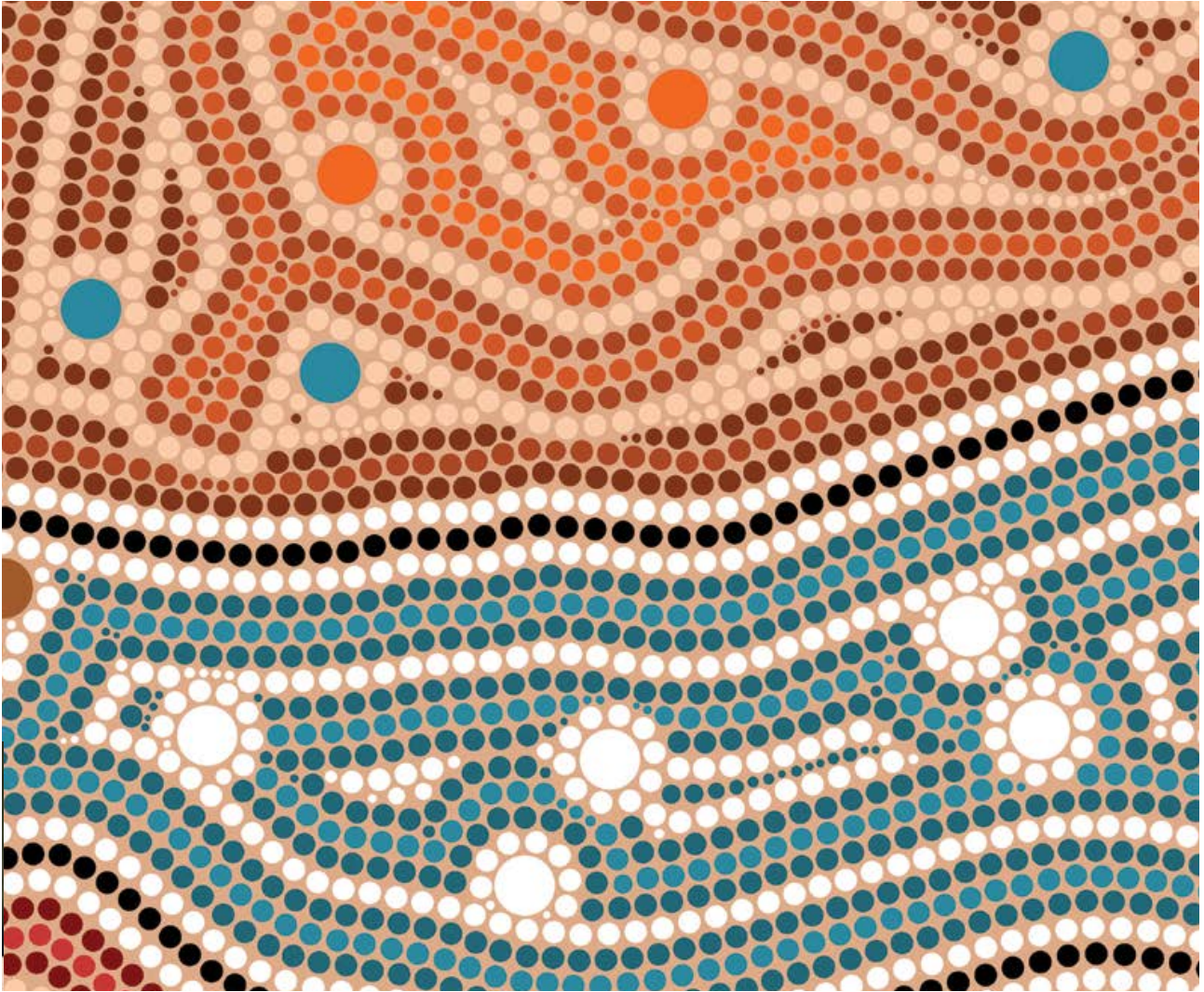




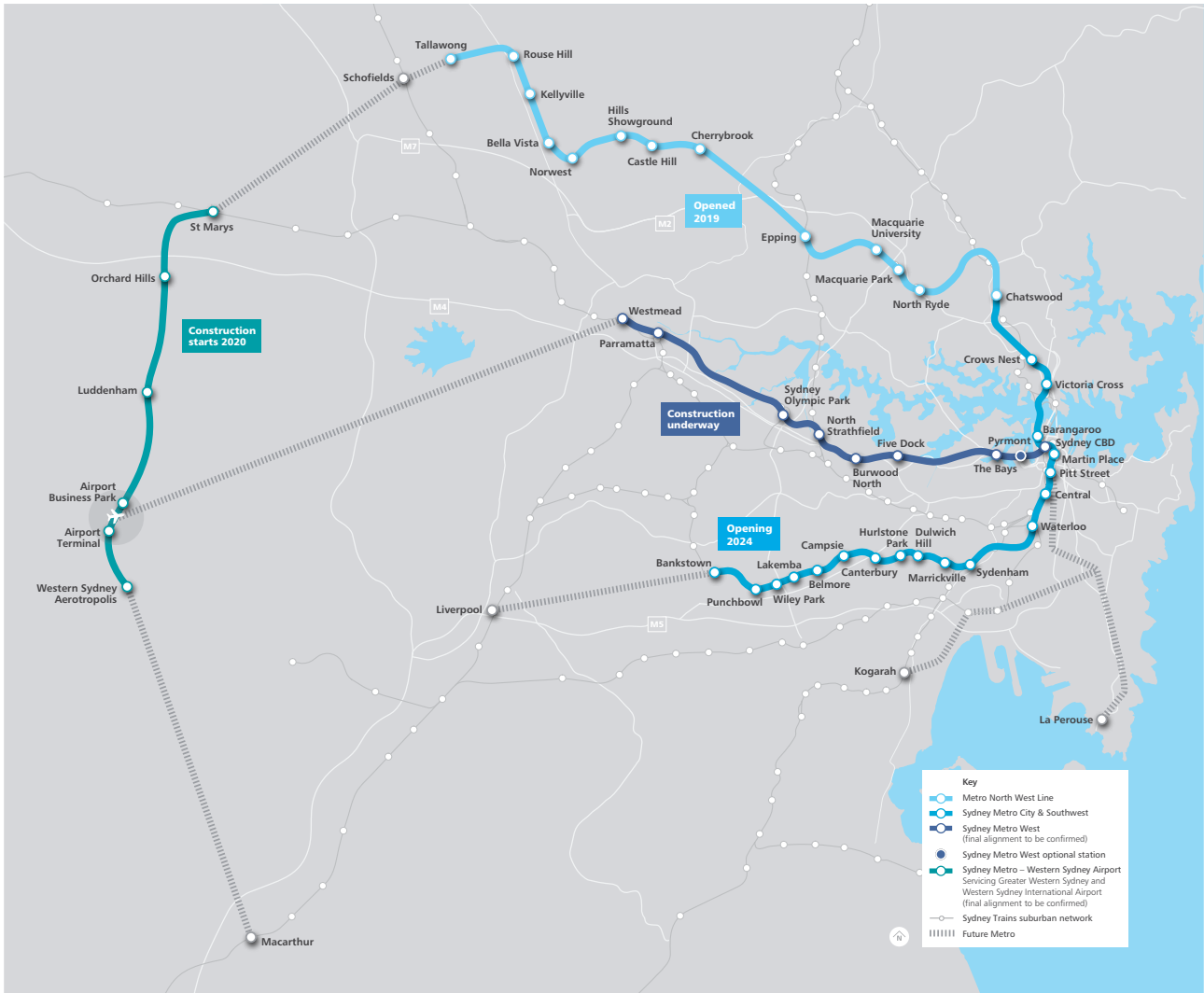
Sustainability Framework





Acknowledgement of Country

Sydney Metro pays respect to Aboriginal peoples as the Traditional Owners and Custodians of the land on which we work and live, we acknowledge Elders past and present and recognise the continued connection to the land and water ways.



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Introduction

Sydney Metro is Australia's biggest public transport project.

The Metro North West Line, opened on 26 May 2019, is Australia's first fully automated railway line. It is currently being extended into the city and beyond to Bankstown by 2024, when Sydney will have 31 metro stations and a 66km standalone metro railway.

Sydney Metro, an agency within the NSW Government's Transport cluster, is also delivering:

- The Sydney Metro West project, linking Greater Parramatta to the Sydney CBD and
- The Sydney Metro – Western Sydney Airport project, which will become the new transport spine for Greater Western Sydney, connecting communities and travellers with the new Western Sydney International Airport and the growing region.

Sustainability forms an integral part of Sydney Metro's values, and our vision to transform Sydney with a world class Metro. Since 2011, driving environmental and socio-economic outcomes has been a key part of the success of Sydney Metro.

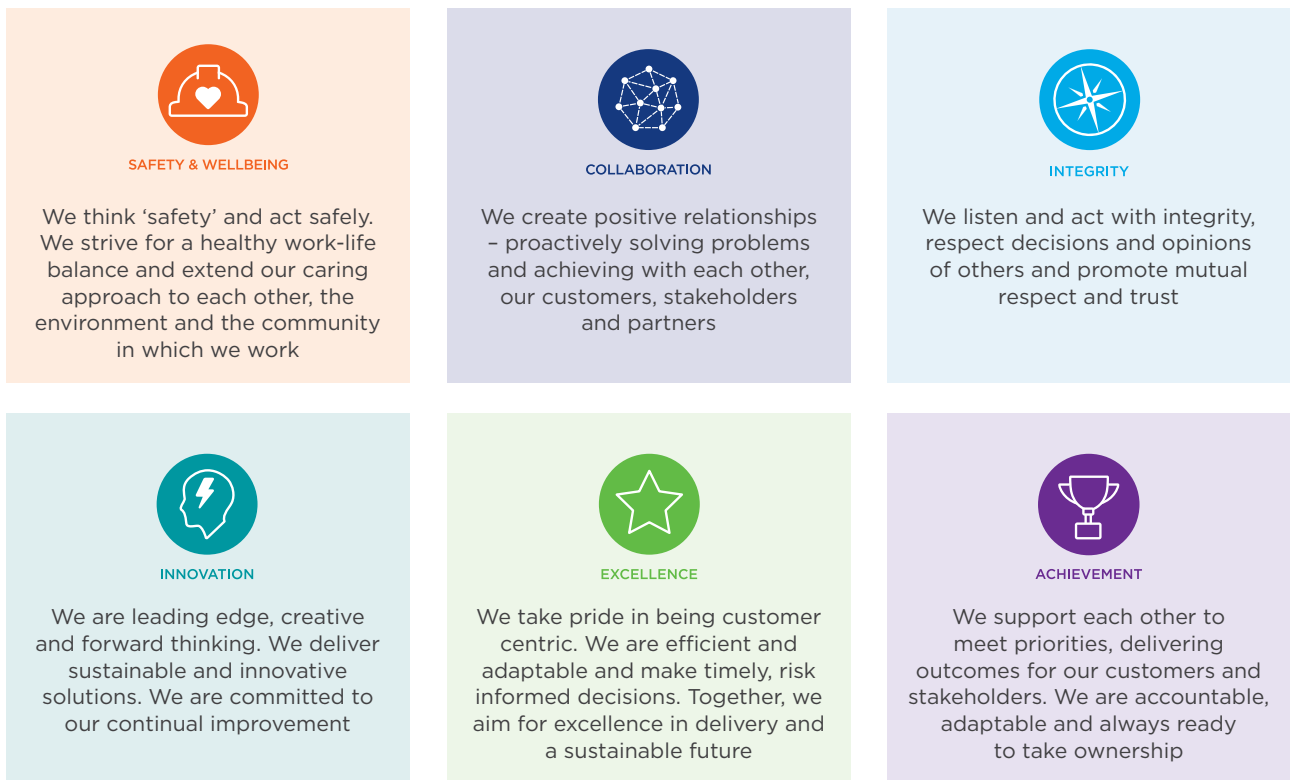
This sustainability framework describes our ongoing commitment to respectful stewardship of the environment and our approach to responsibly delivering social and economic benefits for the community and customers of today and tomorrow.



From our inception delivering sustainable infrastructure that is environmentally and socially responsible has been a core part of Sydney Metro's vision and values. With the evolving nature of best practice sustainability, Sydney Metro needs to continue to take a proactive approach to identify new ways of delivering sustainable outcomes across the business. This Framework sets the foundations for how Sydney Metro intends to continually improve our sustainability performance and ensure the decisions we make today will deliver a resilient and sustainable asset into the future.

Jon Lamonte – Chief Executive, Sydney Metro

Figure 1: Sydney Metro's corporate values





19th Century boat uncovered at Barangaroo Station site.

The purpose of this document

The purpose of this framework is to clearly demonstrate Sydney Metro's approach to delivering sustainable outcomes across our business, in the areas of:

- climate resilience,
- resource and waste management,
- supply chain management,
- social and community benefits, and
- environmental stewardship and protection.

This framework:

- Establishes six guiding principles which set the direction for how we approach sustainability both within our organisation and on our projects,

- Identifies key initiatives which we will undertake that support the successful achievement of sustainable outcomes, and
- Aligns with the Sydney Metro Environment & Sustainability Statement of Commitment, describing how our organisation will deliver on the commitments outlined in that document.

It also demonstrates how Sydney Metro is responding to:

- strategic and regulatory drivers;
- industry drivers; and
- wider global challenges and opportunities in relation to sustainability.

Sydney Metro's approach to sustainability

For Sydney Metro, 'sustainability' means planning, building and operating a metro system for current and future generations that optimises environmental, social and economic outcomes.

This view of sustainability has been refined through the proven experience of delivering and operating Sydney's first fully automated metro system, the Metro North West Line.

Our holistic approach to sustainability (environmental, social and economic) reflects our strategic objectives which exist to sharpen our focus as a successful and outcomes-oriented business. The strategic objectives (outlined in Table 1) and their priority areas are set out in Sydney Metro's Corporate Plan and describe the way we seek to fulfil our legislative mandate.

Our aim is to embed sustainability considerations into the work that we do to support the development, delivery and operation of projects. This mindset, our principles and our commitment to sustainable outcomes is a vital and valuable contribution to the achievement of Sydney Metro's strategic objectives and vision to transform Sydney with a world-class metro. Appendix A provides further details of sustainability related strategic drivers relevant to this framework.

Our environment and sustainability activities are guided by the Transport Cluster Environment & Sustainability Policy. To complement the TfNSW policy and to further reinforce the importance of sustainable mega-project delivery, Sydney Metro has developed an Environment & Sustainability Statement of Commitment (refer Appendix B) that is appropriate to the nature, scale and environmental impacts of Sydney Metro's activities.

This framework responds a number of TfNSW Cluster and Sydney Metro drivers and it forms part of a suite of documents which together articulate Sydney Metro's approach to sustainability (refer Figure 2 for further details).

Table 1: Sydney Metro strategic objectives






Sydney Metro strategic objectives				
 <p>Successful engagement</p> <p>We collaborate with our communities and partners to drive sustainable city-shaping transformation</p>	 <p>Delivery Commitments</p> <p>We deliver high quality metro infrastructure and places safely, on time and on budget</p>	 <p>Operational Excellence</p> <p>We work with partners to ensure that the Metro in operational service achieves a world class standard and meets customer aspirations as a mode of choice</p>	 <p>Financial Responsibility</p> <p>Our financial and commercial focus drives value for money outcomes and business success</p>	 <p>Workforce Capability</p> <p>We attract highly capable delivery partners and talented, diverse and innovative workforce</p>

Figure 2: Sydney Metro sustainability related document hierarchy and purpose



1 The Future Transport Strategy sets the 40 year vision, directions and outcomes for customer mobility in NSW, which will guide transport investment over the longer term.
 2 The TfNSW 10 year blueprint sets out where efforts need to be focused in the near term to move towards the long term vision outlined in Future Transport 2056.

Our principles

The outcomes-based initiatives outlined in this plan align to six guiding principles. These principles are the cornerstone of how we embed and deliver on our sustainability commitments to the community, our customers and our key partners (government and industry).

 <p>Demonstrate leadership</p>	<p>Deliver a world class metro that is environmentally and socially conscious; share knowledge and demonstrate innovation in sustainability</p>
 <p>Tackle climate change</p>	<p>Integrate a comprehensive climate change response, and drive excellence in low carbon solutions</p>
 <p>Manage resources efficiently</p>	<p>Achieve whole-of-life value through efficient use and management of resources</p>
 <p>Drive supply chain best practice</p>	<p>Collaborate with key stakeholders to drive a lasting legacy in workforce development, industry participation and sustainable procurement</p>
 <p>Value community and customers</p>	<p>Respond to community and customer needs, promote heritage, liveable places and wellbeing for current and future generations</p>
 <p>Respect the environment</p>	<p>Minimise impacts and take opportunities to provide environmental improvements.</p>

Examples of Sydney Metro successes in each of these areas have been highlighted below to provide further context.

Demonstrate leadership

Sydney Metro case study
 Sydney Metro is consistently achieving a high level of performance against market leading sustainability rating tools. The Sydney Metro City and Southwest Tunnel and Station Excavation works contractor received an Infrastructure Sustainability (IS) design rating of “Leading” with a final verified score of 100 points, the highest score achieved for an IS rating to date.

UN SDG alignment³








Tackle climate change

Sydney Metro case study
 Sydney Metro entered into a Green Products Purchase Agreement to procure large-scale generation certificates from a new build solar farm to offset 100% of operational electricity requirements on the Metro North West Line.

UN SDG alignment


³ The United Nations Sustainable Development Goals (UN SDGs) form part of the 2030 Agenda for Sustainable Development and comprise a set of 17 integrated goals that wrap around five key themes of people, planet, prosperity, peace and partnership. They present a call to action by all countries to address some of our greatest global challenges such as ending poverty, promoting economic growth, taking action to combat climate change, ensuring affordable and clean energy, ensuring responsible consumption and production and achieving gender equality. Recognising alignment with the UN SDGs as best practice sustainability management, Sydney Metro has mapped how our sustainability framework aligns to the 17 goals to demonstrate our contribution to addressing the global challenges the SDGs aim to address (Refer Appendix C for further details on how we align).



Manage resources efficiently

Sydney Metro case study

The Metro North West Line has been designed to source 70% of the water used during operations from rainwater harvesting or the recycled water network, saving up to 16,600 kilolitres per year.



UN SDG alignment



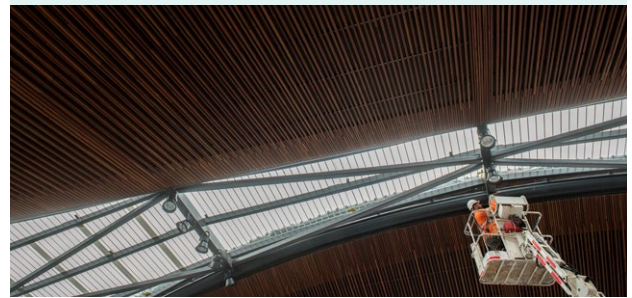
Drive supply chain best practice

Sydney Metro case study

Northwest Rapid Transit (NRT) received project Certification against the Forest Stewardship Council (FSC) and Program for Endorsement of Forest Certification (PEFC) for timber used in the station canopies and car park façade, providing an end to end chain of custody that ensures responsible forest management throughout the supply chain



UN SDG alignment



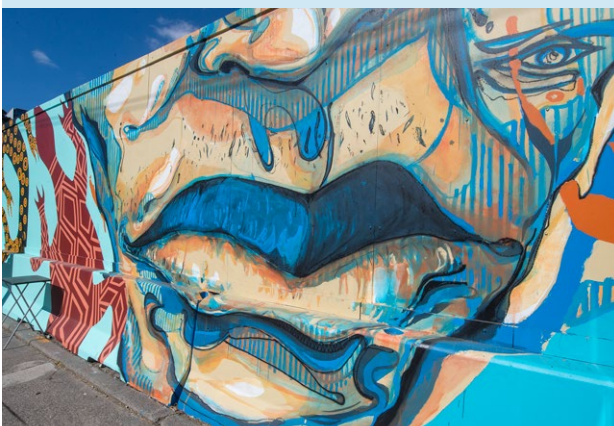
Value community and customers

Sydney Metro case study

Sydney Metro and its delivery partners have delivered 25 community benefit projects with homeless shelters, women's refuges, community organisations and social enterprises.



UN SDG alignment



Respect the environment

Sydney Metro case study

Nearly 900,000 native plants were used in landscaping of land around the Metro North West Line stations.



UN SDG alignment



The above principles align well with the key sustainability drivers including both the outcomes in the TfNSW 10 year blueprint and Sydney Metro's strategic objectives. Refer to Appendix C for further details on how they align.

Key initiatives for 2020-2025

The key initiatives in this section outline actions necessary to support Sydney Metro in continuing to achieve sustainable outcomes across its activities, including meeting project sustainability commitments and TfNSW and NSW Government sustainability drivers.

With one project operational (Metro North West Line) and three in the delivery stage, the outcomes from these key initiatives will inform projects where deemed appropriate and broadly fit within three categories:

- An organisational sustainability outcome that improves sustainability performance of Sydney Metro's activities (e.g. – increased sustainability awareness).
- A sustainability outcome that will inform new projects (e.g. – identifying and implementing opportunities to improve).
- An outcome that will support our delivery partners in achieving their existing obligations (e.g. – guidance notes).



Demonstrate leadership

Key initiatives

- Demonstrate accountability through publicly reporting on our sustainability performance.
- Partner with sustainability related industry organisations to support a high level of sustainability performance
- Include a sustainability plan as an integral part of the project business case for all new Sydney Metro projects⁴.
- Provide sustainability training for Sydney Metro staff.
- Participate in and run sustainability knowledge share forums with Government, industry and delivery partners.
- Drive innovation in sustainability through supporting relevant research opportunities and piloting new technologies where appropriate.
- Increase cross organisational accountability for sustainability outcomes.

⁴ The sustainability plan should respond to the principles within this framework and use a data based approach to drive improvement and define quantifiable sustainability targets as appropriate. Project sustainability plans will be refined and made public post project approval.



Tackle climate change

Key initiatives

- Increase resilience to a changing climate through assessing, managing and communicating our climate risk.
- Offset 100 per cent of operational electricity used in the Sydney Metro network.
- Identify a net zero emission pathway for Sydney Metro construction and operations, in line with broader Government commitments.



TBM Mum Shirl (right) breaks through at Barangaroo Station joining TBM Nancy inside the station box.



Manage resources efficiently

Key initiatives

- Identify a net zero water pathway for Sydney Metro construction and operations.
- Identify and implement opportunities to reduce materials and waste and increase the use of recycled materials.
- Engage with suppliers to promote the use of low impact materials including collaborating with industry to overcome any barriers to their use.



Drive supply chain best practice

Key initiatives

- Demonstrate commitment to sustainable procurement by developing systems, processes and guidance to prevent, mitigate and/or respond to environmental or social impacts in the supply chain⁵.
- Identify further opportunities to promote growth in local economies.
- Continue to include Recognised Aboriginal Businesses, social enterprises and Australian and New Zealand Small Medium Enterprises (ANZ SMEs) within the Sydney Metro supply chain.
- Partner with industry to deliver a workforce legacy and increased Aboriginal participation that promotes a diverse and inclusive workforce and supply chain⁶.

⁵ This will include working with community, industry and Government to understand current best practice and legislative requirements for Government agencies in this area.

⁶ Specific workforce development and Aboriginal Participation outcomes are addressed within a separate Sydney Metro Workforce Development, Industry Participation and Aboriginal Participation Plan.



Value community and customers

Key initiatives

- Optimise community benefits across the lifecycle of our projects to maximise social outcomes for our communities.
- Develop and implement a Sydney Metro wide heritage management framework for both Aboriginal and non-Aboriginal heritage.
- Increase community awareness and engagement in sustainability initiatives and associated benefits on Sydney Metro projects.
- Support the implementation of the TfNSW Reconciliation Action Plan (RAP) for Sydney Metro⁷.
- Develop a set of Aboriginal cultural design principles⁷.
- Enable the development of diverse and affordable housing.
- Encourage sustainable customer travel behaviours.
- Continue to deliver a high quality art program for permanent and temporary art at Metro stations and precincts.

⁷ This will be managed by the TfNSW Reconciliation Advisory Committee project team who will develop an implementation plan including a set of Aboriginal cultural design principles.



Respect the environment

Key initiatives

- Comply with all environment and planning legislation.
- Minimise environmental impacts associated with our activities by establishing and implementing objectives with regard to surface water, ground water, contaminated land, noise and vibration, traffic, air quality, light pollution and biodiversity at a minimum.
- Combat the urban heat island effect by identifying and implementing opportunities to contribute toward Premier's Priorities for a Better Environment⁸.
- Provide guidance on how to incorporate green infrastructure and water sensitive urban design into our projects.
- Actively participate in events that promote environmental awareness and/or result in tangible environmental outcomes.
- Obtain and maintain ISO14001 accreditation for Sydney Metro's Environmental Management System (EMS) by end 2020.

⁸ NSW Premier's Priorities for a Better Environment:

- **Greener public spaces:** Increase the proportion of homes in urban areas within 10 minute walk of quality, green, open and public space by 10 per cent by 2023.
- **Greening our city:** Increase the tree canopy and green cover across Greater Sydney by planting one million trees by 2022.

Implementing this framework

Ownership

Delivering sustainable public transport requires organisational-wide collaboration to ensure that Sydney Metro takes a balanced approach to achieving the environmental and socio-economic outcomes set out in this framework. Effectively integrating sustainability across the organisation also presents opportunities to streamline and find efficient ways of achieving these desired outcomes.

In order to integrate sustainability across the business and deliver against this framework Sydney Metro has identified an Executive sponsor for each of the six sustainability principles. The Executive sponsor would be a champion for their allocated principle and be a driving force for its successful implementation.

Working with industry and government

To effectively implement this framework Sydney Metro will also build collaborative relationships with government stakeholders, industry and our delivery partners to drive best practice sustainable outcomes.

Tracking and reporting

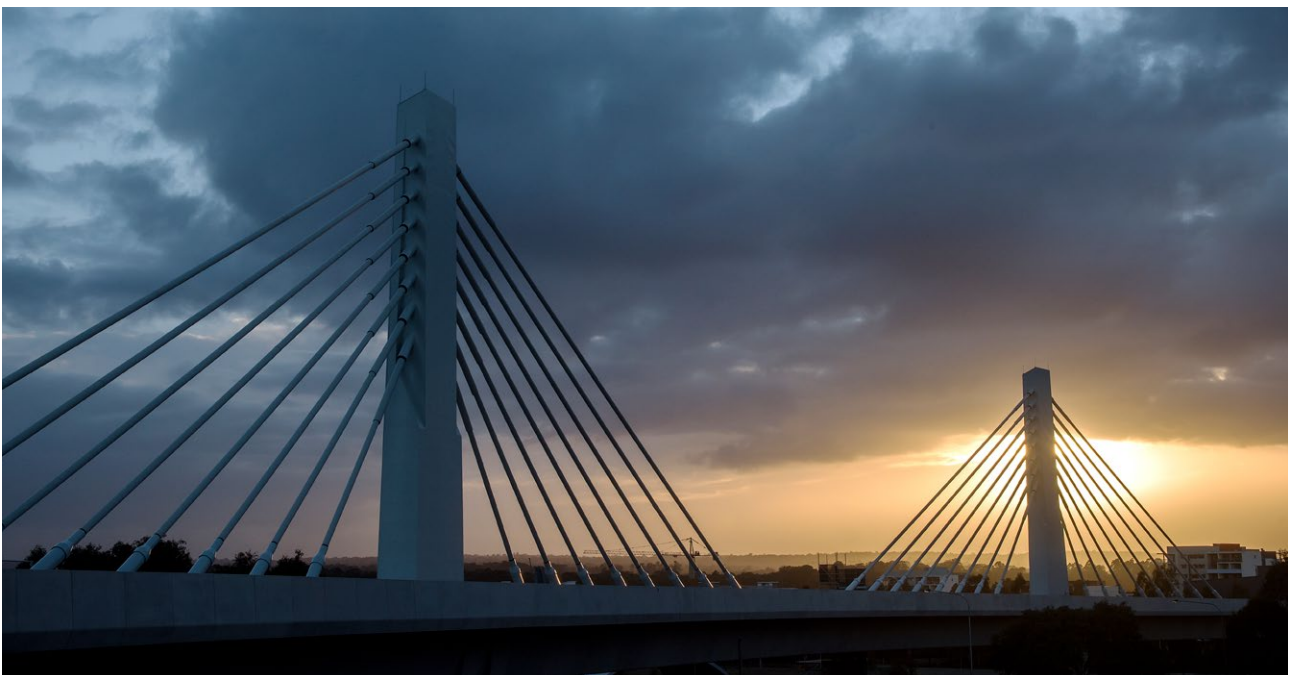
Sydney Metro is committed to the ongoing tracking and reporting of sustainability performance across our organisation. Sydney Metro's sustainability reporting regime consists of regular internal and public sustainability reporting.

The sustainability team will track performance against the key initiatives identified in this framework and where appropriate the progress will be reported through the existing internal and external reporting mechanisms.

Review and respond

Sydney Metro will review the effectiveness of this framework and progress toward against its implementation on a biennial basis. The review will support continual improvement by:

- ensuring alignment with legislation and strategic drivers (including the Sydney Metro corporate plan)
- benchmarking against government peers and industry
- assessing lessons learned from our projects
- identifying new and emerging areas of sustainability
- refocusing our activities to support successful implementation of this framework




Metro North West Line cable stayed bridge at sunrise.



Joanne Cassady - one of the local artists to use the hoarding outside the Marrickville dive site as a canvas for a temporary mural.

Appendix A

Key strategic sustainability drivers and relevant themes




Federal

- Environmental protection
- Ecologically sustainable development
- Economic productivity
- Housing affordability and availability
- Planned accommodation of growth
- Transport capacity and connectivity

- Social responsibility
- Protection of the environment
- Climate resilience and net zero emissions
- Integration of landuse and infrastructure planning
- Liveability, urban green cover and access to green space
- Resource efficiency
- Workforce development (skills, capability and capacity)
- Increased workforce diversity

State






Transport for NSW

- Improved liveability and successful places
- Climate resilience and net zero emissions
- Enhancing communities and their environments
- Delivering for the greater good
- Genuine leadership
- Beyond compliance
- Whole of life considerations
- Sustainable procurement
- Awareness and communication
- Strong economy and quality of life
- Innovation

- Sustainable, city-shaping transformation
- Safe, reliable and accessible transport
- Successful, vibrant places
- Future ready transport
- Leadership and accountability
- Financial, environmental and social responsibility
- Climate resilience and net zero emissions
- Resource management
- Biodiversity and heritage conservation

Sydney Metro



Appendix B

Sydney Metro Environment & Sustainability Statement of Commitment



Environment & Sustainability Statement of Commitment

Sydney Metro will deliver great services, places and transport infrastructure for our customers while protecting the environment, contributing to economic prosperity and delivering social benefits for the communities we serve. We have a duty to undertake our activities in the interest of the greater good, to move beyond compliance and be a genuine leader in both environmental management and sustainability.

Sydney Metro is committed to:

- Minimising our impacts and leaving a positive environmental and social legacy;
- Delivering a resilient asset and service for our customers;
- Collaborating with stakeholders to innovate and drive sustainable outcomes; and
- Embedding sustainability into our activities;

To deliver on these commitments Sydney Metro will:

Leave an environmental and social legacy

- Protect the environment, prevent pollution and comply with legal and other requirements.
- Manage resources and waste efficiently, exploring opportunities to minimise waste, use recycled and low impact materials and reduce our environmental footprint.
- Promote a diverse and inclusive workforce and supply chain, build capability and capacity within industry, and increase Aboriginal participation.
- Responsibly minimise environmental and social risks in our supply chain.
- Create liveable places that are well integrated and promote active and sustainable transport.
- Conserve and enhance the natural environment and our built and cultural heritage.
- Work collaboratively with delivery partners to provide social benefits to the communities in which we work.

Drive resilience

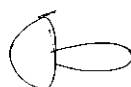
- Tackle climate change and contribute to the NSW Government target of net zero emissions.
- Deliver Sydney Metro assets and operations that are resilient to a changing climate, and work with stakeholders to proactively respond to emerging challenges and opportunities.
- Promote the greening of our cities to help combat the 'urban heat island' effect.

Collaborate to deliver sustainable outcomes

- Align with and respond to Transport for NSW policy and other NSW Government priorities.
- Establish and maintain positive relationships with communities and stakeholders to harness local knowledge and maximise opportunities to add value across the project lifecycle.
- Collaborate and consult with Aboriginal stakeholders to understand how we can best respect and celebrate Aboriginal cultural values including Designing with Country.
- Provide industry leadership by setting benchmarks, encouraging innovation and driving continual improvement with our delivery partners.
- Increase environmental awareness amongst staff and customers to drive more sustainable behaviours.

Embed sustainability

- Establish robust objectives and targets that are measurable and take into account whole-of-life considerations.
- Maintain an environmental management system that is integrated into our projects and continually improved to enhance environmental performance.
- Apply effective assurance processes to monitor environment and sustainability performance including ensuring accountability, incentivising beyond compliance behaviours and implementing corrective actions as required.
- Embed sustainability considerations into key project decisions across the project lifecycle.
- Provide appropriate training and resources to meet our obligations and commitments.
- Publicly report on sustainability performance.



Jon Lamonte
Chief Executive, Sydney Metro

This Statement of Commitment supersedes previous versions of the Sydney Metro Environment & Sustainability Policy and aligns with the cluster wide TfNSW Environment and Sustainability Policy which has been adopted by Sydney Metro. It applies to all people working for Sydney Metro.

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Appendix C

Alignment to the TfNSW 10 year blueprint outcomes, Sydney Metro strategic objectives and UN SDGs

Sydney Metro Sustainability Principles		 Demonstrate leadership	 Tackle climate change	 Manage resources efficiently	 Drive supply chain best practice	 Value community and customers	 Respect the environment
TfNSW 10 year blue print outcomes	 Connecting our customers' whole lives	✓				✓	
	 Successful places		✓	✓		✓	✓
	 Strong economy and quality of life			✓	✓		
	 Thriving people doing meaningful work	✓			✓		
Sydney Metro Corporate Plan Strategic Objectives	 Successful places				✓	✓	
	 Meeting delivery commitments	✓	✓	✓	✓	✓	✓
	 Operational excellence	✓				✓	
	 Financial responsibility		✓	✓			
	 Workforce capability	✓			✓		
UN Sustainable Development Goals	 Gender Equality				✓		
	 Clean Water and Sanitation			✓			✓
	 Affordable and Clean Energy		✓	✓			
	 Decent Work and Economic Growth				✓		
	 Industry, Innovation and Infrastructure	✓				✓	
	 Sustainable Cities and Communities	✓				✓	✓
	 Responsible Consumption and Production		✓	✓			
	 Climate Action		✓				✓
 Life on Land						✓	

SDGs not directly addressed in this framework⁹



⁹ Although eight of the SDGs are not directly addressed by this strategy, Sydney Metro plays a part in addressing a number of the remaining goals through improving access to essential services and as a result reducing inequities within the communities we serve.

