



A GUIDE TO **NET ZERO** TRANSPORT AND INFRASTRUCTURE



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INTRODUCTION

Join us as we embark on the journey to net zero. This guide, based on our [in-depth blog post series](#), serves as a step-by-step resource for leaders in local government, infrastructure, and transport. It outlines each crucial stage in the pursuit of net zero emissions.

With the net zero target by 2050 becoming a defining goal for governments and organisations alike, the need for action is urgent—especially for sectors like transport and infrastructure, where emissions reduction can have a transformative impact.



Watch this video as we dive into the urgent need for emissions reduction in Australia's transport sector and outline practical steps for change.



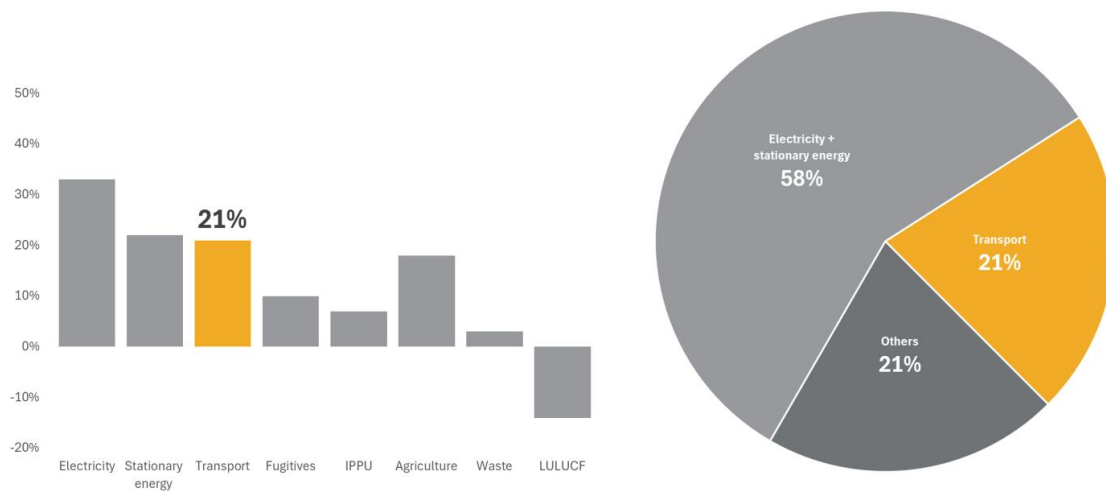
THE JOURNEY TO NET ZERO:

A guide for infrastructure and transport leaders

Throughout this guide, we will take a step-by-step approach to building a robust net zero strategy.

Each section will focus on a specific area, such as establishing a carbon foundation, understanding climate risks, developing a net zero strategy, setting meaningful targets, harnessing collaboration, and meeting compliance standards.

As one of Australia's largest emissions sources, the transport sector alone accounts for **roughly a fifth of national emissions**—a figure that's projected to rise to 26% by 2030, making transport the single largest emissions source in the country. While decarbonisation of the electricity grid will reduce emissions in other sectors, transport emissions are expected to increase due to population growth, higher demand for goods and services, and the vast distances that need to be covered across Australia.



<https://www.dcceew.gov.au/sites/default/files/documents/australias-emissions-projections-2023.pdf>

Figure 1: The carbon footprint of transport in Australia in 2023

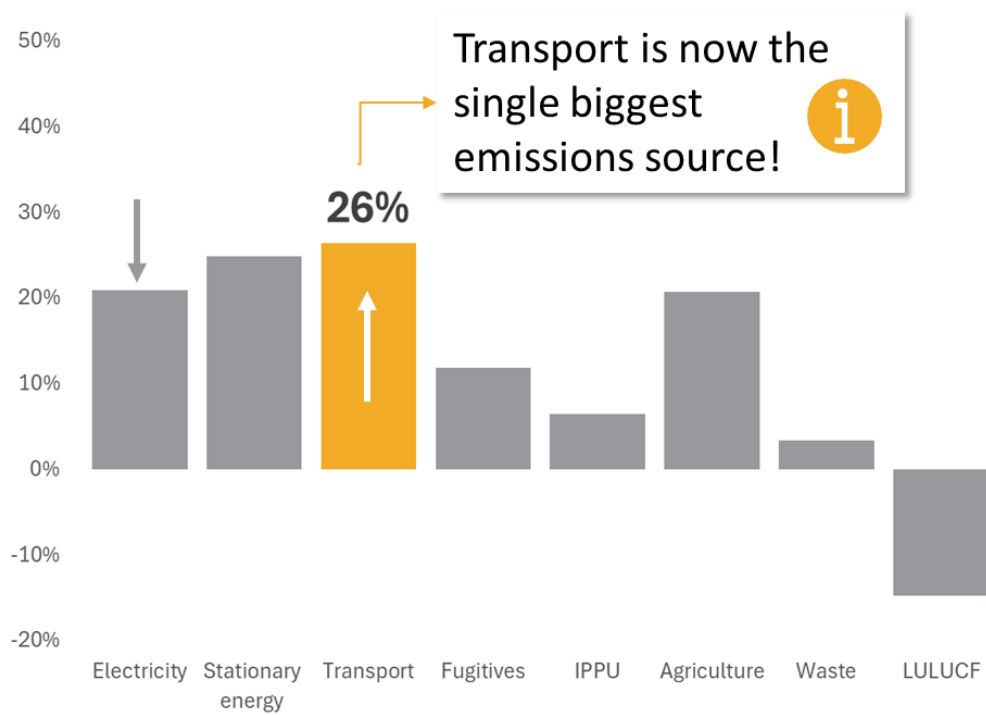


Figure 2: Projected carbon footprint of transport in Australia in 2030

Climate science is clear: If emissions continue to rise, our roads, buildings, and transport systems will face more frequent and severe disruptions, from extreme heat to flooding. The Paris Agreement established a goal to reach net zero by mid-century, setting a clear path forward. For those involved in infrastructure and transport, this means adopting strategies that cut emissions and improve operational efficiency, while building resilience into our systems.

The role of infrastructure and transport for meaningful change

Infrastructure and transport are significant sources of emissions, but they also hold substantial potential for meaningful change. Here's why:

- **Resilient, future-proof infrastructure:** By investing in sustainable materials, energy-efficient systems, and low-emission technologies, infrastructure and transport organisations can create assets that support net zero goals and withstand future climate demands. Innovations like renewable-powered transit and durable, sustainable construction materials are key to ensuring long-term value for communities
- **Setting a standard for public trust and responsibility:** As stewards of public resources, infrastructure and transport leaders have a unique responsibility to

advance sustainability and align with community expectations. Visible commitments to net zero enhance public trust and demonstrate leadership, positioning these sectors as proactive, responsible contributors to a sustainable future.

A balanced path to net zero

The journey to net zero involves reducing emissions wherever possible and balancing what remains with removal-based offsets. For infrastructure and transport, this might include upgrading fleets, using low- or no-carbon materials, or investing in reforestation projects that sequester carbon.

This guide will take you through every step of the journey, offering specific actions and strategies tailored to your industry.

Building your net zero strategy step-by-step

Developing and implementing a net zero strategy can feel overwhelming, but the process becomes more manageable when broken down into key steps. Using the **5 Cs framework** developed by 100% Renewables, this guide provides a comprehensive roadmap to help your organisation achieve its net zero goals.

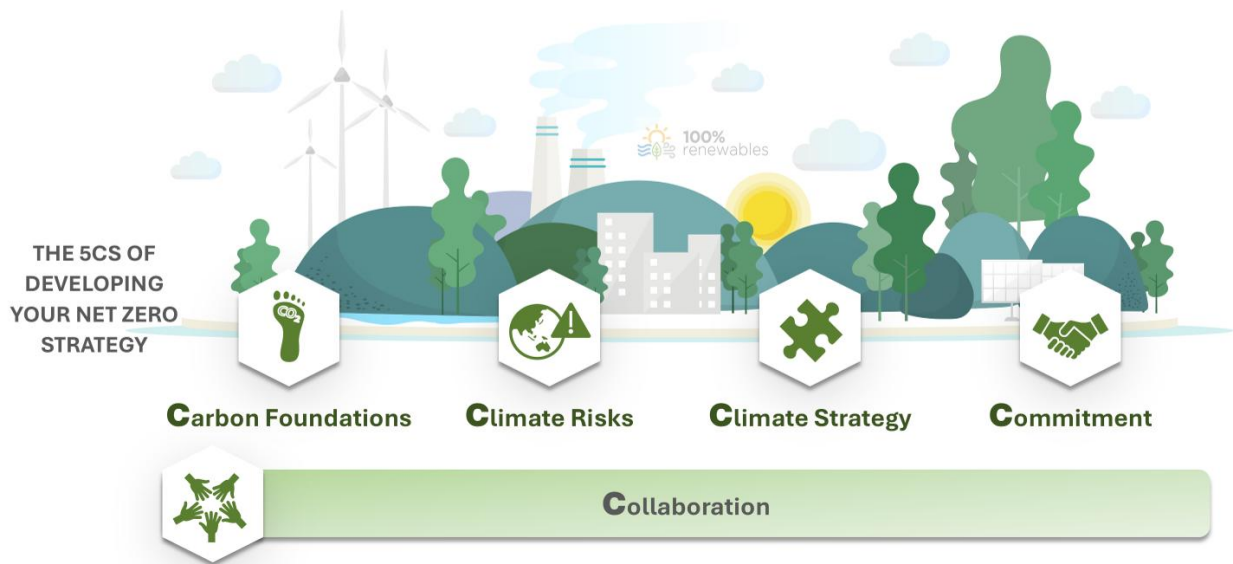
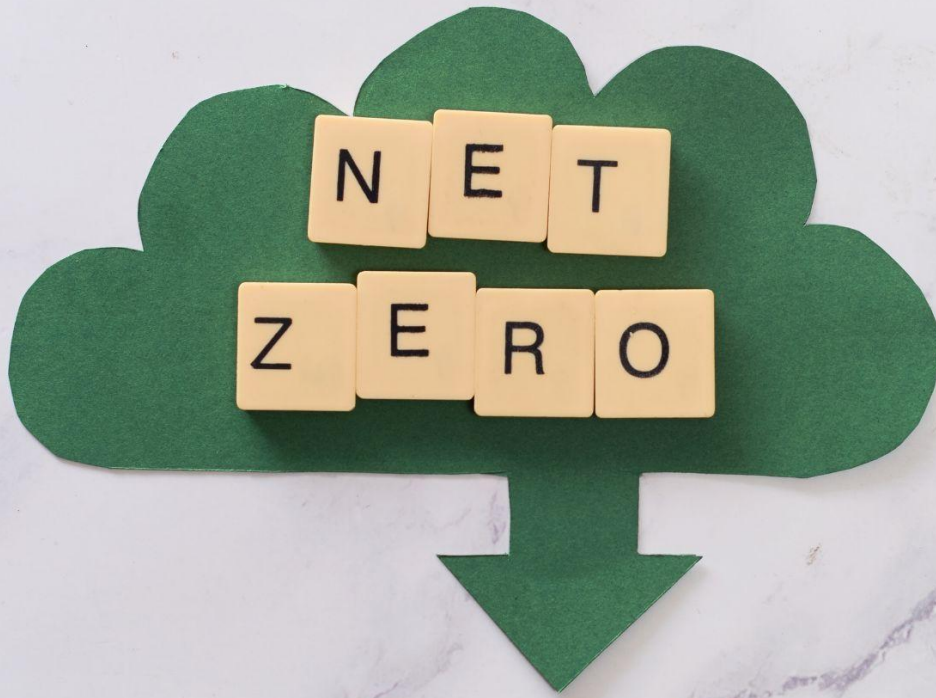


Figure 3: 100% Renewables 5C framework for achieving net zero

Here's what you'll learn:

☑ **Balancing emissions with removals:**

Explore the concept of net zero as a balancing act, understanding how emissions reduction and removals work together.

☑ **Establishing your carbon foundation:**

Learn how to calculate your emissions accurately across the three scopes, identifying where your organisation can make the most impact on emissions reduction.

☑ **Managing climate risks:** Identify and plan for climate-related risks, from physical risks like extreme weather to transition risks related to policy and market shifts.

☑ **Developing a climate strategy:**

Discover how to create a clear, actionable climate strategy that aligns with long-term organisational goals and prioritises high-impact initiatives.

☑ **Setting your commitment through targets:**

Understand how to set ambitious yet achievable net zero targets. This includes creating interim milestones that demonstrate your organisation's commitment to reducing emissions over time.

☑ **The role of collaboration:** Understand why collaboration with suppliers, stakeholders, and industry partners is essential for reaching ambitious emissions targets, especially for Scope 3 emissions.

☑ **Navigating compliance and reporting:**

Gain insights into regulatory standards such as AASB S2 (Australian Sustainability Reporting Standards), with guidance on aligning reporting practices to meet emerging requirements.

Each section offers practical insights and guidance, helping you build a robust net zero strategy tailored to the unique needs of the infrastructure and transport sectors.

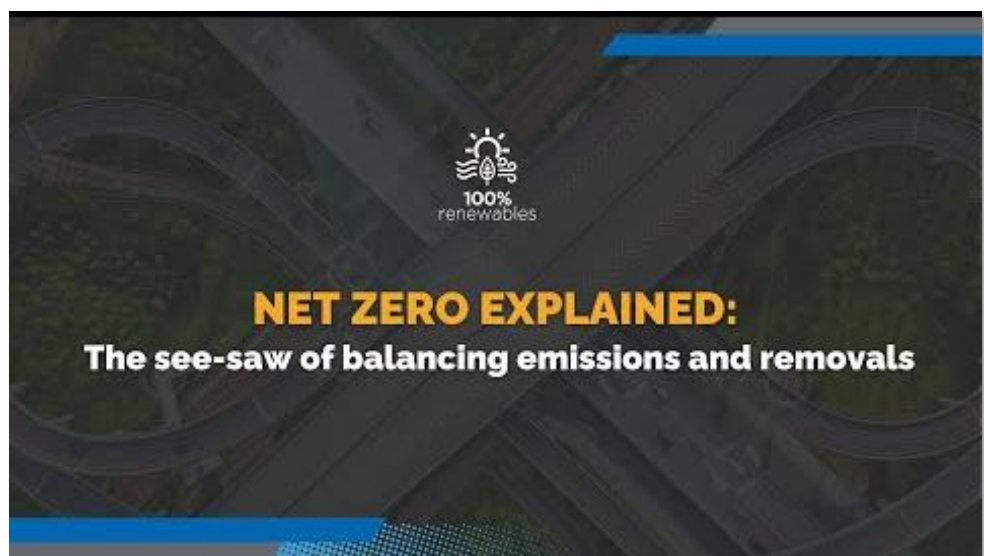




NET ZERO EXPLAINED: The seesaw of balancing emissions and removals



It helps to think of net zero as a balancing act—like a seesaw.



The see-saw of net zero: reducing emissions first

Remember the thrill of sitting on a see-saw as a child? You could feel the weight shift as you and your friend worked to balance each other, with one side dipping low and the other lifting high. Net zero is a lot like that balancing act.

Imagine a seesaw with a large block on the left side representing our current greenhouse gas emissions. This weight, as we know, is pushing our climate beyond safe limits, and the first step toward net zero is to lighten that load.

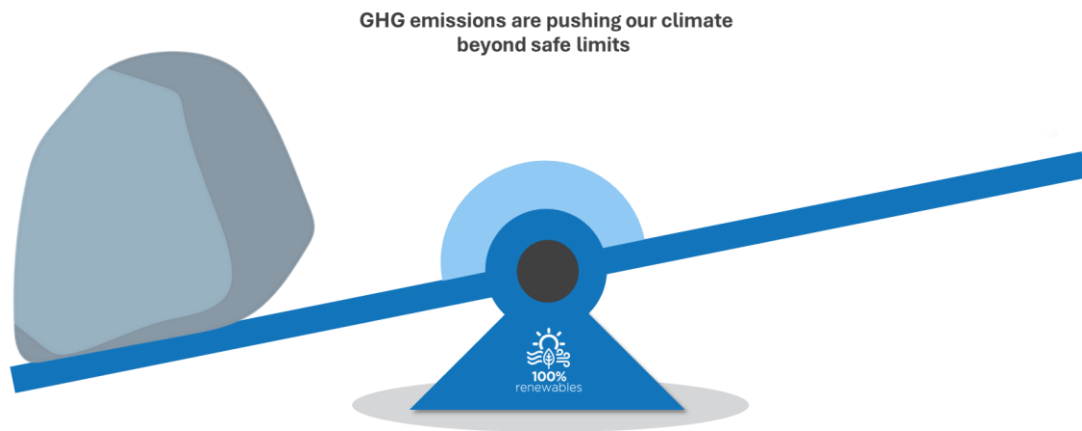


Figure 4: Seesaw illustration

To do this, we must reduce emissions across every aspect of our operations, from energy use to transportation and materials. This is a long-term process—it won't happen overnight—but it's essential to bring emissions down to only the hardest-to-remove sources. These might include

emissions from heavy-duty vehicles and construction equipment, high-temperature industrial processes like cement and steel production, and certain public services, such as emergency vehicle fleets, that currently lack low-carbon alternatives.



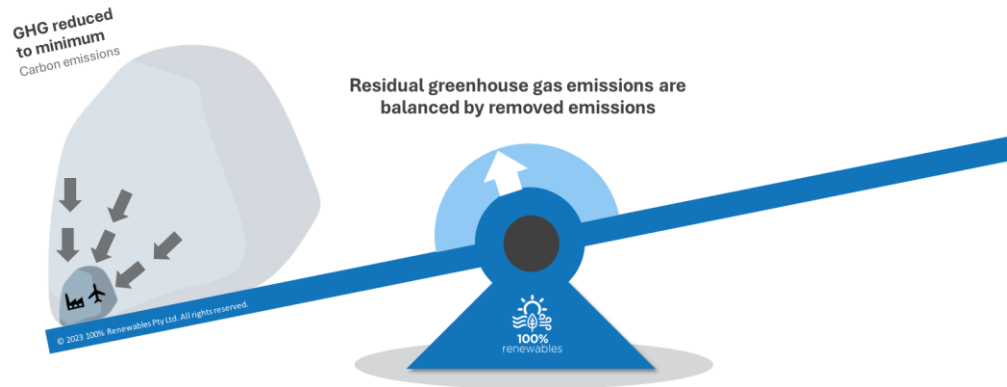


Figure 5: The seesaw of net zero

Balancing emissions with removal-based offsets

Once emissions are reduced to an absolute minimum, we're left with what we call *residual emissions*. These are the hardest-to-abate

sources, and to achieve net zero, we balance them with removal-based carbon offsets. Unlike traditional offsets, removal-based credits come from projects that actively take carbon out of the atmosphere, like reforestation or soil restoration projects.

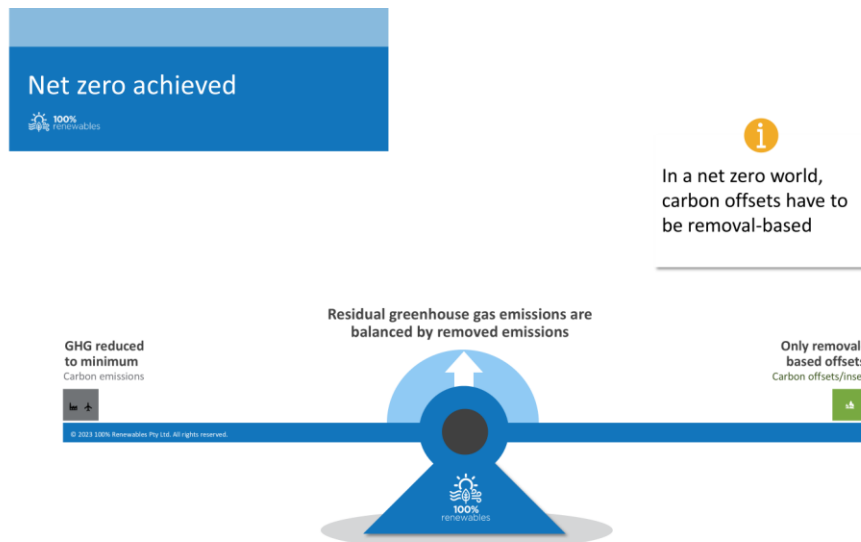


Figure 6: Balancing emissions to achieve net zero

Why a balanced approach matters

Achieving net zero isn't simply about offsetting emissions—it's about prioritising deep emissions reductions across every part of your organisation first, only relying on removal-based offsets for the hardest-to-abate sources. This balanced approach ensures that net zero remains a meaningful, long-term commitment rather than a distant target.

Offsets should be considered a final step, reserved for emissions that cannot yet be eliminated with current technology. Offsets are a complementary measure, not a substitute for action. Organisations genuinely committed to sustainability will focus on reducing their emissions footprint as much as possible before turning to offsets, demonstrating a proactive approach to climate impact that goes beyond quick fixes.



In summary, the concept of 'net zero' simplified

You can simplify net zero into a two-step process:

1. **Reduce emissions as much as possible**
2. **Balance the rest with removal-based offsets**

Together, these steps create a sustainable equilibrium—a future where emissions are aligned with nature's capacity to absorb them.





BUILDING CARBON FOUNDATIONS: The first step in your net zero journey



Watch this video for a quick introduction to building a carbon foundation and why it's essential for reducing your emissions.



Did you know that for many organisations, up to 90% of emissions come from indirect sources?

To effectively reduce your carbon footprint, you need to know exactly where those emissions are coming from. That's where a carbon foundation comes in.

A carbon foundation gives you a clear picture of your greenhouse gas (GHG) emissions across three key categories—Scopes 1, 2, and 3. By identifying key sources, upskilling your internal team and board, and setting a baseline to track your progress, you gain the direction and clarity needed to move forward. Strong governance ensures that this foundation is robust, with clear roles, responsibilities, and policies in place to maintain data accuracy and accountability.

With leadership actively engaged and informed, your organisation can better understand its emissions profile, pinpoint the biggest reduction opportunities, and integrate sustainability into strategic decision-making.

Whether you're managing infrastructure projects, transport systems, or public services, establishing a carbon foundation is the first step in your net zero journey. Without it, it's impossible to know where to focus your efforts or measure your success.



The three scopes of emissions

Emissions can come from a variety of sources and categorising them helps create a clearer

picture of your overall footprint. These categories are known as the three scopes of emissions.

Scope 1



Direct emissions

These are emissions from sources that your organisation owns or controls directly.

Examples include:

- ☐ **Fleet operations:** Fuel combustion in trucks, buses, trains, construction vehicles, and service cars.
- ☐ **Onsite equipment and machinery:** Diesel generators, cranes, excavators, and other heavy machinery used in construction or maintenance.
- ☐ **Stationary combustion:** Natural gas or LP Gas used for heating/cooling buildings, depots, warehouses, or facilities.
- ☐ **Refrigerant emissions:** Leakage from air conditioning systems, cold storage facilities, or refrigerated transport vehicles.
- ☐ **Fugitive emissions:** Leaks from gas pipelines, fuel tanks, or other sources.

Scope 2



Indirect emissions from purchased energy

These are emissions associated with the electricity, heating, or cooling that your organisation purchases. In Australia, Scope 2 is mostly the consumption of electricity.

Examples include:

- ☐ **Facility operations:** Electricity used to power offices, warehouses, depots, and maintenance facilities.
- ☐ **Public infrastructure:** Energy used for streetlights, traffic signals, public charging stations, and transit hubs.
- ☐ **Operational equipment:** Electricity consumption by equipment.
- ☐ **Electric Vehicle (EV) charging:** Electricity used to charge electric fleets or public EV charging stations.

Scope 3



Other indirect emissions

These are emissions that occur across your value chain, both upstream and downstream. Scope 3 emissions are often the most challenging to calculate but can represent up to 90% of your total emissions.

For a comprehensive net zero strategy, you need to accurately capture Scope 3 data.

Examples include:

- **Purchased goods and services:** Emissions from producing construction materials like asphalt, concrete, and steel. Emissions from office supplies, IT equipment, and maintenance services.
- **Capital goods:** Manufacturing of vehicles, machinery, and infrastructure assets such as bridges, roads, rail lines and buildings. Capital goods are long-term assets you purchase or invest in to produce goods or services.
- **Fuel and energy-related activities:** Extraction, production, and transportation of fuels and energy used in operations.
- **Upstream transportation and distribution:** Emissions from transporting raw materials, equipment, or supplies to your organisation or operations.
- **Waste generated in operations:** Emissions from landfilling, recycling, or incinerating operational waste.
- **Business travel:** Flights, train journeys, and car travel for employees attending conferences, meetings, or site visits.
- **Employee commuting:** Emissions from staff commuting by car, public transport, or other modes.
- **Upstream leased assets:** Emissions from assets leased by your organisation for its own operations, such as rented office spaces, vehicles, or equipment.
- **Downstream transportation and distribution.** Emissions from transporting and distributing products to customers or end users.
- **Use of sold products:** Emissions from customers using vehicles, infrastructure, or equipment sold by your organisation.
- **End-of-life treatment of sold products:** Emissions from recycling, disposal, or processing of products at the end of their life cycle.
- **Downstream leased assets:** Emissions from buildings, vehicles, equipment, or infrastructure that your organisation owns but leases out to other entities. Examples include energy use in office buildings, warehouses, or fuel consumption by fleet vehicles or machinery leased to third parties.



In summary, Scope 1 covers emissions from your direct operations, Scope 2 covers emissions from purchased energy, and Scope 3 encompasses emissions throughout your entire value chain.

Practical steps to calculate your emissions

Building your carbon foundation involves several key steps:

1. Upskill your internal team and board

☑ Train your staff, senior leadership, and board members on emissions calculation methodologies, data collection processes, and reporting frameworks like the [GHG Protocol](#). Ensuring your board understands climate-related risks and opportunities allows for better strategic decision-making and governance. An informed leadership team can drive the net zero agenda more effectively and embed sustainability into your organisation's core strategy.

2. Identify emission sources

☑ Create a comprehensive list of activities and operations that produce emissions.

☑ Include direct activities (fleet vehicles, machinery) and indirect activities (purchased electricity, supplier emissions, etc.).

3. Collect data

☑ Gather data on fuel consumption, energy use, travel, and materials. Engage with suppliers to collect Scope 3 data where possible.

☑ Data like energy bills, fuel receipts, online platforms, and procurement records can help provide the information you need.

4. Use emissions factors

☑ Apply appropriate emissions factors to convert your data into tonnes of CO₂ equivalent (t CO₂-e). Use recognised sources like the [National Greenhouse and Energy Reporting \(NGER\)](#) scheme or the [GHG Protocol](#).

5. Calculate your baseline

☑ Establish a baseline year for your emissions. This will serve as the reference point for tracking progress and setting targets.

6. Verify and refine data

☑ Ensure your data is accurate and complete. Consider third-party verification to enhance credibility and confidence in your numbers.

The role of governance in carbon foundations

Building a solid carbon foundation isn't just about calculating emissions—it's also about having the right governance structures and skills in place.

Governance is the backbone of a reliable carbon foundation. It ensures your emissions data is accurate, credible, and integrated into your organisation's strategy. Strong governance involves:

Assigning clear roles:

Ensure senior leadership and dedicated teams are responsible for emissions measurement and management.

Formalising policies:

Create policies and procedures for data collection, verification, and reporting.

Ensuring compliance:

Align your processes with regulatory standards like AASB S2/ASRS and reporting frameworks such as the GHG Protocol

Reviewing regularly:

Establish regular audits and reviews to maintain data accuracy and improve processes over time.

With strong governance, your carbon foundation will not only support accurate emissions measurement but also help your organisation demonstrate accountability, transparency, and strategic alignment.

Challenges in emissions calculation

Calculating emissions can be challenging, particularly for Scope 3 emissions. Here are some common challenges and tips to overcome them:

•**Challenge:** Lack of accurate data from suppliers or partners.

•**Solution:** Start with industry averages or spend-based data and gradually improve accuracy by engaging suppliers.

1. Data availability



•**Challenge:** Emissions come from multiple sources across the value chain.

•**Solution:** Focus on the largest contributors first and work on refining data for smaller sources over time.

2. Complex supply chains



•**Challenge:** Existing systems may not be set up to track emissions data.

•**Solution:** Adapt internal processes to capture emissions-related information more effectively. Consider implementing data management platforms.

3. Internal systems



Why a solid carbon foundation matters

Establishing a carbon foundation is a strategic advantage. Here's why it matters:

✓ **Informed risk assessment and decision-making:** Accurate emissions data helps you identify the most effective ways to reduce emissions and focus your resources and transition risk assessment on high-impact areas.

✓ **Target setting:** A clear baseline enables you to set realistic, science-based targets and track progress toward net zero.

✓ **Compliance and reporting:** Meet regulatory requirements like **AASB S2 (Australian Sustainability Reporting Standards)** and enhance transparency with stakeholders.

✓ **Credibility and trust:** Demonstrating a thorough understanding of your emissions builds trust with the public, customers, investors, and partners.

✓ **Cost savings:** Identifying inefficiencies in energy and resource use can lead to cost reductions over time.





More on AASB S2/ASRS

For those interested in learning more about AASB S2, we offer a [free course](#) covering everything you need to know about these standards and how they apply to your organisation. Understanding AASB S2 is crucial for aligning your net zero efforts with emerging regulations and avoiding greenwashing.

For transport and infrastructure sectors, where emissions reductions and sustainable development are central to long-term success, understanding and implementing these standards is especially critical.

Whether you're in the early stages of sustainability reporting or seeking to enhance existing practices, our AASB S2 course provides the knowledge and tools you need to lead with confidence in the evolving regulatory landscape.

Kickstart your journey into Australian Sustainability Reporting Standards (ASRS) with our complimentary course offer



Scan and enrol now!





MANAGING CLIMATE RISKS: Building resilience into your net zero strategy



Watch this video for a quick introduction to managing climate risks and why it's a priority for leaders in infrastructure, transport, and local government sectors.



MANAGING CLIMATE RISKS: Building resilience into your net zero strategy

In its [2025 Global Risks Report](#), the World Economic Forum highlights that climate-related risks dominate the top concerns for the next decade, with extreme weather events, biodiversity loss, critical changes to Earth systems, and natural resource shortages taking centre stage. For sectors like infrastructure and transport, the message is clear: climate risks are not just future possibilities—they are immediate challenges that demand urgent attention.

In fact, **8 out of 10 companies in the ASX100 acknowledge climate change as a risk to their business**, according to KPMG's 2024 [Australian Sustainability Reporting Trends](#) report. This statistic underscores the growing recognition of climate risks across industries and the need for robust strategies to manage them effectively.

Climate change is already disrupting supply chains, damaging critical assets, and increasing operational costs. For leaders in

infrastructure, transport, and public services, managing climate risks is as important as reducing emissions. But here's the silver lining: ***Managing these risks doesn't just protect your organisation—it also creates opportunities for innovation and sustainability.***

This section builds on the previous ones, where we introduced the carbon foundations needed for emissions tracking and the balancing act of net zero. Now, we focus on understanding and addressing climate risks—both physical and transition risks—to ensure your organisation is resilient and prepared for the challenges ahead.

Whether you're responsible for managing public infrastructure, overseeing transport systems, or delivering public services, this section provides practical guidance to identify, assess, and manage climate risks as part of your net zero strategy.



RISK
AHEAD

The two types of climate risks

Physical risks

Physical risks arise from the direct impacts of climate change, such as extreme weather events, rising temperatures, and sea-level rise.

Examples for transport and infrastructure:

- ☑ Flooding damaging roadways and bridges.
- ☑ Extreme heat causing rail tracks to buckle.
- ☑ Increased maintenance costs due to more frequent storms.

Transition risks

Transition risks are associated with the shift to a low-carbon economy, including policy changes, technological advancements, and market dynamics. However, these risks also open opportunities for innovation, such as adopting cleaner technologies or developing sustainable construction practices.

Examples for transport and infrastructure:

- ☑ Stricter vehicle emissions standards requiring fleet upgrades.
- ☑ Rising carbon prices increasing operating costs.
- ☑ Shifting market demand for low-carbon construction materials.

Opportunities

Examples for transport and infrastructure:

- ☑ Using recycled and/or low-carbon construction materials.
- ☑ Transitioning to electric vehicles, and installing solar and batteries.
- ☑ Investing in flood and heat-resistant infrastructure.
- ☑ Developing urban greening.

Let's look at how one regional council in Australia tackled climate risks in transport infrastructure, turning challenges into opportunities for resilience.



Case example - building climate resilience in transport infrastructure



In recent years, a regional council in Australia faced increasing disruptions due to severe weather events affecting its transport infrastructure. Flooding frequently damaged critical roads and bridges, cutting off access for local communities and businesses. These events highlighted the urgent need to manage physical climate risks proactively.

Challenges

- › **Flood vulnerability:** Key transport routes were regularly inundated, leading to closures and expensive repairs.
- › **Economic disruption:** Prolonged road closures disrupted supply chains and access to essential services, impacting local economies and community wellbeing.
- › **Safety risks:** Flooded and damaged roads posed significant safety concerns for motorists and transport operators.

Outcomes

- › **Reduced disruptions:** The upgrades significantly reduced road closures during adverse weather events, maintaining connectivity for communities and businesses.
- › **Enhanced safety:** Improved infrastructure reduced the risk of accidents and damage during extreme weather conditions.
- › **Economic resilience:** By ensuring consistent transport access, the council supported economic activities vital to the region, including agriculture and logistics.

Actions taken

1. Climate risk assessment

- › The council conducted a detailed risk assessment to identify flood-prone areas and forecast the potential impacts of climate change on local infrastructure.
- › Scenario analysis was used to predict the likelihood of extreme weather events over the next 20 years.

2. Infrastructure upgrades

- › Vulnerable sections of roads and bridges were elevated to mitigate flooding risks.
- › Drainage systems were enhanced to improve water flow during heavy rainfall.
- › Heat-resistant materials were incorporated into road construction to withstand rising temperatures.

3. Community engagement

- › The council engaged local stakeholders, including residents and businesses, to ensure the upgrades addressed community needs and concerns.
- › Regular updates were provided to build trust and transparency about the climate adaptation initiatives.

4. Strategic investment

- › Funding was secured from state and federal grants to support the upgrades, ensuring the project could address both immediate vulnerabilities and future risks.

Assessing climate risks and opportunities

To build resilience and unlock new opportunities, organisations must identify and

evaluate the risks they face, as well as their potential opportunities or benefits. Here's how to approach this:

1

Identify risks and opportunities

- Map out potential physical and transition risks across your operations and supply chain.
- At the same time, identify areas where addressing risks could lead to efficiency gains, innovation, or other advantages.
- Engage stakeholders, including suppliers, to gain a holistic view of your organisation's climate risks and opportunities.

2

Evaluate likelihood and impact

- Assess the likelihood and potential impact of each risk and opportunity.
 - For risks: Consider their potential to disrupt operations, finances, or to damage reputation.
 - For opportunities: Drawing on the above example, evaluate how actions like route optimisation, renewable energy integration, or sustainable product offerings could deliver value.
- Use tools like scenario analysis to explore how different climate scenarios could affect your risks and opportunities.

3

Prioritise focus areas

- Focus on risks with the greatest potential negative impact, such as disruptions to critical infrastructure or rising costs.
- Similarly, prioritise opportunities that align with your strategic goals, such as implementing energy-efficient technologies or developing carbon-neutral services.



Embedding climate risk management into strategy

Once risks are identified, integrate them into your broader organisational strategy:

Governance and oversight

- Assign accountability for climate risk management at the board and executive levels.
- Ensure climate risks are part of your organisation's risk management framework.

Action plans

- Develop mitigation plans for high-priority risks, such as upgrading infrastructure to

withstand extreme weather or transitioning to low-carbon technologies.

Monitoring and reporting

- Regularly review climate risks and update your strategy as new information becomes available.
- Align reporting with frameworks like the ISSB/Task Force on Climate-related Financial Disclosures (TCFD) or [AASB S2/ASRS](#).

For more information on how to assess and manage climate risks, visit our page on [climate risks and opportunities](#). We offer practical guidance to help you navigate the complexities of building climate resilience into your organisation.





Developing your CLIMATE STRATEGY



Watch this video for an overview of how to craft a climate strategy tailored to the infrastructure, transport, and public services sectors. Learn how to set targets, prioritise impactful actions, and embed climate considerations into your governance framework.



DEVELOPING YOUR CLIMATE STRATEGY: **Aligning actions with ambition**

Crafting your climate strategy: Aligning actions with ambition

In 2024, **62% of ASX100 companies had a climate action plan**, a significant increase from just 23% in 2023, according to KPMG's Australian [Sustainability Reporting Trends](#) report. This shift highlights the growing recognition across industries that a well-crafted climate strategy is essential—not only for compliance but for long-term resilience and competitiveness.

Developing an effective climate strategy is the cornerstone of your organisation's net zero journey. It bridges the gap between managing risks and seizing opportunities, turning ambition into action.

For tailored guidance on crafting a robust net zero strategy, visit our page on [net zero strategy services](#). We help organisations set science-based targets, prioritise impactful actions, and build governance frameworks that drive success.

This section builds on our previous discussions on building carbon foundations and managing climate risks. Now, we focus on turning insights into a roadmap that sets clear targets and prioritises impactful actions. Whether you're a leader in infrastructure, transport, or public services, this guide will help you develop a strategy that drives innovation and resilience.

The role of a climate strategy

A well-crafted climate strategy provides:

- ☑ **Direction:** A clear roadmap to reduce emissions and build resilience.
- ☑ **Alignment:** Ensures actions align with organisational goals and stakeholder expectations.
- ☑ **Credibility:** Demonstrates a tangible commitment to sustainability, building trust with investors, customers, and communities.

Without a strategy, organisations risk missing opportunities, failing to meet regulatory requirements, and falling behind in a rapidly evolving landscape.



Key components of a climate strategy

1. Set targets

Your climate strategy should begin with clear, ambitious targets aligned with scientific recommendations. For most organisations, this means setting goals to limit warming to 1.5°C above pre-industrial levels or aligning with federal or state goals.

According to the Australian Council of Superannuation Investors, [two-thirds of ASX200 companies](#) have committed to achieving *net zero by 2050 or earlier*. These commitments highlight the growing momentum across industries to act decisively on climate change.

Local governments are also leading the way, with 165 out of 537 councils in Australia making ambitious commitments to reach net

zero before 2050. You can learn more about these inspiring examples in our 2024 blog post on [net zero commitments by states, local governments, and communities](#).



Key steps:

- Set a **net zero target** for 2050 or earlier, depending on your industry and context.
- Develop **interim targets** (e.g., 2030 or 2035) to ensure consistent progress.
- Align targets with frameworks like the **Science Based Targets initiative (SBTi)** or **state or federal goals**, ensuring compliance and credibility.

2. Identify priority actions

Focus your strategy on high-impact initiatives that address your largest emission sources and climate risks and opportunities.



Examples for infrastructure and transport sectors:

- Electrify fleets to reduce Scope 1 emissions.
- Integrate renewable energy to power facilities and operations.
- Upgrade infrastructure to withstand extreme weather, improving resilience.
- Collaborate with suppliers to reduce Scope 3 emissions, such as embodied carbon in construction materials.

3. Develop implementation plans

Break down each action into specific, measurable steps with clear timelines and accountability.



Implementation essentials:

- Assign roles: Ensure senior leadership, operational teams, and external partners understand their responsibilities.
- Allocate resources: Budget for the necessary technology, training, and infrastructure investments.
- Measure progress: Use robust metrics to track reductions and evaluate the effectiveness of initiatives.

4. Engage stakeholders

A successful strategy requires buy-in from key stakeholders, including employees, suppliers, investors, and communities.



Engagement tips:

- Host workshops or consultations to gather input and align priorities.
- Communicate your strategy transparently, highlighting the benefits for all stakeholders.
- Share progress regularly to build trust and maintain momentum.

5. Embed climate considerations into governance

Ensure climate action becomes an integral part of your organisation's decision-making processes.



Governance best practices:

- Establish a dedicated sustainability or climate committee.
- Integrate climate risks and opportunities into your enterprise risk management framework.
- Regularly review progress at the board (or councillor) level to ensure accountability.

Case example - crafting a climate strategy for a regional transport provider



A regional transport authority recently developed a comprehensive climate strategy to align with its state's 2050 net zero target.

Here's how they approached it:

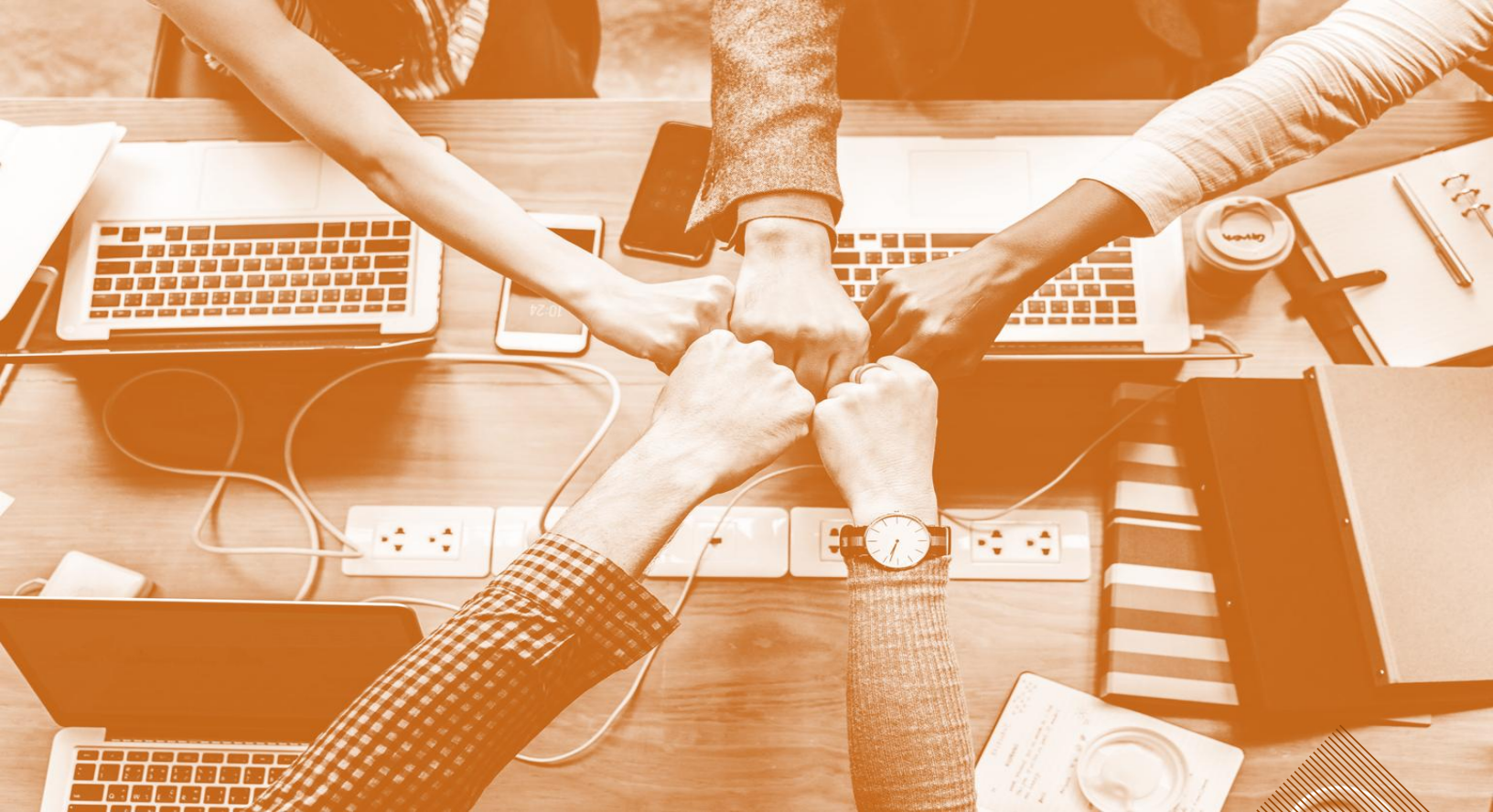
- › **Set targets:** A 50% reduction in Scope 1 and 2 emissions by 2030 and net zero by 2045.
- › **Identify actions:**
 - Electrify 30% of their fleet by 2028.
 - Install solar panels and battery storage at depots and maintenance facilities.
 - Collaborate with local councils to promote active transport, such as bike lanes and pedestrian pathways.
- › **Implementation:** Allocated \$200 million over 10 years for fleet upgrades and renewable energy projects.
- › **Stakeholder engagement:** Ran public workshops to build community support and partnered with suppliers to reduce embodied carbon in vehicle manufacturing.
- › **Governance:** Established a climate action task force to oversee strategy implementation and report progress to the board.

Outcomes:

- › 25% reduction in emissions within three years.
- › Significant cost savings from renewable energy integration.

Improved public perception and increased ridership due to sustainability commitments.





COLLABORATION: The key to amplifying your net zero efforts



In this video, we discuss why collaboration is a key driver of success on your net zero journey. From tackling Scope 3 emissions to working with industry peers and engaging local communities, collaboration amplifies your climate impact.



THE ROLE OF COLLABORATION: **The key to amplifying your Net Zero efforts**

Collaboration is not just an optional component of your net zero strategy—it's essential. Whether you're working with suppliers (or customers) to reduce Scope 3 emissions, partnering with stakeholders to develop innovative solutions, or engaging your community to build support, collaboration amplifies impact and drives innovation for long-term success.

Why collaboration matters in the net zero journey

No organisation can achieve net zero in isolation. Collaboration is particularly important for:

1. **Addressing Scope 3 emissions:** These often make up the largest share of an organisation's carbon footprint and require cooperation with suppliers, customers, and partners.
2. **Driving innovation:** Working together enables creative solutions, such as low-carbon technologies, circular economy initiatives, or shared infrastructure.
3. **Building resilience:** Partnering on adaptation measures, like shared climate risk assessments or regional greening projects, creates shared benefits.
4. **Enhancing credibility:** Transparent collaboration demonstrates a genuine commitment to sustainability, building trust with stakeholders and customers.

This section builds on our previous discussions on **developing a climate strategy** and **managing climate risks**. Now, we focus on how collaboration across your value chain, industry, and community can help you achieve your climate goals faster and more effectively.

Areas for collaboration

Here are the key areas where collaboration can make a tangible difference:

1. Supply chain engagement

→ Work with suppliers to calculate and reduce emissions from purchased goods and services.

→ Promote using low-carbon materials, renewable energy, and sustainable practices across the supply chain.

***Example:** A local government collaborates with suppliers to source low-carbon asphalt and recycled steel, reducing embodied carbon in construction projects.*

2. Industry partnerships

→ Join industry initiatives to share best practices, set sector-wide standards, and co-develop innovative solutions.

→ Collaborate with competitors where shared infrastructure or goals can benefit all parties.

***Example:** Industry and peak body consortiums collaborate to develop and promote the use of low and zero emissions materials in construction and infrastructure projects.*

3. Community engagement

- Partner with local councils, businesses, and residents to co-develop climate initiatives.
- Build public support for projects like active transport infrastructure, renewable energy installations, or urban greening.

Example: A local government partners with businesses and community groups to create green corridors, improving urban liveability and reducing heat island effects.

4. Cross-sector collaboration

- Work with government agencies, not-for-profits, and academia to develop policies, research, and pilot projects.
- Align your organisational goals with broader state or national climate targets.

Example: An infrastructure firm collaborates with a university to research heat-resistant road materials, creating solutions that benefit the entire sector.

How to enable collaboration

1. Identify shared goals

- Clearly define the objectives you want to achieve through collaboration.
- Focus on win-win scenarios that benefit all parties involved.

2. Build trust

- Be transparent about your goals, challenges, and progress.
- Establish open communication channels to promote trust and accountability.

3. Leverage technology

- Use digital tools to share data, track progress, and coordinate efforts across stakeholders.
- Platforms like sustainability dashboards or emissions tracking systems can make collaboration more efficient.

4. Incentivise participation

- Offer incentives for suppliers, partners, or communities to engage in sustainability initiatives, such as cost-sharing or recognition programs.



Case example: Collaborating on Scope 3 emissions in infrastructure projects



A national transport company identified that 70% of its emissions came from Scope 3 sources, such as from outsourced logistics and embodied emissions in fleet.

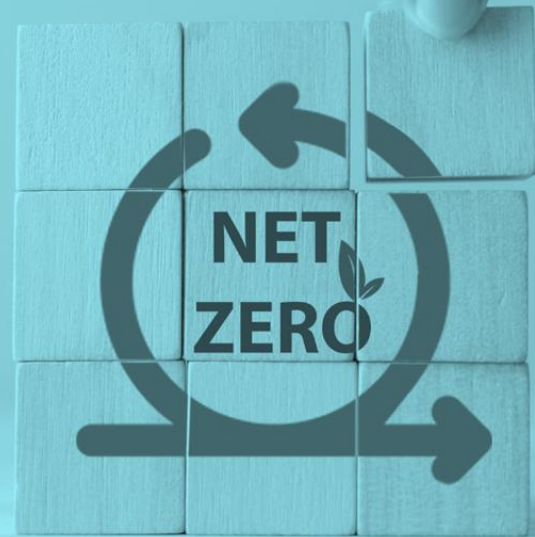
The approach:

- › The company engaged its top 5 suppliers to map emissions hotspots and identify reduction opportunities.
- › It partnered with third-party transport providers to co-develop low-carbon solutions such as route planning and optimisation, fuel efficiency and electrification.
- › The company joined an industry peak body initiative to upskill staff, improve climate literacy and engage with peers.

Targeted results:

- › A stretch goal of 20% reduction in Scope 3 emissions within five years.
- › Cost savings from optimised routes and fuel efficiency.
- › Enhanced credibility with customers, who valued the collaborative approach.





NAVIGATING COMPLIANCE AND REPORTING: Demonstrating your net zero progress



Watch this video as we dive deep into the crucial steps needed for transport and infrastructure sectors to align with AASB S2 and ISSB standards.



NAVIGATING COMPLIANCE AND REPORTING: Demonstrating your net zero progress

Why compliance and reporting matter

Achieving net zero is a journey that requires accountability, transparency, and credibility. Legislative compliance and comprehensive reporting not only demonstrate your progress but also build trust with stakeholders, investors, and communities.

With increasing regulatory requirements such as [AASB S2](#) (Australian Sustainability

Reporting Standards), built on the [ISSB](#) (International Sustainability Standards Board) framework, organisations in infrastructure, transport, and local government need to navigate a complex reporting landscape.

Compliance ensures that your organisation aligns with good practices, avoids risks like greenwashing, and remains competitive in a market where sustainability is no longer optional.

Key compliance and reporting frameworks

AASB S2: Australia's mandatory climate reporting standards

The **AASB S2 standards**, part of the Australian Sustainability Reporting Standards, are built on the globally recognised **ISSB framework**, which incorporates the principles of the TCFD.



Key elements required by AASB S2:

- **Governance:** How your board oversees and manages climate-related issues.
- **Strategy:** The impact of climate risks and opportunities on your business model and financial performance over the short, medium, and long term.
- **Risk management:** Processes for identifying, assessing, and managing climate risks.
- **Metrics and targets:** Quantitative and qualitative data to track progress, including Scope 1, 2, and 3 emissions.

ISSB: Global alignment with TCFD principles

The **ISSB** ensures consistency and comparability for climate-related disclosures across borders. AASB S2 adopts these principles while tailoring them to the Australian regulatory context.



Why this matters:

- AASB S2 provides a clear framework for meeting Australian compliance requirements.
- ISSB-aligned disclosures enhance credibility for organisations with international operations or stakeholders.

Science Based Targets initiative (SBTi)

The **Science Based Targets initiative (SBTi)** provides a framework for organisations to set emissions reduction targets that align with climate science. Committing to SBTi-aligned targets demonstrates credibility and ensures your goals are in line with the 1.5°C pathway.



Key elements of SBTi:

- **Target setting:** Develop near-term and long-term targets towards net zero emissions.
- **Scope 3 inclusivity:** Include Scope 3 emissions if they constitute a significant portion of your total emissions.
- **Validation:** Gain SBTi approval to ensure your targets meet scientific benchmarks.

Aligning with SBTi reinforces your organisation's commitment to ambitious climate action and positions you as a leader in sustainability.

Please note that the SBTi does not currently assess targets for cities, local governments, public sector institutions, educational institutions or non-profit organisations.

Who is affected by the Australian Sustainability Reporting Standards (ASRS)?

The **AASB S2 standards**, effective for financial years starting on **1 January 2025**, require certain entities to prepare and publish sustainability reports. These include:

✓ **Entities reporting under Chapter 2M of the Corporations Act:** This covers large listed companies, private companies, registered schemes, and registrable superannuation entities.

✓ **Threshold-based requirements:** Organisations meeting size thresholds based on staff, revenue, assets, or emissions will progressively fall under reporting requirements.

By FY27/28, more than 6,000 entities are expected to be captured under the legislation as the scope continues to expand.

Even if your organisation isn't required to report right now, it's good practice to start preparing.

Building robust reporting systems and aligning with AASB S2 early will ensure you're ready to comply when the time comes, avoiding unnecessary risks or delays.

For those interested in learning more about AASB S2, we offer a [free course](#) covering everything you need to know about these standards and how they apply to your organisation. Why local governments should prepare now

While **local governments are not currently required to report under AASB S2**, aligning with these standards voluntarily offers several advantages:

✓ **Prepare for future mandates:** Ensure your council is ready to comply with potential reporting obligations.

✓ **Enhance transparency:** Demonstrate accountability to residents and stakeholders.

✓ **Show leadership:** Position your local government as a pioneer in sustainability and climate action.

The benefits of effective compliance and reporting

Clear and consistent reporting does more than meet regulatory requirements. It also:

✓ **Builds trust:** Transparency promotes confidence among investors, customers, and communities.

✓ **Demonstrates leadership:** A strong track record of compliance positions your organisation as a leader.

✓ **Avoids greenwashing risks:** Accurate reporting ensures your claims are credible and align with best practices.

✓ **Drives continuous improvement:** Measuring progress highlights areas for refinement and innovation.

Preparing for compliance and reporting

1. Build robust data systems

✓ Use digital platforms to centralise emissions data across Scope 1, 2, and 3.

✓ Ensure your data collection processes are consistent and repeatable.

2. Engage stakeholders

✓ Work with suppliers (and perhaps customers) to gather accurate Scope 3 data.

✓ Collaborate with stakeholders to ensure alignment on reporting metrics and methodologies.

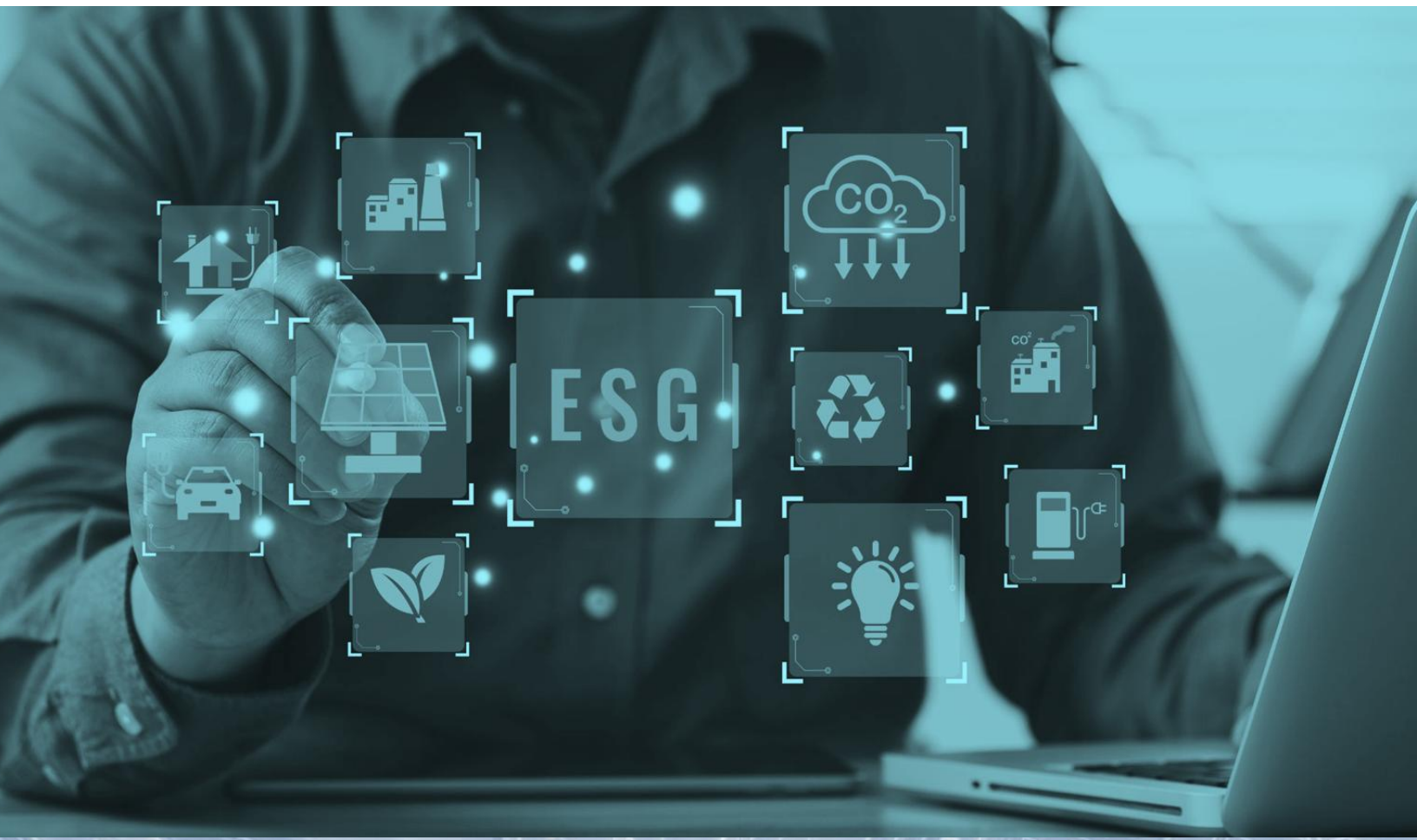
3. Establish governance structures

✓ Assign roles and responsibilities for data collection, analysis, and reporting.

✓ Conduct regular audits to verify the accuracy of your data.

4. Leverage third-party assurance

✓ Engage independent verification bodies to enhance the credibility of your reporting.



Case example: Reporting excellence in the transport sector



A state-owned transport organisation faced mounting regulatory pressure to align its climate disclosures with AASB S2 requirements. With complex operations involving fleet management, infrastructure, and logistics, they struggled with:

- ☑ Aggregating Scope 3 emissions from a wide array of suppliers.
- ☑ Understanding the financial impacts of physical climate risks, such as flooding and extreme heat on transport infrastructure.
- ☑ Demonstrating the credibility of their sustainability claims to stakeholders.

The approach:

1. Built data systems:

- › Developed a comprehensive emissions tracking system that integrated data from fleet fuel usage, building energy consumption, and supplier emissions.
- › Automated emissions reporting through a digital platform, reducing manual errors and improving data consistency.

2. Aligned reporting:

- › Prepared to integrate climate risks and opportunities into their annual financial disclosures, aligned with the AASB framework.
- › Evaluated transition risks, such as rising carbon prices and fleet electrification costs, alongside physical risks, such as infrastructure damage due to extreme weather.

3. Engaged suppliers:

- › Hosted workshops with top suppliers to explain Scope 3 reporting requirements and co-develop emissions reduction initiatives.
- › Provided a standardised emissions data collection template to streamline reporting from contractors and logistics partners.

4. Enhanced governance:

- › Established a sustainability steering committee, including executive leadership, to oversee reporting processes and ensure alignment with strategic goals.
- › Conducted third-party verification to enhance the credibility of reported emissions data.

5. Prioritised Scope 3 action:

- › Partnered with suppliers to reduce Scope 3 emissions.
- › Developed a supplier decarbonisation toolkit to encourage upstream and downstream emissions reductions.

Overcoming common reporting challenges

1. Scope 3 complexities

 **The challenge:** Obtaining accurate data from suppliers.

☒ **Solution:** Start with industry averages, refine with supplier data over time, and build partnerships for long-term collaboration.

2. Data gaps

 **The challenge:** Incomplete or inconsistent data collection.

☒ **Solution:** Use digital tools to centralise data collection and standardise reporting processes.

3. Regulatory shifts

 **The challenge:** Keeping up with evolving standards.

☒ **Solution:** Regularly review compliance requirements and adjust processes accordingly.

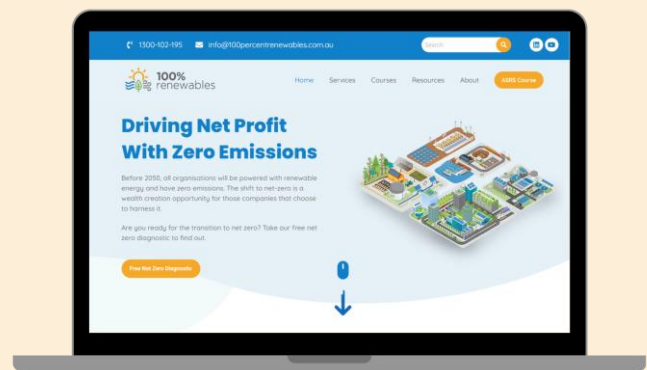
Looking for expert guidance on your net zero journey?

Transitioning to net zero can be complex, but you don't have to navigate it alone. At 100% Renewables, we provide expert support to help your organisation reduce emissions, meet compliance requirements, and set ambitious yet achievable targets.

How we can help

Every organisation's net zero pathway is unique. Whether you're just starting out or refining your strategy, our team can provide tailored solutions, including:

- ☑ Building a strong carbon foundation – Understanding your emissions footprint and identifying key reduction opportunities.
- ☑ Setting science-aligned targets – Developing ambitious yet realistic net zero and interim goals.
- ☑ Navigating compliance and reporting – Ensuring you meet regulatory requirements with confidence.
- ☑ Implementing practical strategies – Creating action plans for emissions reduction, energy efficiency, and sustainable procurement.



[100percentrenewables.com.au](https://www.100percentrenewables.com.au)



[100% Renewables](#)



[Driving Net Profit with Zero](#)

*If you're ready to take the next steps in your net zero journey and would like expert guidance, our team at **100% Renewables** is here to help. Whether you need support in building your carbon foundation, setting ambitious targets, or navigating compliance, we can tailor a net zero strategy to meet your organisation's specific needs.*

✉ **Contact [Barbara](#) or [Patrick](#) for more information.**

OUR STORY AND VALUE PROPOSITION

ABOUT

100% RENEWABLES

100% Renewables is a consulting firm that partners with all levels of government, businesses and industry associations to help them decarbonise and prepare for mandatory reporting. Recognising the powerful intersection of business success and climate ambition, we launched the company in 2015 to help organisations Drive Net Profit with Zero Emissions.

We solve customer challenges with innovative, whole-of-business decarbonisation solutions. Our nimble, senior-led team sets us apart from larger firms, bringing simplicity and personal commitment to every project. Driven by our values, we innovate, share knowledge, and develop solutions that are impactful, ensuring that business success aligns with a sustainable future.

We provide analytical expertise and capacity building to help governments develop and evaluate policies and programs, train industry, and create and execute their own decarbonisation frameworks and plans, delivering measurable outcomes.



OUR VISION

We believe in a future when all organisations are 100% renewable and have zero emissions



OUR MISSION

Driving Net Profit with Zero Emissions



OUR VALUES

Aim high
Always be curious
Act now

OUR DECARBONISED APPROACH

We help organisations decarbonise by building carbon footprints and internal capacity, addressing climate risks and opportunities, developing transition plans, setting targets and preparing our clients for reporting. We also help reduce our customers' value chain emissions by engaging with their suppliers.

Our goal is to be a full-service partner to clients across the spectrum of decarbonisation services and to meet and work with them where they are on that journey.

Whether aiming to lead in sustainability, meet regulatory demands, or embark on their first steps, we empower our clients to achieve their decarbonisation goals, supporting them every step of the way.



WHAT SETS US APART



TRUSTED GOVERNMENT PARTNER

Preferred supplier to numerous Government panels



EXCEPTIONAL CLIENT SATISFACTION

With an NPS of over 75, our clients trust and recommend us



KNOWLEDGE HUB

Go-to resource for net zero learning via multimedia content



EXPERT NET ZERO TEAM

Multi-disciplinary specialists designing innovative solutions



CARBON NEUTRAL FIRM

Climate Active carbon neutral certified



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