   a. The Science Based Targets initiative (SBTi). For further information on SBTi, see *Targets note 5d*.
   b. Climate Active. *For further information on, see Targets note 5e*.
   c. Climate Group commitments. *See Target note 5f for further information*.
      - EP100 (Energy Productivity)

- EV100 (Electric Vehicle)
- RE100 (Renewable Energy)

ii. Consider sector-specific approaches to target setting.
   a. SBTi sector-specific guidance for target setting
   b. Airport Carbon Accreditation (ACA)

iii. Consider whether to set absolute or intensity targets. *For further information, see Targets notes 5g and 5h.*
   a. Note that a selected framework may require that absolute targets are set.

# 5.2 Set near-term and long-term emissions reduction targets.

*For information on international alignment, see Targets note 5i.*

### 5.2.1 If you are aligning your target setting with SBTi, there are two different pathways.

i. Standard SBTi application: this includes committing to set a target, developing a target, submitting a target for validation, communicating your target and disclosing your progress. *See further details on SBTi's website*.

ii. Streamlined route for SME (small or medium-sized enterprises) - see note 5i. The SME route is available to independent companies employing fewer than 500 employees, excluding oil and gas companies and financial institutions. This allows SMEs to bypass the initial stage of committing to set a science-based target and the standard target validation process. See further details on *SBTi's website.*

### 5.2.2 Set near-term (5-10 years) emissions reduction targets, noting the following.

i. Near-term targets should cover at least 95% of organisation- wide scope 1 and 2 emissions.

ii. When scope 3 emissions make up 40% or more of total emissions (scope 1, 2, and 3 emissions), companies should set one or more emissions reduction targets and/or supplier or customer engagement targets that collectively cover(s) at least two-thirds (67%) of total scope 3 emissions.

### 5.2.3 Set long-term targets to reduce emissions to net zero by no later than 2050.

i. Long-term targets should cover at least 95% of organisation- wide scope 1 and 2 emissions and 90% of scope scope 3 emissions.

### 5.2.4 Validate your organisation's targets.

i. Targets set by an organisation independently of a certification's or standard's requirements can be validated by any third party.

ii. If following the SBTi Corporate Net Zero Standard, targets are validated by SBTi. The fee for this will depend on what service is being validated. *For further details on validation costs and steps, see SBTI validation service offerings*.

iii. If developing an emissions reduction strategy aligned with Climate Active Carbon Neutral in the context of climate neutral claims, there is specific guidance. *For more information, see Climate Active Carbon Neutral for Organisations Standard.*

## 5.3 Periodically review and update the organisation's emissions reduction targets.

### 5.3.1 Review targets every five years (if following the SBTi standard), or at another regular timeframe.

### 5.3.2 Targets should be recalculated to reflect the following significant changes that could compromise the relevance of the existing target.

i. Scope 3 emissions become 40% or more of aggregated scope 1, 2 and 3 emissions.

ii. Significant changes in the organisation's structure and activities - ensure alignment with the 4.1.4 Choose a base year and recalculation criteria.

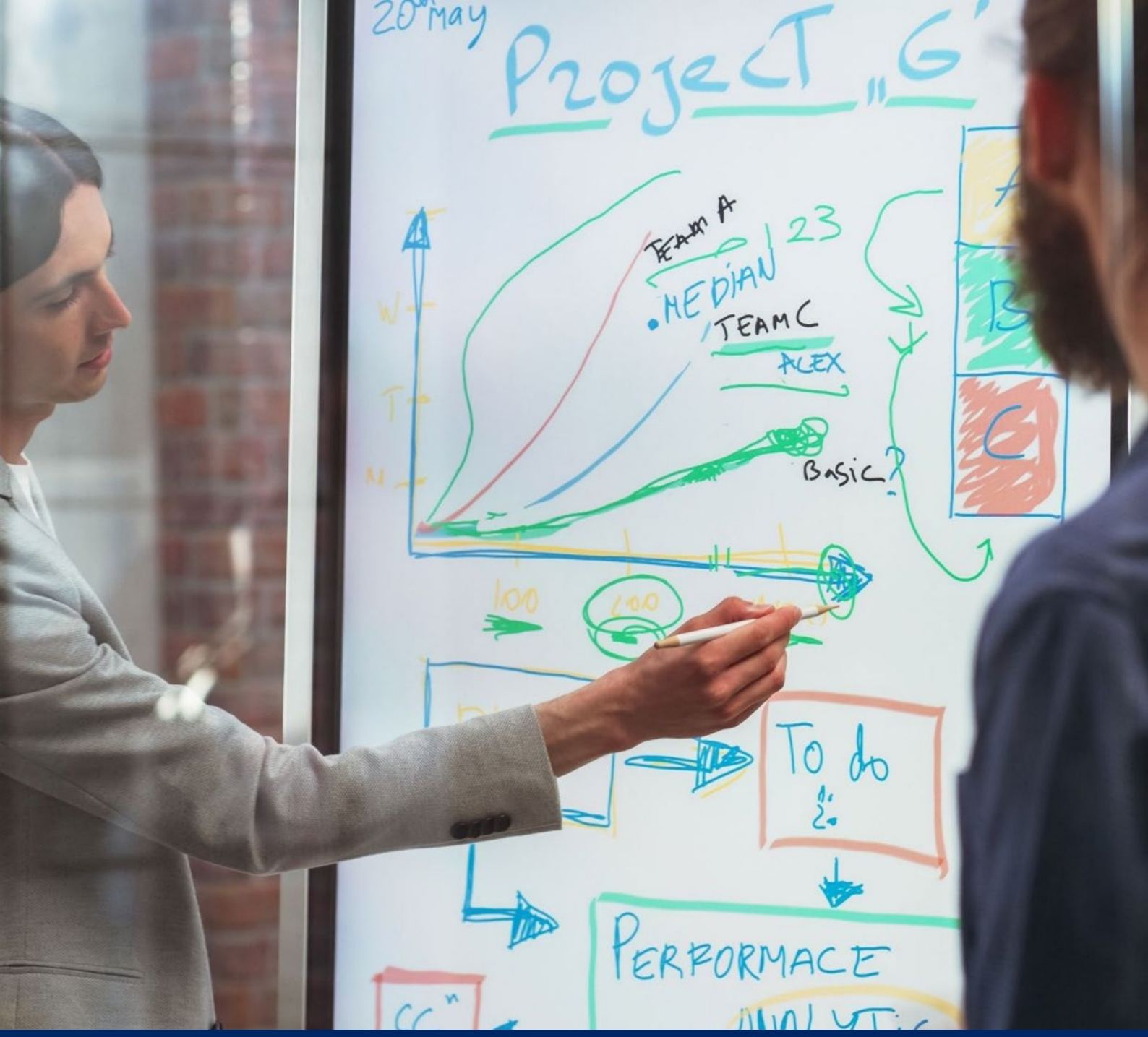
iii. Significant adjustments to the base year inventory, data calculation methodologies, or changes in data to set targets - ensure alignment with 4.1.4 Choose a base year and recalculation criteria.

**5.3.3 Revise targets against delivery. This includes accelerating planned activities, increasing ambition or escalating engagement activities.**

## 5.4 Consider disclosing the organisation's commitment and progress towards achieving the emissions reduction targets.

**5.4.1 Organisations are required to disclose their emissions annually and monitor progress on reaching their targets, as set out in SBTi.**

Different reporting options are available, including disclosure through CDP (Carbon Disclosure Project), annual reports, sustainability reports and your organisation's website. *For further information on reporting, see 9 Reporting.*




# Action plan

# 6. Action plan

A net zero action plan provides an organisation with a structured approach to achieve net zero. The action plan should include a list of practical actions the organisation will undertake to reduce its scope 1, 2, and 3 emissions. An action plan demonstrates credibility and achievability of the organisation's net zero targets. *For information on the role of energy management, see Action Plan note 6a.*

## 6.1 Develop a long-term net zero action plan to achieve net zero.

*For information on international alignment see, Action Plan note 6a.*

### 6.1.1 Create an action plan according to the following considerations.

i. Organisation's net zero strategy. *For information on what typically informs the organisation's net zero strategy, see 1 Strategy.*

ii. Identified emissions sources. *For information on how to identify emissions sources see 4.2 Identify and calculate the organisation's GHG emissions.*

### 6.1.2 Identify emissions reduction opportunities.

i. Consider actions in the emissions reduction hierarchy:

   a. Choose to avoid activities that cause emissions. Consider:

      - Reducing business travel.
      - Reducing printing.
      - Turning off appliances when not in use.

   b. Reduce emissions through practices, resources and technologies that use or result in the use of less energy.

      - Implementing an energy management system to improve efficiency of energy consumption and promote continual improvement. *For information on energy management systems, see Action Plan note 6b.*
      - Installing submeters to gauge energy flows on site and inform energy saving activities.
      - Switching to appliances and equipment that consume less energy, such as energy efficient lighting, heating, ventilation and refrigeration.
      - Using low-carbon refrigerants.

- Optimising energy use of buildings. For example, improving insulation, sealing of air leaks around doors and windows and digital automation.
- Minimising waste and reducing consumption of raw materials.
- Choosing technology and service providers that have committed to robust net zero targets.
- More examples are available in Section 9 of the ISO Net Zero Guidelines (2022).

c. Substitute sources of emissions. For example:

- Switch to renewable energy sources like GreenPower, solar and biogas. For renewable energy certificates, organisations in NSW should consider Large-scale Generation Certificates (LGCs). LGCs are issued by the Clean Energy Regulator and are equivalent to one megawatt hour (MWh) per LGC.

  *For more information on LGCs, see the* Clean Energy Regulator's website.

- Transition from the use of fossil fuels through electrification, especially if the electricity is sourced from renewable sources.
- Change transportation mode into low emission options.

d. Sequester emissions by capturing and storing them.

- Carbon Capture and Storage, which involves capturing GHG that would have been released to the atmosphere and transporting them for injection into underground geological formations for permanent storage.
- Afforestation and reforestation.
- Protect and restore marine ecosystems.
- Bioenergy with Carbon Capture and Storage (BECCS), which involves cultivating fast-growing trees or algae, which are used to produce energy and to capture and store $CO_2$ emissions resulting from energy production.
- Direct Air Capture (DAC), which involves technologies that capture $CO_2$ from the atmosphere at any location instead of a point source(s). One approach is 'enhanced weathering' that directly captures $CO_2$ from air and then converts it into a stable form that is stored in soil. (IPCC Special Report on Global Warming of 1.5°C, Chapter 2, page 121, paragraph 2).

e. Offset residual emissions. When selecting specific types of carbon offsets, consider their certification and origin. For example, organisations in NSW should consider procuring Australian Carbon Credit Units (ACCUs) generated within NSW. *For more information, see Targets note 5c for guidance on the use of offsets.*

ii. Explore other existing data sources.

a. Energy bills

b. Interval meter data

c. Asset registers and maintenance history

d. NABERS Energy ratings

e. Energy audits for all businesses

f. Results or data from an energy management system.

### 6.1.3 Develop an emissions reductions opportunities register.

i. Develop a Marginal Abatement Cost Curve (MAC curve) to prioritise emissions reductions opportunities. MAC curve presents the costs or savings expected from different opportunities, with the potential volume of emissions that could be reduced if implemented.

### 6.1.4 Consider different scenarios and develop several pathways to net zero.

i. A business-as-usual scenario.

ii. Scenarios of implementing different opportunities for emissions reductions.

iii. Scenarios to meet different levels of ambition.

### 6.1.5 Compare pathways to a business-as-usual scenario.

### 6.1.6 Select a preferred pathway.

*For information on selection criteria, see Action Plan note 6c.*

### 6.1.7 Document the assumptions underpinning the action plan.

### 6.1.8 Conduct a sensitivity analysis to test the robustness of the assumptions and understand the action plan's resilience.

*For further information on sensitivity analysis, see Action Plan note 6d.*

## 6.2 Develop mid-term and short-term action plans.

### 6.2.1 Establish specific mid-term and short-term plans.

*See Action Plan note 6a for further information.*

### 6.2.2 Use the following assessments to prioritise.

i. The risk and opportunity assessment. *For information on how to carry out a risk and opportunity assessment see 1.1.2 Conduct climate-related risk and opportunity identification, assessment and management*.

ii. The outputs of the MAC curve analysis and energy audits.

### 6.2.3 Include mid-term targets and KPIs.

### 6.2.4 Include both direct emission reductions and research and development to improve emissions profiles of your products and services.

### 6.2.5 Integrate the plans within business operations.

## 6.3 Periodically review and update the net zero action plans.

### 6.3.1 Use the following data to monitor progress.

i. Energy data:
   a. Measurement and Verification of energy savings.

ii. Collection of other relevant data, such as reduction in waste volumes and changes in modes and distances of travel, to inform progress towards targets.

### 6.3.2 Report on progress against metrics and targets.

### 6.3.3 Identify new opportunities to inform the next update of action plans.

### 6.3.4 Periodically update your action plans:

i. Establish a routine review schedule (quarterly or annually).

ii. Gather feedback from stakeholders for progress assessment.

iii. Identify internal and external factors that may impact the plan, e.g., new industry trends, new technology opportunities, operational changes and energy prices volatility.

iv. Identify lessons learned from challenges and analyse collected data.

v. Update plan based on insights and implement the revised plan.

vi. Maintain detailed records of changes and reasons.

# Finance

# 7. Finance

Organisations need sufficient capital to fund initiatives that progress their net zero targets. Understanding the financial implications, opportunities, and available funding options is crucial for maximising the outcomes. *For further information on short to long term planning, see Finance note 7a*.

## 7.1 Consider the financial impacts of the organisation's net zero goal.

### 7.1.1 Estimate the following expenditure.

i. Costs of emissions reduction opportunities.

ii. Services and consultancy costs, including project management and installation.

iii. Ancillary services costs, including memberships, subscriptions and data services.

iv. Consultancy costs in relation to preparation of disclosures, measurement and verification of energy savings, and other consulting activities.

v. HR costs, for example, the funding of dedicated staff and staff training.

vi. Research and development costs, including research needed to determine decarbonisation opportunities for hard to abate activities.

### 7.1.2 Estimate the following financial savings.

i. Reduced energy costs from energy upgrade projects.

ii. Reduced waste management costs from waste minimisation projects.

iii. Reduced water costs from water efficiency projects.

iv. Reduced maintenance costs from improved equipment.

v. Reduced labour costs from improved productivity, including from the automation and digitalisation of processes.

### 7.1.3 Assess the full cost impact of the net zero goal, as well as the financial savings and return on investment.

i. Operating statement impact.

ii. Balance sheet impact.

iii. Net debt impact.

iv. Net present value (NPV).

v. Internal rate of return.

### 7.1.4 Define investment approach.

i. Determine how investments made by the organisation (in projects, research and development and acquisitions) are in line with the organisation's net zero objectives.

## 7.2 Identify financing options.

### 7.2.1 Identify internal financial resources.

i. Retained earnings/profits.

ii. Proceeds from asset sales.

iii. Owner capital.

### 7.2.2 Identify external financial resources and funding opportunities.

i. Commercial finance from banks and other financial services providers including the following.

ii. Business loans, including:

   a. Green loans, for example:

      - Commonwealth Bank's Green Loan offers a low-interest rate for eligible small-scale renewable energy projects.
      - ANZ's Energy Efficient Asset Finance program offers businesses a discount on finance for assets that reduce energy consumption.
      - NAB's interest rate discounts on lending for green equipment finance and agribusiness emissions reduction, supported by the Australian Government's Clean Energy Finance Corporation.
      - Sustainability linked loans.

iii. Commercial service agreements, including:

   a. Asset leases. *For more information, see Asset leases 101.*

   b. Energy performance contracting (EPC). *For more information, see EPC 101.*

   c. Energy service agreements (ESA). *For more information see ESA 101.*

   d. Environmental upgrades finance (EUF). *For more information, see EUF 101.*

   e. Power purchase agreements (PPA). *For more information, see PPA 101.*

iv. NSW Government programs and grants, including:

   a. $12 million metering package – metering and monitoring assessments and grants.

   b. Heat pump feasibility grants

c. Electric vehicle incentives and charging infrastructure grants.

d. High emitting industries program – decarbonisation support for highest emitting industries.

e. Clean technology innovation grants and offers – support for clean technology development.

f. Sustainability Advantage Program – membership – based sustainability support.

g. Other NSW Government grants and funding – grants finder.

v. NSW Government schemes, including:

a. Energy Savings Scheme (ESS) are incentives for equipment upgrades.

b. Peak Demand Reduction Scheme are incentives for peak demand reduction.

vi. Australian Government funding programs, including:

a. Australian Renewable Energy Agency (ARENA): Supports the global transition to net zero emissions by accelerating the pace of pre-commercial innovation, to the benefit of Australian consumers, businesses and workers. Funding programs include:

- National Industrial Transformation Program.
- Powering the Regions Industrial Transformation Stream.
- Advancing Renewables Program.
- Driving the Nation Program.
- Clean Energy Innovation Fund.
- Clean Energy Finance Corporation.
- Other Australian Government grants.

# 7.3 Budget for net zero financial planning.

## 7.3.1 Develop a long-term financial strategy.

i. Determine the ROI requirement for net zero investments made by the organisation (in projects, research and development, acquisitions or other). For example, while typical projects might have a CAPEX threshold of 3 years for ROI, net zero projects, given their long-term impact and benefits, could have an extended threshold of 5 years.

ii. Explore the adoption of an internal carbon price for supporting operational and strategic decisions including new investments. Some resources are:

a. World Bank – Internal Carbon Pricing.

b. CDP Internal Carbon Pricing.

iii. Consider developing a revolving fund for emissions reductions projects.

### 7.3.2 Develop a mid-term and short-term financial plan.

### 7.3.3 Commit resources to implement activities over the medium and short terms.

### 7.3.4 Seek approval from the executive leadership.

## 7.4 Periodically review and update your financial plans.

### 7.4.1 Establish financial metrics.

### 7.4.2 Monitor progress.

i. Track expenditure and bill savings associated with energy efficiency and other resource savings projects.

ii. Identify high performing projects to inform the next update of the action and financial plans.

### 7.4.3 Report on progress against metrics and targets.

### 7.4.4 Use data analysis to improve financial plans.

### 7.4.5 Periodically update your financial plans.

i. Review the agreed net zero action plans and financial plans in line with BAU.

ii. Revisit business cases for additional emissions reductions project opportunities on a BAU review basis.

iii. Integrate budgeting for net zero activities into BAU budgeting processes.

# Stakeholder engagement

# 8. Stakeholder engagement

Stakeholder engagement builds relationships between the business and its partners to deliver emissions reductions. This is important for reducing scope 3 emissions that fall beyond the operational boundaries of an organisation. This requires collaboration across a broad group of stakeholders, including suppliers and customers, wider industry, government and civil society.

## 8.1 Engage with the organisation's value chain.

### 8.1.1 Assess the materiality of the value chain stakeholders to inform the engagement approach with the different value chain stakeholders.

*For more information on the materiality of the organisation's value chain, see 4.3.3 Set scope boundary by considering the materiality and relevance of each scope 3 emissions category.*

### 8.1.2 Develop a value chain stakeholder communications plan for all of your suppliers and customers and communicate the following.

i. Organisation's net zero goal.

ii. Organisation's high-level action plan, including any changes to products and services relevant to the value chain.

iii. Examples of emissions reduction projects that have been successfully completed by the organisation.

### 8.1.3 Develop and communicate net zero requirements to the suppliers.

i. Review and update the organisation's procurement policy.
   a. Include specific requirements for suppliers, such as a commitment to net zero and/or climate-related financial disclosures.
   b. Incorporate emissions reduction as a weighted consideration when selecting products and services.
   c. Incorporate emissions reporting requirements into procurement contracts for data collection.

ii. Communicate emissions reductions requirements in supply chain and any planned changes to the procurement policy that are relevant to suppliers, as well as the potential pathways for emissions reductions.

### 8.1.4 Support your suppliers to reduce their emissions.

i. Identify pathways to reduce supplier's GHG emissions (your organisation's Scope 3 emissions). You could do this by engaging with key suppliers through group discussions.

ii. Encourage and support high emitting value chain stakeholders to implement emissions reduction projects.

   a. Provide examples of emissions reduction projects that have been successfully completed by the organisation.

   b. Implement joint projects, as an example see Linfox and Woolworths Group electric vehicle partnership.

### 8.1.5 Understand your customer needs, enable and encourage action.

i. Understand customer needs.

   a. Incorporate emissions reduction as a weighted consideration when designing new products and services.

   b. Include net zero product selection for customers.

ii. Provide guidance to customers on how to improve the end-of-life treatment process of the organisation's products and reduce waste.

iii. Provide guidance on reducing emissions, such as switching to renewable energy for tenants.

## 8.2 Engage with the wider industry.

### 8.2.1 Engage with industry bodies, non-government organisations and relevant groups to support the organisation's transition to net zero.

*For more information on the role of industry associations, see Stakeholder engagement note 8a.*

i. Australian Alliance for Energy Productivity is an independent, non-for-profit coalition of businesses and research leaders helping Australian businesses improve productivity with less energy.

ii. Australian Industry Group is a peak national employer organisation representing multiple industry sectors. It provides information, advice and guidance to organisations and advocates for members at all levels of government.

iii. Business Council for Sustainable Development Australia is an organisation working to accelerate the transition to a sustainable world by aligning with SDGs and acting on climate change. It provides resources for and advocacy on behalf of members.

iv. Business Renewables Centre Australia assists organisations in procuring renewable electricity by providing resources and training.

v. Carbon Market Institute is a member-based institute working to accelerate the use of market-based solutions and support best practice in decarbonisation.

vi. Climateworks Centre bridges the gap between research and climate action, operating as an independent not-for-profit within Monash University.

vii. Climate Leaders Coalition provides a forum for Australian CEOs to share the challenges of their decarbonisation journeys and provides information for those not yet taking action and wanting to understand options for their organisation.

viii. Energy Efficiency Council is the peak body for Australia's energy management sector working to drive policy, ensure a skilled workforce and support businesses and households to decarbonise. It provides members with advice, training and advocacy services.

ix. Material Embodied Carbon Leaders Alliance drives the reduction of embodied carbon in the building and construction industry.

x. Sustainability Advantage is a NSW government organisation, which assists organisations in NSW to adopt sustainable practices by offering practical assistance, tools and advice to members.

## 8.3 Engage with government and civil society.

### 8.3.1 Engage with government, public sector organisations and civil society.

i. Participate in net zero or energy efficiency grants.

ii. Respond to consultation requests and provide feedback in public forums.

iii. Upskill staff through any relevant government training programs offered.

iv. Prioritise engagement activities to maximise their contribution towards achieving the net zero goal.

## 8.4 Periodically review and update your stakeholder engagement activities.

### 8.4.1 Establish measurable goals for engaging with stakeholders.

### 8.4.2 Monitor the progress of stakeholder engagement activities.

i. Report regularly and share updates on your engagement progress.

ii. Use data analysis to improve stakeholder interactions and better understand their needs.

### 8.4.3 Periodically update your communications plan to stay in tune with the changing needs and preferences of your stakeholders.

# Reporting

# 9. Reporting

Reporting is essential to track and communicate performance for transparency and accountability. Reporting can be voluntary or mandatory.

## 9.1 Assess if the organisation would be subject to mandatory reporting and disclosure.

### 9.1.1 Consider if the organisation will be required to undertake mandatory reporting at a national level.

i. Consider if your organisation is required to report the Australian Government's mandatory climate-related financial disclosures as per the Australian Sustainability Reporting Standards (ASRS). *For more information, see Reporting note 9a.*

ii. Consider if your organisation is required other mandatory reporting or disclosure, such as NGERS or the Commercial Building Disclosure Program (CBD).

### 9.1.2 Consider if the organisation is required to undertake mandatory reporting at an international level.

i. Consider if the organisation is required to report under any specific disclosure framework and/or regulation, such as Carbon Disclosure Project (CDP) or International Sustainability Standards Board (ISSB).

## 9.2 Assess if the organisation will report and disclose voluntarily.

### 9.2.1 Assess the organisation's approach to voluntary disclosure.

### 9.2.2 Assess if the organisation would implement any internal voluntary reporting.

i. Consider disclosing annual progress towards achieving emissions reduction targets internally across the organisation.

ii. Conduct periodic internal reporting, such as quarterly reports for monitoring.

### 9.2.3 Assess if the organisation would implement any external voluntary reporting.

i. Evaluate whether to disclose externally using a specific reporting standards and/or disclosure frameworks and consider if they align but have different requirements.
   a. Consider relevant GHG emissions reporting standards such as GHG Protocol Corporate Standard, chapter 9.
   b. Consider whether to voluntarily disclose externally all or some information in relation to the organisation's net zero goal.
   c. Consider if the organisation is already reporting under disclosure standards or frameworks, such as IFRS and CDP, or other mandatory reporting and disclosures, such as NGERS and CBD, as these could be the basis of further reporting.

## 9.3 Assess disclosing commitment and progress towards achieving emissions reduction targets.

### 9.3.1 If you are following SBTi, consider disclosing your organisation's emissions annually and monitor progress towards targets.

*For more information, see SBTi's website.*

i. If you have a target certified by SBTi, you should follow SBTi disclosure requirements. *More information on disclosure available in SBTi Corporate Manual, Step 5 Disclose your target.*
ii. Consider disclosure through CDP.
iii. Consider disclosure through annual corporate reports, sustainability reports and your organisation's website.
iv. Consider disclosure in alignment with GRI standards and guidance. *For more information on targets, see 5 Targets.*

### 9.3.2 If you are following Climate Active in the context of carbon neutrality, a summary of your emissions reduction strategy must be included in the annual Public Disclosure Statement.

*For more information, see Climate Active Carbon Neutral for Organisations Standard.*

# 10. Glossary

This glossary does not set out any policy position, recommendations or requirements of the New South Wales government.

Table 1: Glossary of key terms

| Term | Definition |
|---|---|
| **Absolute targets** | An absolute target consists of a set number of metric tons of emissions in the context of emissions reductions.<br>Source: SBTi - Science-Based Target Setting Manual |
| **Activity data** | Activity data is a quantitative measure of a level of activity that results in GHG emissions. For example, litres of fuel consumed or kilograms of material purchased).<br>Source: GHG Protocol - Technical Guidance for Calculating Scope 3 emissions (version 1.0) |
| **Base year** | A base year is the year against which GHG accounting is compared. A baseline is set against the base year.<br>Base year is a historic datum (a specific year or an average over multiple years) against which an organisation's GHG emissions are tracked over time.<br>Source: GHG Protocol – Corporate Accounting and Reporting Standard |
| **Baseline** | Baseline can be used in this Guide to refer to the emissions produced in the base year.<br>In project-based accounting, baseline can refer to the hypothetical scenario for what GHG emissions, removals or storage would have been in the absence of the GHG project or activity. Project-based accounting uses baseline scenarios to demonstrate what the emissions would be if no action were taken.<br>Source: GHG Protocol – Corporate Accounting and Reporting Standard |
| **Bioenergy with Carbon Capture and Storage (BECCS)** | Bioenergy with Carbon Capture and Storage involves capturing and permanently storing $CO_2$ from processes where biomass is converted into fuels or directly burned to generate energy.<br>Source: International Energy Agency |
| **Carbon neutral** | To become carbon neutral an organisation calculates the GHG emissions generated by its activity and reduces these emissions where possible. Any remaining GHG emissions can be 'cancelled out' by purchasing carbon offsets. |

| Term | Definition |
|---|---|
| | Source: Climate Active - How it works |
| **Internal carbon price** | Price used by an entity to assess the financial implications of changes to investment, production and consumption patterns, and of potential technological progress and future emissions-abatement costs.<br>Source: AASB S2 (09/24) |
| **Circular economy** | A circular economy is an economic system aimed at minimising waste and promoting the continual reuse of resources. The circular economy aims to keep products, equipment, and infrastructure in use for longer, thus improving the productivity of these resources.<br>Waste materials and energy should become input for other processes: either a component or recovered resource for another industrial process or as regenerative resources for nature (e.g. compost). This regenerative approach contrasts with the traditional linear economy, which has a 'take, make, dispose' model of production.<br>The circular economy is based on three key principles:<br>1) design out waste and pollution<br>2) keep products and materials in use<br>3) regenerate natural systems.<br>Source: NSW EPA - NSW Waste and Sustainable Materials Strategy 2041 |
| **Climate-related opportunities** | Climate-related opportunities refers to the potential positive effects arising from climate change for an entity. Efforts to mitigate and adapt to climate change can produce climate-related opportunities for an entity.<br>Source: AASB S2 (09/24) |
| **Climate-related risks** | Climate-related risks refers to the potential negative effects of climate change on an entity. These risks are categorised as climate-related physical risks and climate-related transition risks<br>Source: AASB S2 (09/24) |
| **Control approach** | Under the control approach, a company accounts for 100% of the GHG emissions from operations over which it has control. It does not account for GHG emissions from operations in which it owns an interest but has no control.<br>Control can be defined in either financial or operational terms. Further information and examples can be found in chapter 3 of the GHG Protocol Standard. |

| Term | Definition |
|---|---|
| | Source: GHG Protocol - Setting Organisational Boundaries |
| **Direct Air Capture (DAC)** | Direct air capture technologies extract $CO_2$ directly from the atmosphere at any location (unlike carbon capture which is generally carried out at the point of emissions). The $CO_2$ can be permanently stored in deep geological formations or used for a variety of applications.<br>Source: International Energy Agency |
| **Emission factors** | An emission factor is a factor that converts activity data into GHG emissions data. For example, the kilograms of $CO_2$ emitted per litre of fuel consumed or the kilograms of $CO_2$ emitted per kilograms of material produced.<br>Source: GHG Protocol - Technical Guidance for Calculating Scope 3 emissions (version 1.0) |
| **Inventory** | A quantified list of an organisation's GHG emissions and sources.<br>Source: GHG-protocol-revised.pdf |
| **Equity share approach** | Under the equity share approach, a company accounts for GHG emissions from operations according to its share of equity in the operation. The equity share reflects economic interest that includes economic risks and rewards in an operation. Normally, the company's equity share is the same as its percentage ownership of an operation.<br>Source: GHG Protocol - Setting Organisational Boundaries |
| **Financial control** | The company has financial control over the operation if the former has the ability to direct the financial and operating policies of the latter with a view to gaining economic benefits from its activities.<br>Source: GHG Protocol - Corporate Accounting and Reporting Standard |
| **Financed emissions** | Financed emissions are those emissions associated with the reporting company's investments in the reporting year, not already included in Scope 1 or Scope 2. This Scope 3 category of emissions is applicable to investors (companies that make an investment with the objective of making a profit) and companies that provide financial services.<br>Financed emissions also apply to investors that are not profit driven (for example multilateral development banks). In this case, the same calculation methods should be used.<br>Source: GHG Protocol - Scope 3 Calculation Guidance<br>Please see 'Scope 3 emissions' definition for further details. |

| Term | Definition |
|---|---|
| **Fugitive emissions** | Emissions that are not physically controlled but result from the intentional or unintentional releases of GHGs. They commonly arise from the production, processing transmission storage and use of fuels and other chemicals, often through joints, seals, packing and gaskets.<br>Source: GHG Protocol - Corporate Accounting and Reporting Standard |
| **Greenhouse gases (GHGs)** | Gases that absorb and trap heat (infrared radiation) from the Sun in the Earth's atmosphere. GHG includes the following gases that are covered by the UNFCCC/Kyoto Protocol:<br>• carbon dioxide ($CO_2$)<br>• methane ($CH_4$)<br>• nitrous oxide ($N_2O$)<br>• hydrofluorocarbons (HFCs)<br>• perfluorocarbons (PFCs)<br>• sulphur hexafluoride (SF6)<br>• nitrogen trifluoride ($NF_3$).<br>These gases are the direct cause of climate change.<br>The term "GHGs" is often used interchangeably with "all UNFCCC/Kyoto GHGs".<br>Source: SBTi - Guide to Common Terms |
| **Intensity targets** | An intensity target is defined by a reduction in emissions relative to a specific business metric, such as the production output of the company. For example, the tonne $CO_2e$ per tonne product produced.<br>Source: SBTi - Science-Based Target Setting Manual |
| **Large-scale Generation Certificates (LGCs)** | LGCs are tradable certificates created for eligible large-scale renewable energy power stations. The certificates represent the amount of renewable energy generated by these facilities.<br>An LGC is equal to 1 megawatt-hour (MWh) of renewable electricity generated or displaced by a power station.<br>Source: Clean Energy Regulator |
| **Leadership** | Leadership or top management refer to a person or a group of people who direct and control an organisation at the highest level.<br>Leadership has the power to delegate authority and provide resources within the organisation.<br>Source: ISO - Net Zero Guidelines |

| Term | Definition |
| --- | --- |
| **Marginal abatement cost (MAC) curve** | A MAC curve presents the costs or savings expected from different opportunities, alongside the potential volume of emissions that could be reduced if implemented.<br>Source: Climateworks Centre - How to read a marginal abatement cost curve |
| **Materiality (GHG inventory)** | A material misstatement occurs when individual or aggregate errors, omissions and misrepresentations have a significant impact on the GHG inventory results and could influence a user's decisions. Materiality has both quantitative and qualitative aspects.<br>Source: GHG Protocol - Corporate Value Chain (Scope 3) Standard |
| **Materiality (climate-related risks and opportunities)** | Materiality is an entity-specific aspect of relevance. The materiality of information is assessed in the context of an entity's climate-related financial disclosures. It is based on the nature or magnitude of the item to which the information relates, or both.<br>Source: AASB S2 (09/24) |
| **Measurement and Verification (M&V)** | M&V methods and processes are used to measure and verify, in a defined, disciplined and transparent way, the energy savings resulting from planned and defined changes to all or parts of the energy infrastructure of a specific facility or a group of specific facilities.<br>Source: Energy Efficiency Council - Measurement & verification |
| **Mobile combustion** | Combustion of fuels in transportation devices such as automobiles, trucks, buses, trains, airplanes, boats, ships, barges and vessels.<br>Source: GHG Protocol - Corporate Accounting and Reporting Standard |
| **National Greenhouse and Energy Reporting (NGER) scheme** | The National Greenhouse and Energy Reporting (NGER) scheme is established by the National Greenhouse and Energy Reporting Act 2007 (NGER Act).<br>The scheme is a national framework for reporting and disseminating company information about GHG emissions, energy production, energy consumption and other information specified under NGER legislation.<br>Source: Clean Energy Regulator - About the National Greenhouse and Energy Reporting Scheme. |
| **Net zero** | Net zero refers to the condition in which human-caused residual emissions are balanced by human-led removals over a specified period and within specified boundaries. Residual emissions are those that remain after taking all possible emissions reduction actions. |

| Term | Definition |
|---|---|
| | Please note that ‘net zero’ may be also referred as ‘net zero GHG emissions’ by other relevant sources.<br><br>Please see 'residual emission’ and ‘removals’ definitions for further details.<br><br>Source: ISO - Net zero guidelines |
| **Net zero goal** | In this guide, net zero goal is used to refer to setting out the organisation’s overarching net zero ambition so that the organisation’s commitment is clear to staff, investors, customers and other stakeholders. |
| **Offsets** | Offsets can have different meanings under different standards.<br><br>Under ISO Net Zero Guidance, offsets are emissions reduction or removal resulting from an action outside the organisation’s boundaries used to counterbalance the organisation’s residual emissions. ISO notes that only offsets that are removals can be used to counterbalance residual emissions to achieve net zero.<br><br>Source: ISO - Net Zero Guidance<br><br>In the context of carbon neutrality, Climate Active states that offset units are used to compensate for emissions a business produces, to help reduce their carbon footprint. Offset units are generated by projects that reduce, remove or capture emissions from the atmosphere such as reforestation, renewable energy or energy efficiency.<br><br>Source: Climate Active - Carbon offsets |
| **Operational control** | A company has operational control over an operation if the company or one of its subsidiaries has the full authority to introduce and implement its operating policies at the operation.<br><br>Source: GHG Protocol - Corporate Accounting and Reporting Standard |
| **Process emissions** | Emissions from physical or chemical processes such as but not limited to:<br><br>• $CO_2$ from the calcination step in cement manufacturing<br>• $CO_2$ from catalytic cracking in petrochemical processing<br>• PFC emissions from aluminium smelting.<br><br>Source: GHG Protocol - Corporate Accounting and Reporting Standard |
| **Relevance** | Relevance is one of the principles of GHG accounting and reporting. It ensures a GHG inventory appropriately reflects the GHG emissions of |

| Term | Definition |
|---|---|
| | an organisation and serves the decision-making needs for internal and external users of the organisation.<br><br>Source: GHG Protocol - Corporate Accounting and Reporting Standard<br><br>Please note that Climate Active also provides guidance on how to apply this principle to select relevant indirect emissions sources through a 'relevance test'. See Climate Active - Technical Guidance |
| **Removal (removal-based offsets)** | Removals or GHG removals refer to the withdrawal of a greenhouse gas from the atmosphere as a result of deliberate human activities. Human-led removals can include:<br>• ecosystem restoration<br>• direct air carbon capture and storage<br>• reforestation and afforestation<br>• enhanced weathering<br>• biochar<br>• other effective methods.<br><br>Under ISO Net Zero Guidance, offsets are emissions reduction or removal resulting from an action outside the organisation's boundaries used to counterbalance the organisation's residual emissions. ISO notes that only offsets that are removals can be used to counterbalance residual emissions to achieve net zero.<br><br>Source: ISO - Net Zero Guidance |
| **Residual emissions (residual GHG emission)** | Residual emissions refer to the GHG emissions that remains after taking all possible actions to implement emissions reductions.<br><br>Source: ISO - Net Zero guidelines |
| **Scenario analysis** | Scenario analysis is a process of examining and evaluating possible events or scenarios that could take place in the future and predicting the various feasible results or possible outcomes.<br><br>Source: Corporate Finance Institute - What is Scenario Analysis? |
| **Scope 1 emissions** | Scope 1 GHG emissions occur from sources that are owned or controlled by the company. For example:<br>• emissions from combustion in owned or controlled boilers, furnaces or vehicles<br>• emissions from chemical production in owned or controlled process equipment.<br><br>Source: GHG Protocol - Corporate Accounting and Reporting Standard |

| Term | Definition |
|---|---|
| **Scope 2 emissions** | Scope 2 emissions account for GHG emissions from the generation of purchased electricity, steam, heat, or cooling consumed by the company.<br><br>Purchased electricity is defined as electricity that is purchased or otherwise brought into the organisational boundary of the company. Scope 2 emissions physically occur at the facility where electricity is generated.<br><br>Source: GHG Protocol - Corporate Accounting and Reporting Standard and GHG Protocol Scope 2 Guidance |
| **Scope 3 emissions** | Indirect emissions from a company's upstream and downstream activities. It also includes emissions associated with outsourced manufacturing, leases, or franchises not included in Scope 1 or Scope 2 emissions.<br><br>Source: GHG Protocol - Corporate Accounting and Reporting Standard |
| **Stationary combustion** | Combustion of fuels in stationary equipment such as boilers, furnaces, burners, turbines, heaters, incinerators, engines and flares.<br><br>Source: GHG Protocol - Corporate Accounting and Reporting Standard |
| **Validation** | A process for evaluating the rationality of the assumptions, limitations and methods that support a statement about the outcome of future activities.<br><br>Source: ISO - ISO 14064-3:2019 Greenhouse gases - Part 3: Specification with guidance or the verification and validation of greenhouse gas statements |
| **Value chain** | All of the upstream and downstream activities associated with the operations of the reporting company, including the use of sold products by consumers and the end-of-life treatment of sold products after consumer use.<br><br>Source: GHG Protocol - Corporate Value Chain (Scope 3) Accounting and Reporting Standard |
| **Verification** | A process for evaluating a statement of historical data and information to determine if the statement is materially correct and conforms to criteria.<br><br>Source: ISO - ISO 14064-3:2019 Greenhouse gases - Part 3: Specification with guidance or the verification and validation of greenhouse gas statements |

Table 2: Acronym list

| Acronym | Full name |
|---|---|
| **AASB** | Australian Accounting Standards Board |
| **ACCUs** | Australian carbon credit units |
| **BAU** | Business-as-usual |
| **EnMS** | Energy management system |
| **ESG** | Environmental, social and governance |
| **GHG** | Greenhouse gas |
| **HR** | Human resources |
| **ISO** | International Organisation for Standardisation |
| **ISSB** | International Sustainability Standards Board |
| **KPI** | Key performance indicator |
| **LGCs** | Large-scale Generation Certificates |
| **MAC** | Marginal abatement cost curve |
| **NGER** | National Greenhouse and Energy Reporting |
| **NPV** | Net present value |
| **SBTi** | Science Based Targets Initiative |
| **TCFD** | Taskforce on Climate-related Financial Disclosures |
| **TNFD** | Taskforce on Nature-related Financial Disclosures |

# 11. Notes

This Notes summary includes all notes referred to throughout this Net Zero Business Guide.

**1) Strategy**

a. The *Treasury Laws Amendment (Financial Market Infrastructure and Other Measures) Act 2024 (Cth)* amends *the Corporations Act 2001 (Cth)* to include climate-related financial disclosures as part of an entity's new annual sustainability reporting obligations. This means that from 1 January 2025, many large Australian businesses and financial institutions need to prepare annual sustainability reports containing mandatory climate-related financial disclosures. Entities are required to report if they meet specific thresholds, as outlined here. Go back to element 1 Strategy.

b. Australian Sustainability Reporting Standards published by the Australian Accounting Standards Board (AASB) are:

AASB S1 is a voluntary standard. An entity electing to voluntarily apply this standard would disclose information about all sustainability-related risks and opportunities that could reasonably be expected to affect the entity's cash flows, its access to finance or cost of capital over the short, medium or long term.

AASB S2 is mandatory for certain entities required by the *Corporations Act 2001* for annual periods beginning on or after 1 January 2025. AASB S2 requires an entity to disclose information about climate-related risks and opportunities that could reasonably be expected to affect the entity's cash flows, its access to finance or cost of capital over the short, medium or long term. Go back to element 1 Strategy.

c. There are two approaches to materiality: 'the outside in' and 'inside out'. These approaches are not mutually exclusive; net zero strategies and transition plans can include both, which is called 'double materiality'. The 'outside-in' focuses on how climate affects the organisation financially. Materiality is understood from the 'outside-in' acknowledging that omitting, mis-stating or obscuring risks could reasonably be expected to influence decisions that interested stakeholders (existing and potential investors, lenders and other creditors) make on the basis of reports detailing these risks and opportunities. If the focus is on how the organisation integrates risks and opportunities resulting from its activities on the environment and society, materiality is considered from the 'inside-out'. Proponents of inside-out argue that it is essential to understand a business' impact on social and environmental issues as it enables the identification of risks and opportunities that are not yet directly impacting the organisation's financial situation. Go back to element 1 Strategy.

d. The magnitude and likelihood of climate related risks and opportunities impacting an organisation is hard to predict. These uncertainties should be factored into a risk and opportunity assessment. It will be important for users – including regulators, investors, suppliers and customers – of the risk and opportunity assessment to understand what assumptions were used in the scenario analysis. If these assumptions change over time, the risk assessment can be reviewed. Go back to element 1 Strategy.

e. The business model implications of a net zero commitment could be added to your business's current strategy. They can also be added to a stand-alone document. Go back to element 1 Strategy.

f. Organisations should consider the potential cost of not making a public net zero commitment as part of business model implications. Investors, partners and potential customers increasingly expect businesses to have a net zero commitment. Go back to element 1 Strategy.

g. The 2030 Agenda for Sustainable Development, adopted by all United Nations Member States in 2015, sets out 17 Sustainable Development Goals (SDGs). Go back to element 1 Strategy.

h. The loss of nature poses a risk to the whole economy; the Task Force on Nature-related Financial Disclosures (TNFD) Framework helps organisations consider nature in their decision making. Go back to element 1 Strategy.

i. The International Labour Organisation defines a 'just transition' as 'greening the economy in a way that is as fair and inclusive as possible to everyone concerned, creating decent work opportunities and leaving no one behind.' Go back to element 1 Strategy.

j. Certified B Corporations meet certain standards of verified social and environmental performance, and public transparency. Go back to element 1 Strategy.

k. CDP Forests and CDP Water provide frameworks for managing and voluntarily disclosing forest-related and water-related risks and opportunities. Go back to element 1 Strategy.

**2) Governance**

a. The organisation will need to determine which divisions are responsible for net zero activities, for example: which division or unit will be responsible for emissions data collection, or reporting; will multiple divisions share responsibility? Go back to element 2 Governance.

**3) People and capability**

a. Parts of this element are aligned with the Australian Sustainability Reporting Standards. Go back to element 3 People and capability.

b. Examples of training provided by public and not-for-profit organisations include:

   i. Business Renewables Centre Australia's (BRCEx Australia) Buyers' Bootcamps and other training.

   ii. Climateworks Centre and Monash Sustainable Development Institute's environmental, social and governance (ESG) training.

   iii. NSW Government's EnMS Advisor training, delivered by the Energy Efficiency Council.

   iv. RMIT University's Sustainability and Social Impact future skills short course.

v. More information about careers for net zero and training and education resources are available at Careers for Net Zero in Australia's clean economy.

Go back to element 3 People and capability.

c. Many Australian universities offer masterclasses and graduate certificates in change management. Go back to element 3 People and capability.

**4) Data**

a. Parts of this element are aligned with the Australian Sustainability Reporting Standards. Go back to element 4 Data.

b. The guidance included in the 4 Data element, at a high level, aligns with the GHG Protocol, which can be referred to for further guidance. The GHG Protocol is an internationally recognised standard frequently used in net zero planning. ASRS, SBTi, TCFD and ISSB all align with the GHG Protocol. Go back to element 4 Data.

c. An organisation's goals (see 1.3 develop a high-level net zero policy) and reporting requirements (see 9 Reporting) will determine the standard of accounting and reporting the organisation requires. Go back to element 4 Data.

d. Climate Active is an ongoing partnership between the Australian Government and Australian businesses to drive voluntary climate action. Many organisations are certified or are seeking to become 'carbon neutral' certified under Climate Active. Go back to element 4 Data.

e. To become 'carbon neutral' an organisation calculates the greenhouse gas emissions generated by its activity and reduces these emissions where possible. Any remaining emissions can be balanced by purchasing carbon offsets to have a balance of zero emissions, which is referred as the state of being carbon neutral (Climate Active). The terms net zero and carbon neutral are often used interchangeably, but there is an important difference. A carbon neutral organisation can offset its GHG emissions through purchasing carbon offsets. Where an organisation commits to net zero, it commits to reducing its own GHG emissions as much as possible, and counterbalances any residual GHG emissions through removals. Achieving net zero is a future state that can take 10 to 30 years depending on the industry, with a strong focus on emissions reductions. Carbon neutrality can be achieved today through carbon offsets. Both concepts are not exclusive but rather complementary. Go back to element 4 Data.

f. The Partnership for Carbon Accounting Financials (PCAF) builds on, and is aligned with, the GHG Protocol and provides specific advice for category 15 emissions (financed emissions). Go back to element 4 Data.

g. Note that companies vary in legal and organisational structures, such as incorporated and non-incorporated, joint ventures, subsidiaries and more, and that this should be taken into consideration when setting an organisational boundary. In Australia, the 'operational control approach' is recommended by NGERS and used by many Climate Active certified organisations. Go back to element 4 Data.

h. Most organisations choose a single year for the base year. This should be a year when operations were stable and the organisation was operating as if business as usual (BAU).

This means, for example, that the base year should not be 2020 or 2021 when the global economy was extraordinarily impacted by COVID-19. The SBTi also stipulates that the base year should not be before 2015.

To succeed in meeting an organisation/business's net zero goal, it's crucial to have an accurate baseline to track progress against. A GHG emissions inventory helps organisations understand their emissions profile, enabling them to establish emissions baselines against which they can measure progress. A base year is the year against which GHG accounting is compared. Baselines are the emissions produced in the base year. Project-based accounting also uses baseline scenarios that demonstrate what the emissions would be if no action were taken. Go back to element 4 Data.

i. Purchased electricity is one of the largest sources of GHG emissions for many companies. Go back to element 4 Data.

j. Scope 3 emissions are indirect emissions – other than indirect emissions arising from electricity, steam, heat or cooling purchased by the organisation (scope 2 emissions) – that occur because of an organisation's activities, but are not directly attributable to that organisation as the emissions were produced from sources not owned or controlled by the organisation. To determine if an activity falls within scope 1 or scope 3, the organisation should refer to the selected approach (equity or control) used in setting its organisational boundaries in 4.3.1 Select a GHG emissions calculation approach for Scope 3 emissions. Go back to element 4 Data.

k. The most common approach for calculating GHG emissions is applying documented emission factors, like the Australian Government Department of Climate Change, Energy, the Environment and Water's National Greenhouse Accounts Factors. Go back to element 4 Data.

l. Organisations may need to gather and summarise data from multiple facilities, possibly in different countries; relevant guidance can be found in chapter six of the GHG Protocol Corporate Standard. Reductions in an organisation's emissions are calculated by comparing changes in the organisation's actual emissions inventory over time, relative to the selected base year. The GHG Protocol requires reporting of absolute emissions (the quantity of emissions released into the atmosphere). Organisations can optionally report on emissions normalised by a business metric that results in a 'ratio indicator'. Ratio indicators can facilitate comparisons between similar processes and products over time; relevant guidance and examples of ratio indicators can be found in Chapter nine of the GHG Protocol. Go back to element 4 Data.

m. Scope 3 is an important part of an organisation's GHG emissions profile, often being more significant than the organisations scope 1 and 2 emissions. Stakeholders increasingly expect organisations to have credible plans to reduce scope 3 emissions.

Not all standards require reporting of scope 3 emissions. Under the GHG Protocol it is optional but recommended where 'significant' scope 3 emissions sources represent a 'material contribution' to a business's GHG footprint. Climate Active requires all relevant and material emissions to be reported, including scope 3.

SBTi requires that 'if scope 3 emissions compose over 40% of total scope 1, 2 and 3 emissions, companies must develop ambitious scope 3 targets that collectively cover at least two-thirds of scope 3 emissions.' In the longer term, this target setting for Scope 3 must be expanded to cover 90% of scope 3 emissions by 2050. It is important that the organisation adheres to the requirements of any selected standard. Go back to 4 Data.

n. Allocation is where GHG emissions from a single facility or other system (for example, production line or business unit) are partitioned separated among its outputs. It is needed when a single facility or system produces multiple outputs and emissions are only quantified for the entire facility or system as a whole. More information on allocation is available in the GHG Corporate Value Chain (Scope 3) Standard, Chapter 8. Go back to element 4 Data.

o. Reductions in an organisation's emissions are calculated by comparing changes in the organisation's actual emissions inventory over time, relative to the selected base year. The GHG Protocol requires reporting of absolute emissions (the quantity of emissions released into the atmosphere). Organisations can choose to report on emissions normalised by a business metric that results in a 'ratio indicator'. Ratio indicators can help compare similar processes and products over time. Guidance and examples of ratio indicators can be found in Chapter 9 of the GHG Protocol. Go back to element 4 Data.

p. Reductions in indirect emissions (changes in scope 2 or 3 emissions over time) may not always capture the actual emissions reduction accurately. This is because there is not always a direct cause-effect relationship between the activity of the reporting company and the resulting GHG emissions. This is understood within the market and should not prohibit reporting on scope 2 and 3 emissions. Go back to element 4 Data.

q. Monitoring emissions ensures we can measure progress against targets. It also helps to increase ambition by highlighting opportunities for energy efficiency and reducing a reliance on offsets. Monitoring emissions can also have operational benefits, like identifying where efficiencies can be made or where maintenance is needed. Go back to element 4 Data.

r. The quality of emissions data is crucial to the accuracy of emissions reporting and organisations' net zero and carbon neutral claims. It's important that data can be easily obtained and analysed over time. Go back to element 4 Data.

**5) Targets**

a. This element is aligned with the Science Based Targets initiative's (SBTi) Corporate Net Zero Standard, which requires ambitious, science-based targets. SBTi is aligned with the GHG Protocol which is detailed in 4 Data element. Go back to element 5 Targets.

The scope should align with the emissions inventory; particularly how to set organisational and operational boundaries. See 4 Data element and 6 Action Plan element. Go back to element 5 Targets.

b. The organisation will create long, mid-and short-term action plans referring to targets set under the 5 Targets element. It may also amend its targets once an action plan has been established. See 6 Action Plan.

Target setting and planning are co-dependant and should be revisited regularly to see if the level of ambition can be raised. Go back to 5 Targets.

c. The use of offsets in the context of net zero may be different to the use of offsets in relation to carbon neutrality. Under ISO Net Zero Guidance, only offsets that are removals can be used to counterbalance residual emissions to achieve net zero. Consider additional guidance on the use of offsets in the context of net zero, such as ISO Net Zero Guidance and Oxford Principles for Net Zero Aligned Carbon Offsetting.

   Many disclosure frameworks and standards such as the UK TPT (Transition Plan Taskforce) and the SBTi standards require separate reporting of the use of offsets. SBTi only considers offsets to be an option 'for companies wanting to finance additional emission reductions beyond their science-based target (SBT) or net-zero target'.

   Under Climate Active's carbon-neutral certification requirements 'it is expected that reductions are made where it is practical and cost effective to do so' and guidance is provided on what offsets are acceptable.

   In Australia, there are offsets regulated by the Australian Government. These are referred to as Australian Carbon Credit Units (ACCUs) and are issued by the Clean Energy Regulator. An ACCU represents one tonne of carbon dioxide equivalent ($tCO_{2\text{-}e}$) stored or avoided by a project. More information on ACCUs is available here.

   The credibility and use of offsets is increasingly contentious because using offsets which have not been independently verified can lead to greenwashing claims. Greenwashing by businesses in Australia has become a focus topic for the Australian Competition and Consumer Commission (ACCC). The ACCC describes greenwashing as 'a term used to describe false or misleading environmental claims.' Organisations claiming to be, or state that they have an ambition to become, net zero have been investigated in relation to greenwashing by the ACCC. Greenwashing would breach an organisation's obligations under the Australian Consumer Law and potentially laws administered by other regulators including the Australian Securities and Investment Commission (ASIC). The ACCC has developed a guide for businesses that explains their obligations under the Australian Consumer Law when making environmental and sustainability claims.

   The Voluntary Carbon Markets Integrity Initiative's Claims Code of Practice can assist organisations determine the credibility of offsets. Sector specific guidance is also available such as the Green Building Council Australia's framework. Go back to element 5 Targets.

d. The most reliable approach is to set a net zero target with independent validation, such as a target validated by the SBTi. The SBTi standards are supported by thousands of international organisations and include cross-sector and sector-specific guidance and tools. Organisation's science-based targets are approved by the initiatives partners (CDP, United Nations Global Compact, World Resource Institute and WWF), giving confidence not only to the organisation itself but also its investors and customers that the targets are scientifically grounded. There is a five-step process to setting a science-based target:

i. Commit: submit a letter to SBTi establishing your intent.

ii. Develop: an emissions reduction target in line with SBTi's criteria.

iii. Submit: present your target to the SBTi for validation.

iv. Communicate: announce your target to stakeholders.

v. Disclose: report company-wide emissions and track progress annually.

Small or medium sized enterprises (SMEs) can follow a streamlined process. SBTi defines SMEs as independent, non-subsidiary companies with fewer than 500 employees. This does not include financial institutions and oil and gas companies. Please see more information here. Go back to element 5 Targets.

e. Climate Active is an Australian scheme under which organisations and products can be certified as carbon neutral. A Climate Active 'carbon neutral' certification may not satisfy international standards because it allows the use of offsets. SBTi standard only considers offsets 'to be an option for companies wanting to finance additional emission reductions beyond their science-based target (SBT) or net-zero target'. An organisation's 'carbon neutrality is independently validated and annual reporting is required. Please see the Climate Active Guide for more details. Go back to element 5 Targets.

f. Climate Group commitments include RE100, EP100 and EV100:

i. RE100 brings together businesses committed to 100% renewable electricity with a mission to drive change towards zero carbon electricity grids globally by 2040. It is only open to companies with significant annual electricity demand (at least 0.1 TWh / 100 GWh / 100,000 MWh) except in exceptional circumstances. RE100 members publicly commit to sourcing 100% of renewable energy throughout their operations by 2050 and must meet interim targets of 60% by 2030 and 90% by 2040. Members are required to report data annually through the CDP Climate Change Questionnaire.

ii. EP100 brings together businesses committed to improving their energy efficiency. EP100 members commit to doubling their energy productivity.

iii. EV100 brings together companies committed to accelerating the transition to electric vehicles. Members commit to switching their owned and contracted fleets up to 7.5t to electric vehicles and installing charging infrastructure for employees and customers by 2030. Go back to element 5 Targets.

g. An absolute target consists of a set number of metric tons of emissions. Intensity-based targets measure metric tons of emissions per unit of production.

Under the SBTi standard, intensity targets are only eligible when they lead to absolute emission reductions or when they are based on an approved sector pathway or method. Australian guidance from the Investor Group on Climate Change also recommends that companies should disclose what intensity targets mean in absolute terms. This is because intensity targets do not guarantee absolute emissions reductions. Go back to element 5 Targets.

h. When setting targets using the SBTi corporate net zero standard, organisations can choose from various methods, including:

   i. Cross-sector absolute reduction: reducing absolute emissions by an amount that is, at a minimum, consistent with the cross-sector pathway

   ii. Sector specific absolute reduction: absolute emissions are reduced by an amount that is, at minimum, consistent with a sector-specific pathway

   iii. Sector-specific intensity convergence: all companies in a sector converge to a sector-specific emissions intensity in 2050 (2040 for the power and maritime transport sectors). This is also referred to as 'physical intensity convergence' or 'Sectoral Decarbonization Approach (SDA)'

   There are important differences when setting near-term and long-term science-based targets. For in-depth guidance on calculating near-term targets, please see the SBTi corporate net zero standard. Go back to element 5 Targets.

i. This section is at a high-level aligned with the SBTi Corporate Net Zero Standard, which requires ambitious, science-based targets. An organisation can follow the SBTi standard without having SBTi validation or choose to set targets following a different standard.

   The SBTi's streamlined route for SMEs does not require SMEs to set near term targets for their scope 3 emissions; however, SMEs must still commit to measure and reduce their scope 3 emissions (SBTi). The SBTi's streamlined target validation route is available to independent companies with less than 500 employees (excluding oil and gas companies and financial institutions). Under this process, SME's have two target-setting options: near-term targets (by 2030) and net-zero targets (long-term targets aligned to 1.5°C to be achieved by 2050). The process involves:

   i. SME submits an online application including general business information, a target ambition, and their emissions profile (which must be in line with the GHG Protocol and accepting the terms).

   ii. SBTi reviewing applications.

   iii. The SME pays a fee depending on the service selected.

   iv. SBTi sends a communications pack to the SME.

   v. SBTi publishing targets on both theirs and their partner's website, We Mean Business. *Further details are available on SBTi's website.* *Go back to element 5 Targets*.

**6) Action Plan**

a. Timelines vary among international standards. According to SBTi, long-term means more than 10 years or out to 2050. The Guide aligns with the SBTi SME route: that near-term targets cover a minimum of 5 years and maximum of 10 years from the date of submission for validation. Long-term net zero targets should be no later than 2050. It is up to the organisations to define the timeline for short term, mid-term and long-term. Go back to element 6 Action plan.

b. Energy management systems (EnMS) drive continuous improvement in an organisation's energy performance. Energy management systems include policies, plans and processes but it is executive buy-in that is crucial to deliver ongoing energy management improvements. The international standard ISO50001 specifies an energy management system framework. While larger organisations may consider ISO50001 certification, its Plan – Do – Check - Act continual improvement framework is a useful reference for all organisations establishing an energy management system. Go back to element 6 Action plan.

c. Each organisation will have its own criteria for pathway selection. Criteria could include cost, abatement and ease of implementation. Go back to element 6 Action plan.

d. A sensitivity analysis allows you to understand the effect of a change in a key assumption underlying your plan. For example, if one of your assumptions is that green hydrogen will be available by a particular date and this is not the case, it is important to understand the consequence this would have on your plan. If the plan is not sufficiently robust, it should be updated prior to commencement. The assumptions of the plans should be tested periodically. Go back to element 6 Action plan.

**7) Finance**

a. Long-term financing requirement estimates will be based on assumptions and will be subject to change over time. You need these estimates to create your preferred pathway (see element 6.1.4). Compare pathways to a business-as-usual scenario sub-element. You can create more refined estimates for your short-term net zero action plan and your organisation's budget process. Go back to element 7 Finance.

**8) Stakeholder engagement**

a. Industry associations give a voice to individual organisations within an industry. They help members to share information, discuss issues and establish best practice. Influence mapping can help determine whether industry bodies' activities are aligned with net zero. Go back to element 8 Stakeholder engagement.

b. Competition law limits how businesses can communicate and cooperate with each other. Contracts or arrangements that substantially lessen competition are illegal. The ACCC has developed a guide to assist businesses that are considering collaborating together to achieve sustainable outcomes. Where Australian competition law risks do arise, but the sustainability collaboration is in the public interest, an ACCC exemption may be appropriate.

**9) Reporting**

a. From 1 January 2025, many large Australian businesses and financial institutions need to prepare annual sustainability reports containing mandatory climate-related financial disclosures under the Corporations Act. Criteria for entities required to report can be found here. *For more information, see Strategy note 1b*. Australian Securities and Investments Commission (ASIC) is responsible for administering the sustainability reporting requirements in the Corporations Act and will monitor entities' compliance with these requirements. ASIC has provided initial guidance on the mandatory reporting

and plans to develop detailed guidance. The climate related financial disclosures include requirements for disclosure of transition plans, including information about offsets, target setting and mitigation strategies, as well as progress towards targets. Go back to element 9 Reporting.

NSW GOVERNMENT

## For more information

For more information about the Net Zero Business Guide and other initiatives, visit our website or contact us via email.

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