



Sustainability Report 2023

Towards a sustainable future

Contents

Foreword / 3

Our projects / 4

RPV Sustainability Framework / 8

Sustainability Governance / 9

Internal Processes / 9

External Influences / 10

Environment / 13

Climate Change Resilience / 13

Materials and Waste / 13

Water Management / 17

Energy Efficiency / 18

Ecology and Vegetation / 20

Native Vegetation Protection / 20

Social / 22

Education Programme / 24

Metro Tunnel Schools Engagement / 24

Regional Rail Revival Schools Engagement / 26

Economic / 28

Social Procurement / 28

Employment and Industry Development (2022-2023) / 29

Recognition & Industry Innovations / 30

Recognition / 30

Industry Innovations / 30

Highlights from 2023 Sustainability Conferences / 32

Digital Engineering & Sustainability / 34

The Future / 35

We acknowledge the First Peoples and Traditional Custodians of the land we now call Victoria.

We recognise and respect their continuing connection to land, water, and community, and pay respect to Elders past, present and emerging.

We acknowledge that this land was and always will be Aboriginal land.

Foreword

Throughout 2023 Rail Projects Victoria continued to build a stronger, healthier and more connected Victoria, underpinned by the three pillars of RPV's Sustainability Policy: Environment, Social and Economic. Our project teams continued to focus on positive outcomes for Victorian communities as they delivered some of the biggest rail projects this state has seen.

In partnership with our construction contractors, we maintained a strong focus on waste reduction and material recycling, water and energy efficiency and conservation of flora and fauna across our work sites. Together, we implemented several new materials and technologies that enhanced the sustainability of our projects and kept us at the forefront of innovation.

In all our work in 2023, we continued to preserve and celebrate the cultural heritage of the places we work. And we continued to implement ecological and habitat development initiatives, giving back to communities and areas that have been impacted by our works.

Like our projects themselves, we're building for the future, aiding Victoria's economic recovery by creating jobs and supporting local businesses near our work sites. Through our construction projects, RPV and our contractors are training the next generation of rail infrastructure and construction professionals - with hundreds of apprentices, cadets and graduates gaining valuable experience while delivering landmark infrastructure for Victoria.

RPV's Sustainability Annual Report 2023 allows us to reflect on our achievements over the past year, as we remained committed to our sustainability principles in every aspect of our work. I am incredibly proud of the role RPV is playing in building a better Victoria through the delivery of our projects.



Nicole Stoddart
Chief Executive Officer
Rail Projects Victoria

Driven by the three pillars of RPV's Sustainability Policy – Environment, Social and Economic – our project teams continued to focus on positive outcomes for Victorian communities.



[Contents](#)

Foreword

[Our projects](#)

[RPV
Sustainability
Framework](#)

[Sustainability
Governance](#)

[Environment](#)

[Social](#)

[Education
Programme](#)

[Economic](#)

[Recognition
& Industry
Innovations](#)

[Highlights
from 2023
Sustainability
Conferences](#)

[Digital
Engineering
& Sustainability](#)

[The Future](#)

Our projects

About Rail Projects Victoria

RPV is a dedicated project team within the Major Transport Infrastructure Authority responsible for the delivery of rail projects including the Metro Tunnel, Sunbury Line Upgrade and the Regional Rail Revival. RPV is responsible for the planning and development of project reference designs, site investigations, stakeholder engagement, planning approvals and procurement, construction delivery and project commissioning.



We have a skilled team of highly experienced professionals that ensure the objectives of our projects are realised for the Victorian community.



[Contents](#)

[Foreword](#)

[Our projects](#)

[RPV Sustainability Framework](#)

[Sustainability Governance](#)

[Environment](#)

[Social](#)

[Education Programme](#)

[Economic](#)

[Recognition & Industry Innovations](#)

[Highlights from 2023 Sustainability Conferences](#)

[Digital Engineering & Sustainability](#)

[The Future](#)



[Contents](#)

[Foreword](#)

Our projects

[RPV
Sustainability
Framework](#)

[Sustainability
Governance](#)

[Environment](#)

[Social](#)

[Education
Programme](#)

[Economic](#)

[Recognition
& Industry
Innovations](#)

[Highlights
from 2023
Sustainability
Conferences](#)

[Digital
Engineering
& Sustainability](#)

[The Future](#)



Metro Tunnel Project

The Metro Tunnel Project (MTP) will create a new end-to-end rail line from Sunbury in the northwest to Cranbourne and Pakenham in the southeast.

The project's twin nine-kilometre rail tunnels beneath the Melbourne CBD are complete. Construction continues on the five new stations, which will accommodate high capacity trains.

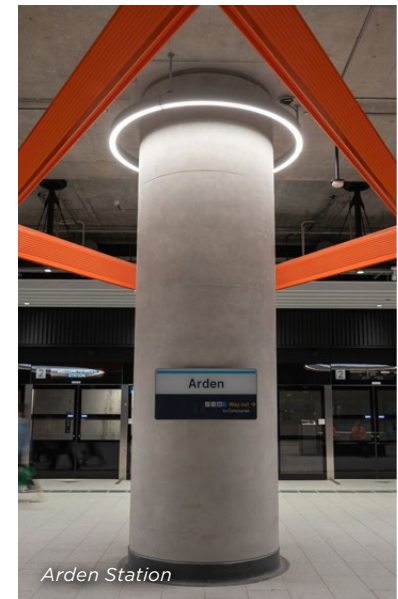
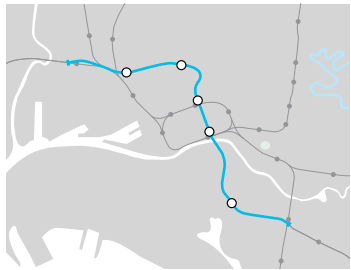
By taking two of the busiest lines on the network out of the City Loop, the Metro Tunnel will create space for more services on other lines across the network.

The project's main tunnelling works and five underground stations are being delivered by CYP D&C, a consortium comprising Lendlease, John Holland, Bouygues Construction, John Laing and Capella Capital.

Works at the eastern and western tunnel entrances and the project's rail systems are

being delivered by the Rail Network Alliance (RNA), a consortium comprising John Holland, CPB Contractors, Alstom, AECOM, Rail Projects Victoria and Metro Trains.

Throughout 2023, the Metro Tunnel Project continued to hit major milestones, including the completion of track laying in March, the first test trains entering the tunnels in July and the first passenger service to run using high capacity signalling on the Cranbourne/Pakenham Line.



Arden Station



Regional Rail Revival

The Victorian and Australian governments are investing more than \$4 billion in the Regional Rail Revival program, which is upgrading every regional passenger train line in Victoria as well as the Murray Basin Freight Network.

Projects underway in 2023 were the Shepparton Line Upgrade, the Gippsland Line Upgrade, the Warrnambool Line Upgrade, the South Geelong to Waurn Ponds Duplication and the Murray Basin Rail Project.

Shepparton Line Upgrade (SLU)

The Shepparton Line Upgrade is delivering more frequent and reliable services. Three stations have been upgraded, allowing modern VLocity trains to travel to and from Shepparton for the first time. The project also includes a new stabling facility and crossing loop extension, and upgrades to level crossings, track and signalling. Stage 3 is continuing and will enable nine daily return services between Shepparton and Melbourne and trains to travel faster on the line.

Gippsland Line Upgrade (GLU)

The Gippsland Line Upgrade will deliver more frequent and reliable services for the growing communities of Gippsland. It has already delivered significant benefits, with level crossing upgrades between Sale and Bairnsdale enabling VLocity trains to travel to Bairnsdale for the first time and a new rail bridge over the Avon River in Stratford allowing trains to travel faster.

Major upgrades to Bunyip, Longwarry, Morwell and Traralgon stations will change the way people travel. The project is also delivering a new signalling system which, in conjunction with track works and station upgrades already delivered, will enable additional services and future-proof the line.

[Contents](#)

[Foreword](#)

Our projects

[RPV
Sustainability
Framework](#)

[Sustainability
Governance](#)

[Environment](#)

[Social](#)

[Education
Programme](#)

[Economic](#)

[Recognition
& Industry
Innovations](#)

[Highlights
from 2023
Sustainability
Conferences](#)

[Digital
Engineering
& Sustainability](#)

[The Future](#)



Warrnambool Line Upgrade (WLU)

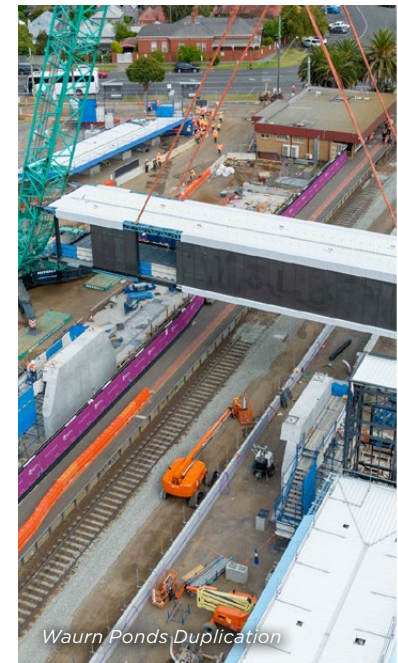
The Warrnambool Line Upgrade is improving safety and reliability and will allow modern VLocity trains to travel on the line for the first time. The project has delivered an extra weekday return service to and from Melbourne, signalling upgrades between Waurin Ponds and Warrnambool and a crossing loop at Boorcan. Stage 2 of the project is upgrading train detection technology at more than 50 public level crossings, while a stabling upgrade at Warrnambool Station will enable VLocity trains to be housed overnight.

South Geelong to Waurin Ponds Duplication (WPD)

The South Geelong to Waurin Ponds Duplication is delivering the upgrades needed to enable five trains per hour during the peaks and three per hour between the peaks for growing communities in Marshall and Waurin Ponds. The project is duplicating around 8km of track between South Geelong and Waurin Ponds stations, rebuilding South Geelong and Marshall stations, and removing the congested level crossings at Surf Coast Highway and Fyans Street. More than 5km of new shared user paths linking to existing trails and paths will create a continuous connection between South Geelong and Waurin Ponds.

Murray Basin Rail Project (MBRP)

The Murray Basin Rail Project is delivering important upgrades to the rail freight network in the state's north-west and will increase the number of weekly trains on the Murray Basin network from 28 to 49. Works are addressing key operational issues that have been identified by industry and will optimise the current standard and broad gauge networks. Capacity on the Ararat to Maryborough Line has increased to 21-tonne axle loading following upgrades to the 88-kilometre section of track. The project is also delivering passing loops at Emu, Tourello and Elmhurst, a mobile refuelling station at Ouyen and signalling upgrades at the Ouyen and Maryborough yards.



RPV Sustainability Framework

Sustainability Vision

Through our delivery of major projects, we are connecting communities in the healthiest, most sustainable way possible. We will leave a legacy for present and future generations for a more liveable Victoria – environmentally, socially, and economically.

In 2023, Rail Projects Victoria continued to drive outcomes across these three pillars of sustainability – Environment, Social and Economic. This report provides an overview of our progress for 2023 and outlines our sustainability aspirations.

Environment

RPV aims to minimise the environmental impacts of our projects and pursue innovative opportunities to reduce harm and maximise benefits. To achieve these goals, we focus on management of:

- Materials and waste
- Water
- Energy efficiency
- Ecology and vegetation
- Climate change resilience.

Social

RPV aims to minimise and manage potential impacts of our projects on local

communities and identify opportunities to work with the community to contribute positively to the social fabric in the areas we work in. We work to achieve these through:

- Cultural heritage
- Education programs
- Creative programs.

Economic

RPV aims to contribute to a resilient and prosperous economy that offers opportunities for all.

- Our initiatives include:
- Employment programs
 - Social procurement.

Sustainability Focus Areas



[Contents](#)

[Foreword](#)

[Our projects](#)

**RPV
Sustainability
Framework**

[Sustainability
Governance](#)

[Environment](#)

[Social](#)

[Education
Programme](#)

[Economic](#)

[Recognition
& Industry
Innovations](#)

[Highlights
from 2023
Sustainability
Conferences](#)

[Digital
Engineering
& Sustainability](#)

[The Future](#)

Sustainability Governance

Rail Projects Victoria's sustainability objectives are supported by internal frameworks, processes and broader policies that sit within the Victorian legislative, policy and regulatory context. Our sustainability vision also aligns with the United Nations Sustainable Development Goals (SDGs).

Internal Processes

The RPV Sustainability Policy applies to all the major projects we deliver. RPV have established a Sustainability Policy and Framework to drive industry-leading sustainability outcomes.

Through our delivery of major projects, we're committed to connecting communities in the healthiest, most sustainable way possible. We'll help to ensure a legacy for present and future generations for a more liveable Victoria – environmentally, socially, and economically.

To achieve this vision, RPV is:

- Optimising the design of projects to ensure they will operate sustainably
- Managing resources efficiently by embedding energy, water and material saving initiatives into the design, construction, and operation of the projects
- Avoiding, minimising, and offsetting harm to the environment and the loss of biodiversity
- Protecting and conserving the natural environment
- Preparing for the challenges presented by climate change.

The vision and objectives in the RPV Sustainability Policy are directly managed by the Sustainability Team. Interfacing areas such as environmental compliance, social procurement and safety are managed by various other teams across RPV. Each of these teams are guided by their own policies and frameworks, with the Sustainability Team playing a supporting role as appropriate.

[Contents](#)

[Foreword](#)

[Our projects](#)

[RPV Sustainability Framework](#)

[Sustainability Governance](#)

[Environment](#)

[Social](#)

[Education Programme](#)

[Economic](#)

[Recognition & Industry Innovations](#)

[Highlights from 2023 Sustainability Conferences](#)

[Digital Engineering & Sustainability](#)

[The Future](#)

Sustainability Framework

RPV's Sustainability Framework provides guidance for implementing our Sustainability Policy across our programs and projects.

RPV's Sustainability Framework identifies five focus areas to prioritise the achievement of sustainability outcomes on rail infrastructure projects.

The five focus areas include:

- Materials
- Water management
- Energy
- Liveability and legacy
- Climate change resilience.

Each project is required to develop a strategy that embeds RPV's sustainability commitments into project specific actions, objectives, and targets, supported by sustainability management plans. These plans identify the processes required to be followed by our delivery partners to ensure we achieve our sustainability outcomes. The Metro Tunnel Project has specific sustainability targets based on industry leading performance that have pushed

the delivery teams to innovate across the project. Regional Rail Revival targets are developed to be specific for each project's scope of works.

Monitoring Performance

RPV reviews progress for each project in implementing their sustainability plans and strategies throughout the delivery phase.

The monitoring program includes:

- Collecting and reviewing project sustainability performance reports monthly
- External auditing of processes and systems to provide assurance that sustainability objectives are being met.

RPV projects apply industry rating tools where relevant to set and measure progress towards sustainability targets. These tools include Green Star certification under the Green Building Council of Australia and Infrastructure Sustainability scores under the Infrastructure Sustainability Council (ISC) rating scheme.

External Influences

RPV's sustainability vision aligns with five of the United Nations Sustainable Development Goals and sits within a legislative, policy and regulatory context. This broader context helps frame and guide the integration of sustainability across our projects.

Sustainable Development Goals (SDGs)

The SDGs are 17 interlinked global goals that provide a blueprint to achieve a better and more sustainable future by 2030. They address global challenges, including those related to poverty, inequality, climate, environment, prosperity, and peace.



[Contents](#)

[Foreword](#)

[Our projects](#)

[RPV
Sustainability
Framework](#)

[Sustainability
Governance](#)

[Environment](#)

[Social](#)

[Education
Programme](#)

[Economic](#)

[Recognition
& Industry
Innovations](#)

[Highlights
from 2023
Sustainability
Conferences](#)

[Digital
Engineering
& Sustainability](#)

[The Future](#)

Alignment with the SDGs

RPV's sustainability vision contributes to the following five SDGs:



Goal 8 - Decent Work and Economic Growth

RPV is delivering Victoria's largest ever rail infrastructure program with more than \$30 billion invested in metropolitan and regional rail projects:

- Our projects create thousands of jobs directly and support local businesses, manufacturers, and Victorian suppliers
- We are training the next generation of rail infrastructure and construction professionals, with hundreds of apprentices, cadets and graduates gaining valuable experience
- RPV and its delivery partners engage Aboriginal-owned companies to provide goods and services in areas such as the procurement of office supplies, traffic management and labour hire services.



Goal 9 - Industry Innovation and Infrastructure

RPV aims to deliver resilient infrastructure and we are implementing several new technologies to reduce the environmental impact of our projects:

- Our Regional Rail Revival program is upgrading every passenger rail line in Victoria, enabling the use of more modern trains, and increasing the capacity and reliability of the network
- International technology such as High Capacity Signalling, and Platform Screen Doors have been adopted on the Metro Tunnel Project to improve the reliability, safety, and energy efficiency of rail services for the community
- A trial of renewable, geothermal energy captured inside the Metro Tunnel's State Library Station's foundations was tested to provide future opportunities for efficient and cost-effective heating and cooling.



Goal 11 - Sustainable Cities and Communities

RPV's rail infrastructure projects contribute significantly to sustainable cities and communities in Melbourne and regional Victoria:

- The Metro Tunnel Project will enable more trains more often on our busiest metro lines and connect people to key destinations by train for the first time
- New rail projects and station upgrades will improve access to safe, inclusive, and accessible transport and enhance connection across Melbourne and regional areas
- The five new stations being built as part of the Metro Tunnel Project are targeting a 5-star Green Star Design and As Built Rating.



Goal 12 - Responsible Consumption and Production

RPV has a major focus on reducing waste generation through recycling and reuse of materials and using water and energy more efficiently:

- RPV's delivery partners reused, repurposed, and recycled waste materials such as glass, plastic, timber, steel, and iron, diverting these waste streams from landfill
- A recycled glass concrete mix was trialled for the construction of temporary suspended slabs at the Metro Tunnel's State Library Station, reducing reliance on sand for concrete production and diverting waste glass from landfill
- Regional Rail Revival installed Duratrak Composite Sleepers, composed of 85% post-consumer recycled plastic instead of sourcing new materials, diverting 17.7 tonnes of plastic waste from landfill.



Goal 13 - Climate Action

RPV is contributing to Victoria achieving its greenhouse gas emission reduction targets and building climate resilience:

- Our Sustainability Policy commits RPV to connecting communities in the healthiest, most sustainable way possible and to preparing for the challenges presented by climate change
- RPV undertakes climate risk assessments and implements adaptation plans to ensure the projects we build are more resilient to the influences of a changing climate
- RPV uses 100% GreenPower at our head office at 222 Exhibition Street, Melbourne
- The Metro Tunnel Project has reduced the amount of energy required for tunnel lighting including reducing cabling, light fittings and wattage.

Contents

Foreword

Our projects

RPV
Sustainability
Framework

**Sustainability
Governance**

Environment

Social

Education
Programme

Economic

Recognition
& Industry
Innovations

Highlights
from 2023
Sustainability
Conferences

Digital
Engineering
& Sustainability

The Future

Policies and Strategies **Climate Change Act 2022** **(Commonwealth)**

The Commonwealth Climate Change Act 2022 outlines Australia's greenhouse gas emissions reduction target of a 43% reduction from 2005 levels by 2030 and a target of net-zero emissions by 2050.

Climate Change Act 2017 **(Victoria)**

The Climate Change Act 2017 is a roadmap to net-zero emissions and climate resilience by 2050. The current targets require emissions to be 28-33% below 2005 levels by 2025 and 45-50% below 2005 levels by 2030. The transport sector plays a significant role in achieving these targets and ensuring Victoria's transport system is resilient to the impact of climate change.

Victoria's Climate Change **Strategy 2021**

Victoria's Climate Change Strategy includes the transport sector emissions reduction pledge which requires substantial reductions in transport sector emissions to support Victoria's target of net zero by 2050.

Victorian Aboriginal Heritage **Act 2006**

The Victorian Aboriginal Heritage Act 2006 recognises Registered Aboriginal Parties (RAP) as the primary guardians, keepers, and knowledge holders of Aboriginal cultural heritage. RPV works with RAPs to ensure that transport activities, including construction, appropriately protects Aboriginal cultural heritage.

Transport Integration Act 2010

The Transport Integration Act 2010 requires transport agencies to actively contribute to environmental sustainability. This includes minimising transport-related emissions, promoting transport with lower environmental impacts, and adapting to challenges presented by climate change.

Circular Economy (Waste **Reduction and Recycling)** **Act 2021**

The Circular Economy (Waste Reduction and Recycling) Act 2021 provides the foundation for Victoria's transition to a circular economy. RPV acknowledges that the government has a pivotal role to play in this transition and looks for opportunities to increase the use of recycled materials in construction projects.

Recycled First Policy 2020

Victoria's Recycled First Policy requires the construction sector to incorporate recycled and reused materials in new projects. This includes a requirement to report on the types and quantities of recycled products used on infrastructure projects. Implementation of the policy supports Victoria moving to a more circular economy and the establishment of new Victorian businesses supplying more sustainable materials.

Other relevant driving policies, **frameworks, and legislation**

- The Environment Protection Act 2017 describes Victoria's prevention-based approach to environmental protection and the General Environmental Duty requires businesses to manage risks of harm to human health and the environment.
- The Victorian Social Procurement Framework details principles including supporting direct and indirect purchases of goods, services and construction from Victorian social enterprises, Victorian Aboriginal businesses, and other social benefit suppliers.
- The 2018 National Waste Policy provides a framework for waste and resource recovery in Australia and principles to enable the transition to a circular economy.

Through our delivery of major projects, we're committed to connecting communities in the healthiest, most sustainable way possible.



Contents

Foreword

Our projects

RPV
Sustainability
Framework

**Sustainability
Governance**

Environment

Social

Education
Programme

Economic

Recognition
& Industry
Innovations

Highlights
from 2023
Sustainability
Conferences

Digital
Engineering
& Sustainability

The Future

Environment

Rail Projects Victoria aims to minimise the environmental impacts of its projects and continue to improve the way it manages materials and waste, water consumption, energy, ecology and vegetation and climate change resilience.

Climate Change Resilience

RPV undertakes climate risk assessments for all projects to ensure we plan for the challenges presented by climate change. These challenges include an increase in extreme rainfall events, increased carbon in the atmosphere, increasing instances of fire weather conditions, and more frequent heatwaves. As part of the risk assessment process, adaptation measures are implemented to ensure that the projects RPV builds are more resilient to the influences of a changing climate.

Materials and Waste

RPV projects track material use and waste production against industry leading targets. This activity supports Victoria's transition towards a circular economy. Key sustainability metrics that are tracked include recycled materials (and reduction in the use of virgin materials), construction waste, office waste and soil diverted from landfill, reduction in Portland cement and the use of responsibly sourced steel¹. Sustainable improvements modelled for operations and tracked in construction are compared to a baseline of the project implementing contemporary industry standard practices². This helps track how our projects have performed.



We will leave a legacy for present and future generations for a more liveable Victoria – environmentally, socially, and economically

1. ACRS is the Australasian Certification Authority for Reinforcing and Structural Steels (ACRS). The ACRS is the leading independent, third-party steel certification authority of construction steels to Australian and New Zealand Standards.

2. Sustainable improvements in construction and operation are tracked based on a comparison to the project's base case. This base case constitutes contemporary standard practices for an infrastructure project as defined by the Infrastructure Sustainability Council (ISC), or the Green Building Council of Australia (GBCA).

[Contents](#)

[Foreword](#)

[Our projects](#)

[RPV
Sustainability
Framework](#)

[Sustainability
Governance](#)

Environment

[Social](#)

[Education
Programme](#)

[Economic](#)

[Recognition
& Industry
Innovations](#)

[Highlights
from 2023
Sustainability
Conferences](#)

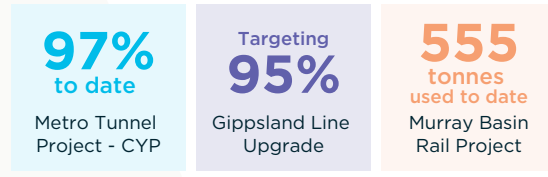
[Digital
Engineering
& Sustainability](#)

[The Future](#)

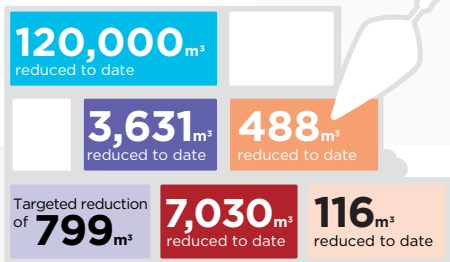
Material carbon emission reductions (tCO2)



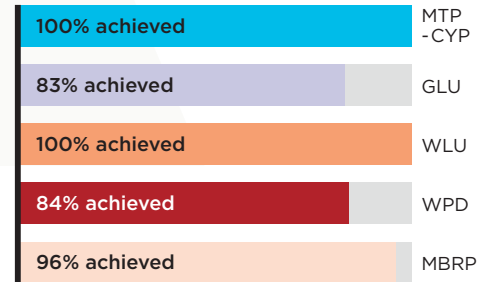
Certified or re-used timber use (tonnes)



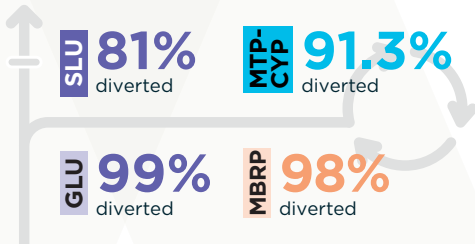
Portland cement reduction (m³)



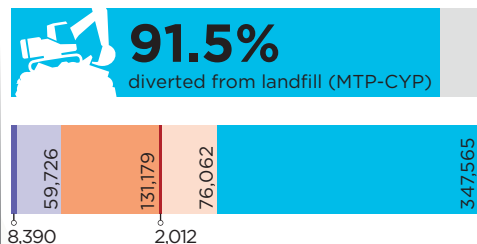
Certified steel use (%)



Total diversion from landfill (%)



Inert waste diversion from landfill (m³)



Legend



MTP cable drum repurpose

Children’s play equipment and education about sustainability and recycling are two key benefits of an initiative to keep cable drums out of landfill and repurpose waste material from the Metro Tunnel Project.

The majority of cable used on MTP has been delivered on reusable cable drums which have been returned to suppliers, however, some imported cables use disposable drums, and are not suitable for reuse and are difficult to recycle. These drums would usually be sent to landfill.

After reaching out to charity organisations looking for reuse opportunities, delivery partner CYP D&C was connected with the Reverse Art Truck, a Victoria-based not-for-profit organisation who accepted the donation of the cable drums.

The organisation mainly engages in creative reuse of waste resources to facilitate education and children’s play, which brings a positive impact to and engagement with the local community. They collect items and deliver them to their members, with schools and

kindergartens especially keen for cable drums as they are excellent playground additions.

Approximately six tonnes of cable drums were diverted from landfill and donated to the Reverse Art Truck in the first quarter of 2023. This initiative highlights CYP D&C’s commitment to achieving RPV’s target to divert 90% of construction waste from landfill. CYP D&C has exceeded this target each month at an increasing rate, with the total construction waste diverted from landfill over the life of the project being 91.5%.



Contents

Foreword

Our projects

RPV
Sustainability
Framework

Sustainability
Governance

Environment

Social

Education
Programme

Economic

Recognition
& Industry
Innovations

Highlights
from 2023
Sustainability
Conferences

Digital
Engineering
& Sustainability

The Future

Clean up Australia Day (MTP)

Metro Tunnel Project's commitment to caring for the environment was on show in February when CYP D&C staff took to the streets, local parks, and waterways as part of Clean Up Australia Day, the nation's largest community-based environmental event.

Bringing to life the 2023 theme of 'Step Up to Clean Up', our people hosted a 'Business Clean Up Day' and collected an amazing 15 large bags of rubbish (weighing approximately 75kg) and six bags of recyclables, material that otherwise would have ended up in our waterways.

The most-collected items were cigarette butts, beverage containers and takeaway coffee lids, along with soft plastics.

The Sustainability Team also presented a toolbox talk to site workers explaining the office and crib waste management system and recycling initiatives, spreading awareness about recycling to improve waste management on our sites.

Positive feedback was received from staff who volunteered, noting the visible improvement around project sites and the direct impact individuals were able to make in supporting the environment. Members of the public also stopped to ask what was going on and were impressed with the efforts of the project to get involved, be accountable and make a difference.

Overall, the event was extremely successful and a positive experience for staff, highlighting CYP D&C's commitment to protecting our environment and raising sustainability awareness.



Priority Waste Reuse in Contaminated Mine Remediation (SLU)

The remediation of the former Old New Moon Gold Mine, a legacy gold mine in Bendigo, represented one of the major waste management wins for the project due to the use of spoil from the rail formation, drainage lines and culvert material.

Historic weed spraying in the rail corridor had resulted in areas of elevated arsenic within the rail formation, material that is classified as reportable priority waste. Given the existing levels of arsenic at the mine site, the remediation contractor received approval from the EPA to use arsenic-impacted material.

This presented a perfect opportunity for the SLU Alliance to reuse the spoil for remediation of the gold mine, which included capping of a former tailings dam and re-profiling of the surface, without changing the risk to the environment or human health at the mine site.

As of November 2023, approximately 15,650m³ of spoil material has been sent to aid in the remediation of the mine.



[Contents](#)

[Foreword](#)

[Our projects](#)

[RPV
Sustainability
Framework](#)

[Sustainability
Governance](#)

Environment

[Social](#)

[Education
Programme](#)

[Economic](#)

[Recognition
& Industry
Innovations](#)

[Highlights
from 2023
Sustainability
Conferences](#)

[Digital
Engineering
& Sustainability](#)

[The Future](#)

MBRP 100% Recycled Flagging

The introduction of recycled flagging on the Murray Basin Rail Project (MBRP) project has helped to conserve the environment while fulfilling its purpose of protecting native vegetation.

The MBRP spans from Ballarat to Mildura, with flagging used at compounds, for lay-down areas, in tree protection zones and other no-go zones where permanent delineation is essential to ensure works meet environmental requirements and practices.

Where possible MBRP prioritises reusing virgin flagging for delineation of site works, however reuse is dependent on the condition of the flagging (i.e. wear and tear) and availability, as works often take place simultaneously across multiple sites.

Thorough investigation into the recycling of virgin flagging at end-of-life indicated no facilities are currently accepting the product for recycling due to lack of technology to process it. MBRP then looked for a

sustainable alternative and found Cacti Conserve – a supplier who could provide 100% recycled flagging, including the rope.

Cacti Conserve's flagging is made from 100% recycled post-consumer and industry plastics and is distributed in 100% recycled packaging, which significantly reduces waste to landfill and contributes to creating a circular economy.

The flagging was customised with the MBRP logo and 'No Go Zone' wording, which has increased communication and awareness of protected zones across the project.

Currently 276 units of flagging have been implemented on-site, with more to be ordered as the project continues.

In addition to recycled flagging, Cacti Conserve has also supplied 250 recycled plastic star pickets – made from 100% recycled content – for safety fencing.

Cacti Conserve is a certified social enterprise with 50% of their profits donated to Australian conservation projects.



MBRP Flagging



Recycled glass sand

Circular Economy in CSR (MBRP)

Using recycled glass sand and uPVC plastic communications and electrical conduit are two impactful outcomes of MBRP utilising recycled materials within Combined Services Route (CSR) applications.

As part of Victoria's Recycled First Policy, wherever feasible MBRP has been driving the use of high-performing recycled materials that not only meet project scope and technical requirements but exceed them. These include recycled glass sand from Allstone Quarries (ASQ) and Vinidex recycled uPVC for CSR routes.

The MBRP is the first Regional Rail Revival (RRR) project to procure and implement recycled glass sand from ASQ, with 750 tonnes used at the Wiltshire and Elmhurst sites as part of the Ararat to Maryborough CSR works.

The recycled glass sand replaces 100% of virgin sand used in CSR bedding, well beyond the project's requirement to replace 25% of virgin sand.

Ongoing supply of recycled glass sand has been secured for continued use across the project.

The Vinidex conduit, which is comprised of 60% uPVC recycled plastic, was implemented in Ararat-Maryborough works and installed below ground for the entire Wiltshire loop, replacing 100% of the CSR conduit. It will continue to be used across the project.

Supplier ASQ obtained the required V/Line approval for use, and the conduits were easily implemented as the product met relevant Australian standards and V/Line specifications. The recycled conduit was also less expensive than conventional virgin conduit.

By using these materials, MBRP are promoting and strengthening the supply chain of the recycled materials industry and enhancing their acceptance in rail projects and beyond.

Contents

Foreword

Our projects

RPV
Sustainability
Framework

Sustainability
Governance

Environment

Social

Education
Programme

Economic

Recognition
& Industry
Innovations

Highlights
from 2023
Sustainability
Conferences

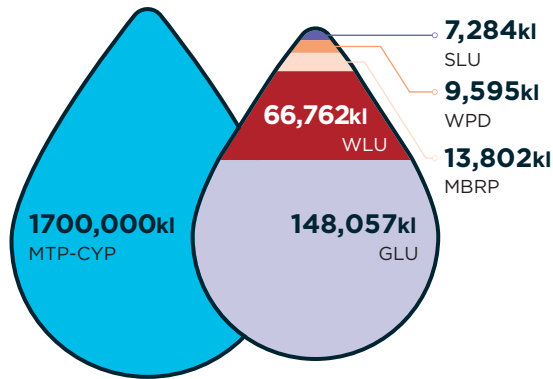
Digital
Engineering
& Sustainability

The Future

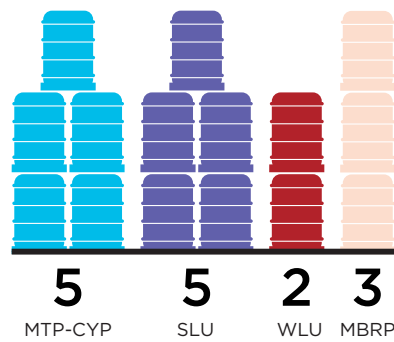
Water Management

RPV aims to reduce the amount of potable water consumed by our projects and manage the impact of stormwater drainage from our construction sites on natural waterways. RPV projects track water consumption and non-potable water reuse against industry standard practices to gauge how we are performing.

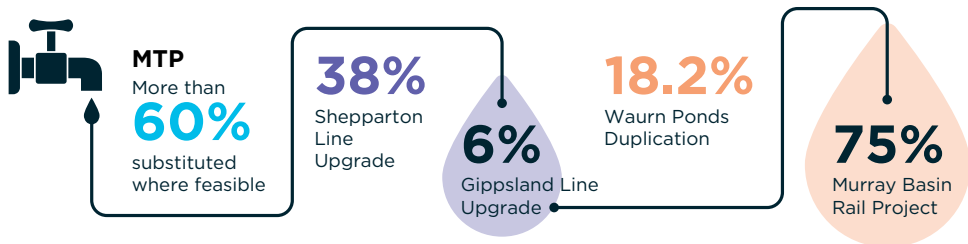
Total water used (kl)



Number of water tanks installed



Non potable water use compared to total water use



Legend



Non-potable Water Connection at Emu (MBRP)

The use of non-potable water for dust suppression at Emu met MBRP's technical requirements and project scope and provided a pointer to where further environmental benefits lie.

Emu was identified as a site location that would require non-potable water to assist with suppression, and with more than 5000 litres needed, MBRP engaged a local water authority, GWM Water, to arrange for a local hydrant to supply non-potable water to the project.

The supply used was untreated surface water from Lake Bellfield in the Grampians, which is provided to contractors working in construction, rural farms for stock and feed, fire control and watering of vegetation.

The hydrant used is located 30 minutes from site, with water carted to Emu as required. It is much closer than previous alternatives, lowering both hiring costs and carbon emissions.

Recycled Water use for Construction Activities (SLU)

The Shepparton Line Upgrade (SLU) Project Alliance's use of recycled water for dust suppression, material conditioning, compaction, material stockpile dust suppression and other construction activities proved a successful initiative in conserving resources of potable water.

SLU, in collaboration with Goulburn Valley Water (GVW), procured and installed a standpipe and upgraded the GVW Reclaimed Water Facility at Nagambie to enable recycled water use.

When the project is complete, the Alliance will donate the Standpipe to GVW as project legacy to promote and enable the future use of recycled water in the region by community, farmers and other projects.

In addition, the Alliance has also implemented the use of a water-based polymer soil binding agent mixed with recycled water for dust suppression on access roads across the SLU project area.

Contents

Foreword

Our projects

RPV
Sustainability
Framework

Sustainability
Governance

Environment

Social

Education
Programme

Economic

Recognition
& Industry
Innovations

Highlights
from 2023
Sustainability
Conferences

Digital
Engineering
& Sustainability

The Future

Energy Efficiency

RPV aims to reduce energy use and greenhouse gas emissions during the construction and operation of our infrastructure projects. RPV projects are tracked against their energy use, including the extent of replacement of traditional fossil fuel generated electricity and vehicles with renewable options³.

Escalator energy efficiency

The project will feature 103 escalators which will contribute to more than 30% of the energy consumption of each station. To offset this impact, CYP D&C are employing several energy saving solutions.

Regenerative braking for downward-travelling escalators is one of several energy efficiency initiatives targeted by CYP D&C, along with multispeed operation and the procurement of energy-efficient escalator models.

Regenerative braking is modelled to save up to 5.5% of escalator energy. This energy is captured and converted back to electricity to be re-used in the station.

Similar technology is also present in the stations' lifts, generating electricity as the elevators slow to a stop.

The amount of energy able to be saved through regenerative drives is proportional to both the number of passengers and the height of the escalator.

Due to the wide variance in escalator heights and foot traffic across the stations, the energy savings range from 0.5 to 17.2 kWh per day on the MTP. These contribute respectively 1.4% and 22.8% of their respective daily energy use.

Regenerative drive technology is generally most effective when applied in design solutions catering for high pedestrian traffic and need to travel over multiple storeys.

The project's commitment to deliver sustainable station building outcomes has led to the implementation of energy-efficient escalators featuring regenerative drives along with multiple speed capability.

Greenhouse gas emissions reduction (tCO₂)



The above figures refer to scope 1 and 2 emissions

Operational energy sourced from renewables (kWh)

86,239 kWh targeted | **125 kWh sourced**

Warrn Ponds Duplication

Shepparton Line Upgrade

125 kWh Solar Panel system installed

at Arden Station (MTP-CYP)

Construction energy sourced from renewables (kWh)

MTP-CYP **On track to achieve 20%**

SLU **82,547 kWh to date**

GLU **264,740 kWh to date**

WLU **635,748 kWh to date**

WPD **89,927 kWh to date**

MBRP **294,016 kWh to date**

Legend



³ Sustainable improvements in construction and operation are tracked based on a comparison to the project's base case. This base case constitutes contemporary standard practices for an infrastructure project as defined by the Infrastructure Sustainability Council (ISC), or the Green Building Council of Australia (GBCA).

Contents

Foreword

Our projects

RPV
Sustainability
Framework

Sustainability
Governance

Environment

Social

Education
Programme

Economic

Recognition & Industry
Innovations

Highlights
from 2023
Sustainability
Conferences

Digital
Engineering
& Sustainability

The Future

Switching to GreenPower® at Rail Projects Victoria's head office

RPV's head office at 222 Exhibition Street, Melbourne is powered by 100% GreenPower®. This initiative aligns with the Victorian Government's pledge to purchase 100% renewable electricity by 2025 for all Victorian Government operations, facilities and services. GreenPower® is a renewable energy certification that ensures electricity is sourced from entirely renewable sources. It supports Australia's renewable energy sector by funding projects such as wind farms and solar grids. Switching to GreenPower® for project offices is one of many initiatives used to reduce our overall carbon footprint.

Ecosite Caravan

A trial of an Ecosite caravan secured through the Acciona decarbonisation fund has significantly reduced fuel consumption and costs as MBRP continues to explore solar options at site locations.

Ecosite caravans provide a sustainable solution for onsite rental requirements, as they operate on renewable energy through a dual solar inverter coupled with back-up diesel generator.

Previously MBRP's conventional satellite compounds have been powered by diesel generators that didn't capitalise on available sunlight.

The Ecosite caravan trial was so successful it was extended from an initial four months to six.



MBRP Office Upgrades Power Connection to 100% Renewable Power

Electricity consumed to power the Salmon St office in 2023 has been significantly reduced through renewable energy use as MBRP's commitment to lowering energy consumption continues.

Since 2021 the Salmon St office has been connected to 100% Carbon Neutral Power provided by a Climate Active-certified Carbon Neutral power supplier.

In May 2023, this power supply was swapped to 100% Greenpower renewable energy, doubling MBRP's impact and energy efficiency.

Transportable Solar Sheds at Waurin Ponds

A transportable modular solar shed that can be ready for use in 15 minutes and demobilised for transport in just five minutes has made significant energy-saving gains after replacing a site shed that was powered by a combination

of diesel and grid power. Run by solar panels and batteries, the WPD's Gate House Solar Shed runs standard office and kitchen requirements on renewable energy alone and can utilise a back-up diesel generator during periods of low solar generation.



Contents

Foreword

Our projects

RPV
Sustainability
Framework

Sustainability
Governance

Environment

Social

Education
Programme

Economic

Recognition
& Industry
Innovations

Highlights
from 2023
Sustainability
Conferences

Digital
Engineering
& Sustainability

The Future

Ecology and Vegetation

RPV aims to improve the natural environment surrounding its projects. RPV projects are tracked against their contribution to the ecology and habitat of the project area, including through vegetation preservation and improvement.

National Tree day

Planting around Arden Station – where 103 more trees will grow than before Metro Tunnel Project works – has highlighted CYP D&C’s support of RPV’s aim to maintain and restore the ecosystems in which it operates.

Planet Ark’s National Tree Day, on Sunday 30 July, was a reminder of the project’s urban ecology objective of creating infrastructure that is not only resilient but also strengthens the local environment, as trees aid urban shading and reduce heat island effect.

Landscaping at Arden Station and the North Melbourne Intake Substation (ISS) underscores that the future health of our planet depends on trees, meeting the project’s objectives to:

- Plant more trees than are cleared during construction

- Use soil volumes for trees to promote canopy growth, which is in line with RPV’s tree canopy cover objectives
- Deliver a net increase in vegetated surfaces post-construction
- Develop tree protection plans.

At Arden and Anzac stations, rainwater tanks that contribute to the reduction of stormwater runoff have been installed, as well as strata vaults for tree pits and drainage for tree plots. The rainwater tank specifically promotes MTP’s water quality objectives, aiming to capture rainwater and use it for non-potable purposes.

A raingarden will be installed at the ISS, while tree planting has commenced at Anzac Station.

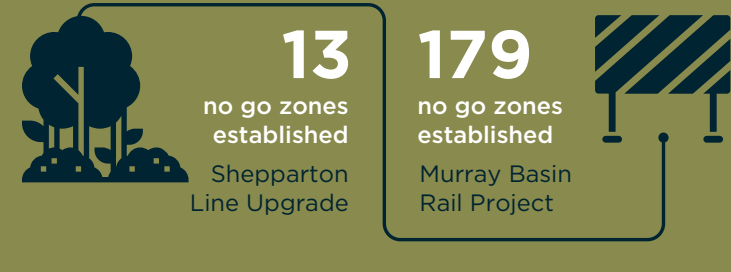
These various methods of Water Sensitive Urban Design act as an avenue to manage local

stormwater and promote the growth of newly planted trees.

At Arden Station, 103 native trees with a low water demand will be planted within the public realm (designed extent of works). Mature trees along Laurens Street have been retained to provide shade, maintain air quality, and inspire an urban uplift in a currently industrial area.

Project wide, CYP D&C is achieving a 3401m² increase in vegetated surfaces, an increase of 247 trees within the designed public realm area and 125 trees within project land. This post-construction net increase in number of trees and vegetated surfaces addresses MTP’s commitment to enhancing the urban ecology.

Native Vegetation Protection



Contents

Foreword

Our projects

RPV
Sustainability
Framework

Sustainability
Governance

Environment

Social

Education
Programme

Economic

Recognition
& Industry
Innovations

Highlights
from 2023
Sustainability
Conferences

Digital
Engineering
& Sustainability

The Future



1. Site dominated by Phalaris Grass, very thick making it difficult for frogs to move around the site foraging.



2. Reduced biomass and newly planted native tussock species.



Growing Grass Frog Habitat Rehabilitation

Habitat restoration works near Donnybrook Station helped conserve a large population of Growing Grass Frog and proved a major win for the project.

Donnybrook is one of the key habitat areas for the Growing Grass Frog, a listed vulnerable species under the Environment Protection and Biodiversity Conservation Act (EPBC) 1999.

During the construction of the Combined Service Route for Shepparton Line Upgrade (SLU), the Alliance identified

a large find of Growing Grass Frog, and performed habitat restoration works at Spring Rd, Donnybrook in agreement with the Department of Energy, Environment and Climate Action (DEECA) and stakeholders (RPV, VLine, VicTrack).

This included removal of weed species, waste and rubbish clean-up, installation of waste prevention fencing, placement of stacks of repurposed wood logs and sunbathing rocks, and planting 160 terrestrial plants, 80 semi-aquatic plants and 160 aquatic plants.



Growing Grass Frog

Contents

Foreword

Our projects

RPV
Sustainability
Framework

Sustainability
Governance

Environment

Social

Education
Programme

Economic

Recognition
& Industry
Innovations

Highlights
from 2023
Sustainability
Conferences

Digital
Engineering
& Sustainability

The Future

Social

Rail Projects Victoria works with communities around our projects to enhance social wellbeing and to minimise and manage potential impacts.

2023 International Women's Day at CYP

CYP D&C took part in a host of industry events to mark International Women's Day in 2023, again demonstrating the project's leadership when it comes to supporting women in construction.

The events, which included 25 staff attending a High Tea hosted by the National Association of Women in Construction on 8 March, helped promote social sustainability outcomes by encouraging meaningful and positive discussion among project participants and supporting our industry in increasing diversity.

The IWD 2023 theme was 'Embrace Equity', with the aim of raising awareness as to why 'equality' isn't enough to aim for, and our focus should be on 'equity'.

Equality means every individual or group of people is given the same resources or opportunities.

Equity recognises that each person has different circumstances, and allocates the exact resources and opportunities needed to reach an equal outcome.

Attendees at the IWD High Tea heard from esteemed and influential panellists who are "cracking the code" and creating "innovation for a gender-equal future".

Other events included the Women of the Metro Tunnel Program hosting their third "online" site tour on IWD, in which 105 staff dialled in from the CYP D&C project.

The Victorian State Government and Building Industry Consultative Council summit 'Building Respect Together' was attended by three CYP D&C managers. The summit's focus was on actions to create respectful workplaces and enabling change in our industry.

Engineers Australia's IWD event was attended by 17 CYP D&C staff, who heard Michelle Payne speak about smashing through horse racing's glass ceiling in 2015 when she became the first female jockey to win the Melbourne Cup on 100-1 shot Prince of Penzance.

The Women of the Metro Tunnel were also featured in a three-minute video and full-page profiles which were circulated internally and to the public.

[Contents](#)

[Foreword](#)

[Our projects](#)

[RPV
Sustainability
Framework](#)

[Sustainability
Governance](#)

[Environment](#)

[Social](#)

[Education
Programme](#)

[Economic](#)

[Recognition
& Industry
Innovations](#)

[Highlights
from 2023
Sustainability
Conferences](#)

[Digital
Engineering
& Sustainability](#)

[The Future](#)

Metro Tunnel Legacy Artworks

Metro Tunnel project has delivered two significant artworks at the eastern tunnel entrance that embody the RPV Sustainability Framework's 'Liveability and Legacy' theme and will be enjoyed by generations of visitors.

Aunty Kim Wandin's *Murrup Biik*, in collaboration with artist Christine Joy, and Kent Morris's *Where We Walk* will have permanent homes in the South Yarra Siding Reserve and Arthur Street Pocket park, featuring new landscaping, seating and area-specific artworks.

Murrup Biik, meaning 'Spirit Country', honours its location as a significant Aboriginal cultural site through a series of colourful sculptures inspired by Bilangs - string bags in the language of the Wurundjeri Woi Wurrung women.

The three sculptures feature a patterned design of Murnong flowers (native yam), acknowledging the journey the women made across Country collecting food to provide for families as custodians of the land.

Where We Walk was inspired by the significant flaked

stone artefacts that were uncovered at the reserve during construction of the eastern tunnel entrance. It will be a cultural marker of respect and connection representing First Nations knowledge systems.

Kent Morris, a Barkindji man chosen after expressions of interest from Victorian First Nations artists, hopes his work will inspire people to open their hearts and minds and look and listen deeply on their journey through the reserve, embracing the knowledge that is embedded in Country.



Waurin Ponds Duplication - National Reconciliation Week

Cultural Advisors Kat Rodwell and Jeffrey Gray put on a barbecue for workers at the Waurin Ponds Duplication project alliance's Barwon Terrace site compound before educating them with a wander through Australia's Indigenous history, illustrated by chalked "graffiti" on the compound's concrete floor that covered major events from more than 100,000 years ago up to the present.

Kat explained the significance of the mural that adorns the entrance to the Djilang Alliance compound, a striking work of orange ochre on wood that leverages an earlier exercise in which workers were encouraged to use symbols and markings to draw their own story and show how they connect to the Waurin Ponds Duplication project.

The entrance mural welcomes people to Wadawurrung Country and features representations of history and stories being passed on, waterways signifying Corio Bay, the Barwon River and its

tributaries, and the travel stops we make on our journey. All against a backdrop of Wurdi Youang - the You Yangs - which Kat referred to as a spiritual place of healing.



The gum leaf also plays a key role in welcoming workers and visitors to the site, signifying safe passage on Country. Kat noted the leaves painted around the entrance have already become an important feature for many as they arrive at work.

Contents

Foreword

Our projects

RPV
Sustainability
Framework

Sustainability
Governance

Environment

Social

Education
Programme

Economic

Recognition
& Industry
Innovations

Highlights
from 2023
Sustainability
Conferences

Digital
Engineering
& Sustainability

The Future

Education Programme

Objective

RPV's education activities focus on learning about careers in infrastructure, identifying students' skills and participation in Science, Technology, Engineering, Arts and Maths (STEAM) subjects. The Education Team works with staff across the organisation to build meaningful engagement that shows young people what our projects mean to them as citizens and future workers.

Summary

More than 26,000 students and their teachers have engaged with RPV Education Program activities since we commenced operations in 2018, 15,500 of them through formal bookings at Metro Tunnel HQ. 2023 was our biggest year to date with 232 individual events and almost 9000 participants in total. Our small team of sessional teachers was busier than ever, engaging with a record breaking 5000 students and teachers at HQ alone. The HQ also features a dedicated sustainability wall with a banner showcasing sustainability initiatives on the Metro Tunnel Project.

Metro Tunnel Schools Engagement

Our Year 9 workshop, 'Careers Explorer', showcasing the wide range of jobs in rail infrastructure, remains our most popular schools offering. This year we refreshed the content to include video profiles of graduates working on the Metro Tunnel Project. Students learn about their career journeys and try to work out what job they do. Seeing how "near age peers" have made their way into the workforce demystifies the process. It also helps students identify unconscious biases and then break down stereotypes about what type of person does each role.

Awareness of our maths-based workshop 'Voluminous Matters' has grown steadily, and we are delighted to see that it has become a staple part of the curriculum for several girls schools keen to promote STEAM outcomes. With COVID impacts receding, more primary schools are making their way to HQ where our hands on workshop using small robots to explore signalling technology is always a big hit.



[Contents](#)

[Foreword](#)

[Our projects](#)

[RPV
Sustainability
Framework](#)

[Sustainability
Governance](#)

[Environment](#)

[Social](#)

**[Education
Programme](#)**

[Economic](#)

[Recognition
& Industry
Innovations](#)

[Highlights
from 2023
Sustainability
Conferences](#)

[Digital
Engineering
& Sustainability](#)

[The Future](#)



Partnerships with like-minded organisations such as the Level Crossings Removal Project (LXRP) and Local Learning and Employment Networks (LENs) helped us reach broader audiences through external and multi-school events. In May we were part of the Major Transport Infrastructure Authority (MTIA) presence at the Victorian Government's Trades Fit Fair which demonstrates the exciting world of trade and tech industries and the rewarding, well-paid career opportunities they can provide to young women.

Partnerships have also helped us deliver on our inclusion goals. We hosted several disability groups from Uniting Pathways Employment Program and, working with Monash Tech School, we delivered a series of modified sessions for special schools in the south-east. Doxa Youth Foundation sponsored excursions and city camps enabled 333 students from low socio-economic environments to experience our program.

Getting the message out to the right teachers is critical to increasing awareness of our activities and over the years the Australian Centre for Careers Educators has proved a great advocate for our work. Careers teachers understand the value of what we offer and this year we were delighted to be part of the program for their Biennial Conference - Career Development in a Changing World hosted by the University of Melbourne. Sixteen careers teachers joined us for an exclusive tour of the completed Arden Station. Dressed in full PPE they went down to platform level and were fascinated by the wide range of trades used in the build and the project's commitment to sustainable technology.

[Contents](#)

[Foreword](#)

[Our projects](#)

[RPV
Sustainability
Framework](#)

[Sustainability
Governance](#)

[Environment](#)

[Social](#)

**[Education
Programme](#)**

[Economic](#)

[Recognition
& Industry
Innovations](#)

[Highlights
from 2023
Sustainability
Conferences](#)

[Digital
Engineering
& Sustainability](#)

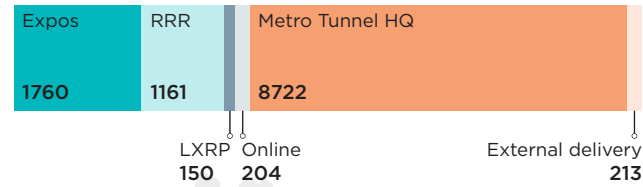
[The Future](#)

Regional Rail Revival Schools Engagement

While the Metro Tunnel Project remains the primary driver of the Education Program, school engagement for Regional Rail Revival also enjoyed its biggest year ever with nearly 1200 participants in 2023. With construction activity in full-swing we conducted a range of safety themed workshops for primary schools in Shepparton. As part of the South Geelong to Waurin Ponds Duplication we ran lively craft workshops with local artist James Price whose work will feature on the completed overpass.

Education Program Statistics

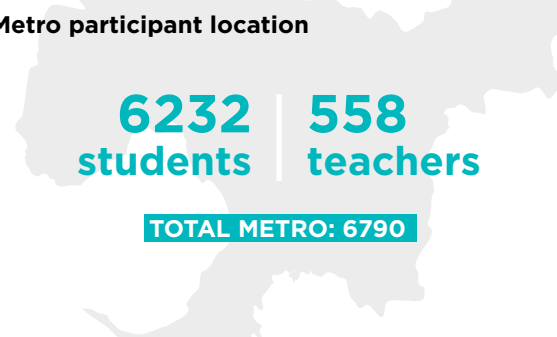
Participants



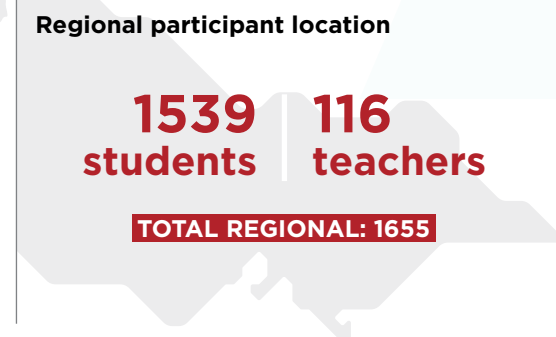
School Sector

	Students	Teachers	Total
Catholic	1865	132	1997
Government	5225	449	5674
Independent	681	93	774
Total	7771	674	8445

Metro participant location



Regional participant location

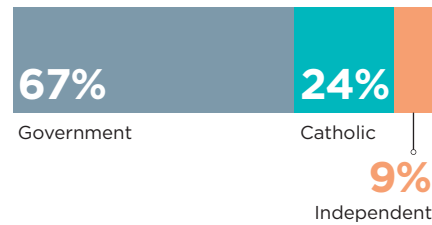


Total
7821
students

674
teachers

8445
participants

% of participants per school sector



% of participants per region



ICSEA Value of Participating Schools*



*Index of Community Socio-Educational Advantage. The lower the ICSEA value of a school (the average being 1000), the lower the level of educational advantage of students who attend that school.

Contents

Foreword

Our projects

RPV
Sustainability
Framework

Sustainability
Governance

Environment

Social

**Education
Programme**

Economic

Recognition
& Industry
Innovations

Highlights
from 2023
Sustainability
Conferences

Digital
Engineering
& Sustainability

The Future



Bandicoot Nest Boxes

The Gippsland Line Upgrade project is a joint venture of the Alliance UGL, Decmil and Arup and is delivering station upgrades, track duplication and signalling upgrades between Pakenham and Traralgon.

The western end of the rail corridor is home to the Southern Brown Bandicoot (SBB) which is listed as endangered under the EPBC Act. To allow for the construction of critical infrastructure and signalling upgrades the project is allowed, under their EPBC Referral, to remove up to 0.901 ha of SBB habitat. The offset for this habitat loss has already been secured, however the project wanted to leave a positive impact for the bandicoots within the rail corridor.

The GLU project undertook bandicoot monitoring throughout the corridor to assess and verify SBB locations. To mitigate negative impacts of habitat removal and disturbance, the project engaged a specialist to design a nesting box that would be suitable for the SBB to utilise. These nesting boxes will provide suitable habitat and will protect the species from adverse weather and predators.

In conjunction with the nest boxes, the project Alliance was eager to share the importance of the SBB with the wider community. The Alliance engaged Koo Wee Rup Secondary School to assemble the nest boxes and provided a presentation to the students. The nest boxes were then taken to Bunyip Primary School where prep students were able to paint new homes for their local furry friends and learn the importance of protecting them.

[Contents](#)

[Foreword](#)

[Our projects](#)

[RPV
Sustainability
Framework](#)

[Sustainability
Governance](#)

[Environment](#)

[Social](#)

**[Education
Programme](#)**

[Economic](#)

[Recognition
& Industry
Innovations](#)

[Highlights
from 2023
Sustainability
Conferences](#)

[Digital
Engineering
& Sustainability](#)

[The Future](#)

Economic

Social Procurement

MultiSkills

Established in 2012, MultiSkills has been operating for over 10 years and have grown into one of Victoria's most well-known and reputable Registered Training Organisations (RTO). MultiSkills deliver training services in both regional Victoria and the Melbourne metropolitan area with locations in Geelong and Werribee. MultiSkills employ over 50 people, including approximately 30 industry experienced trainers and assessors from backgrounds such as civil construction, mining, transport, high-risk work, and crane operations.

MultiSkills work with small and large organisations to deliver training services to major projects throughout Victoria including the South Geelong to Waurin Ponds Duplication, The Metro Tunnel Project, West Gate Tunnel Project, Level Crossing Removal Project, Major Road Projects Victoria, and other Victorian Government infrastructure initiatives.

MultiSkills worked closely with the Djilang Alliance during recruitment for Certificate III in Civil Construction Plant Operations Trainees.

[Contents](#)

[Foreword](#)

[Our projects](#)

[RPV
Sustainability
Framework](#)

[Sustainability
Governance](#)

[Environment](#)

[Social](#)

[Education
Programme](#)

Economic

[Recognition
& Industry
Innovations](#)

[Highlights
from 2023
Sustainability
Conferences](#)

[Digital
Engineering
& Sustainability](#)

[The Future](#)

ECB Training Services

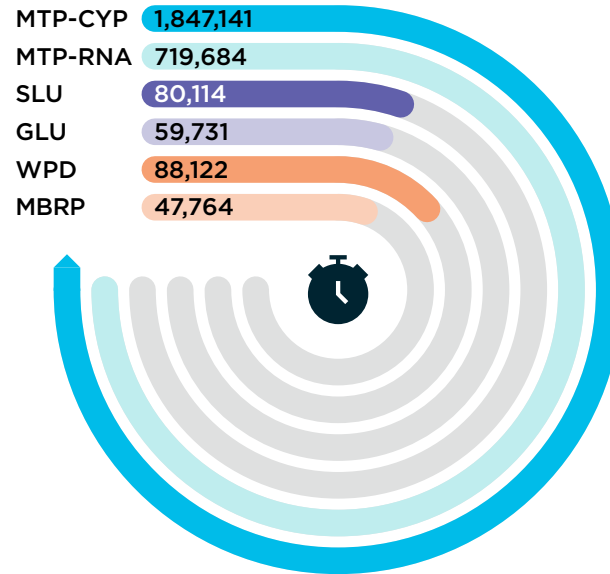
ECB Training Services is an Indigenous owned RTO specialising in mining, civil construction, and general construction industries. The Bayleys started ECB Training Services running general inductions for Leightons, soon progressing to verification and competency assessments across the INPEX gas project in Darwin.

ECB Training Services was engaged by Metro Tunnel CYP to provide all day induction training to CYP D&C which includes both spotter and fire training. ECB also conducts Verification of Competencies for CYP which assists employers to meet Work Health & Safety requirements.

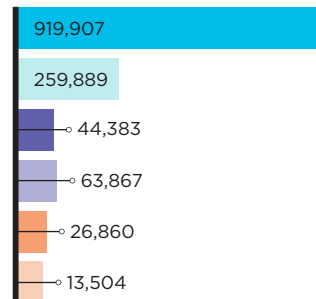
For CYP the benefit was having an opportunity to utilise a well-established and successful RTO and support an indigenous business. Now ECB has grown from husband and wife and two others to six trainers and four administration staff. Soon their Group Training Organisation component will come through, making them the only Indigenous provider in the group training space in civil construction.

Employment and Industry Development (2022-2023)

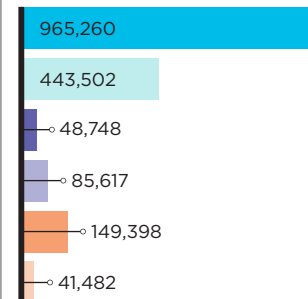
Total apprentice/trainee/cadet hours



Aboriginal employee hours



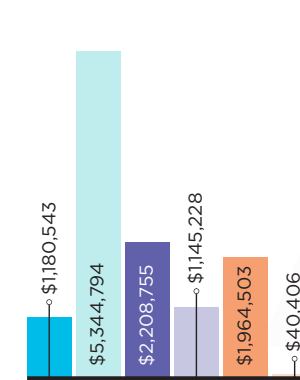
Hours worked by priority job seekers



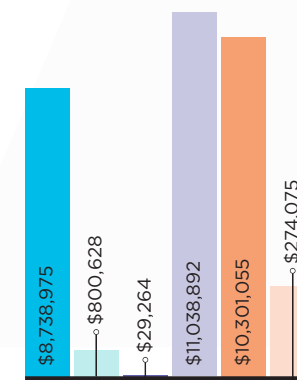
Legend



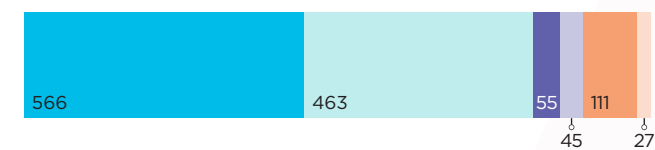
Spend on social enterprises



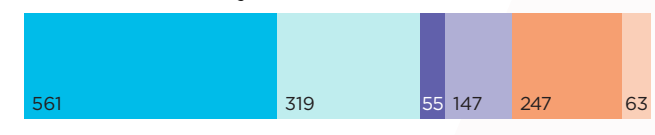
Spend with Aboriginal businesses



Number of Apprentices/trainees/cadets



Number of Priority Job Seekers



53

businesses engaged in 2022-2023 for Social Enterprises

72

Aboriginal businesses engaged in 2022-2023

Contents

Foreword

Our projects

RPV Sustainability Framework

Sustainability Governance

Environment

Social

Education Programme

Economic

Recognition & Industry Innovations

Highlights from 2023 Sustainability Conferences

Digital Engineering & Sustainability

The Future

Recognition & Industry Innovations

Recognition

The Australasian Railway Association published a guideline in 2023 to give businesses in the rail sector an overview of different areas of sustainability to make the industry more sustainable. This guideline showcased Rail Projects Victoria's Metro Tunnel Project as a best practice example, highlighting the project's energy savings, recycled material use and overall carbon emissions reductions to name a few. Carbon emission reductions on the Murray Basin Rail Project were also mentioned as a best practice example. To date, 800 tonnes of carbon emissions have been avoided, enough to fill 800 hot air balloons.

The Infrastructure Sustainability Council hosted the Annual Gala Awards 2023. The Metro Tunnel Project was "Highly Commended" for the use of crushed glass sand in concrete, a collaborative innovation trial with the University of Melbourne that has the potential to significantly reduce a project's environmental impact.

Industry Innovations

Australian First Communication Based Train Control (CBTC)

The Metro Tunnel Project is introducing CBTC (CITYFLO 650) technology. CBTC technology will allow the new High-Capacity Metro Trains (HCMT) to run closer to each other safely in the new tunnel so more services can run on the line. In addition to more capacity, CBTC technology is integrated with conventional signalling technology, allowing existing non-CBTC trains to continue running on the line. The system will allow trains to run up to every 2-3 minutes an hour in each direction.



[Contents](#)

[Foreword](#)

[Our projects](#)

[RPV
Sustainability
Framework](#)

[Sustainability
Governance](#)

[Environment](#)

[Social](#)

[Education
Programme](#)

[Economic](#)

**Recognition
& Industry
Innovations**

[Highlights
from 2023
Sustainability
Conferences](#)

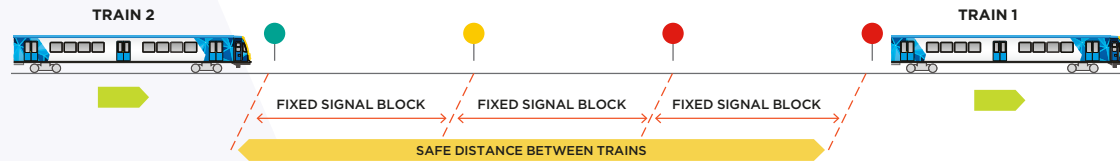
[Digital
Engineering
& Sustainability](#)

[The Future](#)

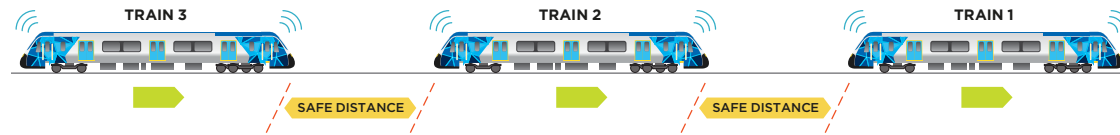
Australian first Communication Based Train Control (CBTC)

It is the first time this technology is being introduced on an existing rail network. Existing signalling systems are based on fixed block signalling. Fixed block signalling divides the track into small blocks. When a block is occupied, the signal will not allow another train to enter the occupied block until the block is empty. These fixed blocks create train separation times known as headway which are significantly higher than CBTC. As such, the current headway is limited to a few trains per hour.

Existing fixed block signalling system



Moving block signalling system



The CBTC system will introduce a moving block signalling system. Unlike the fixed block system, CBTC will be able to identify the exact location of trains on the tracks and to maintain a safe separation distance between trains and enable trains to run closer together safely. Several components make up the system, including radio systems installed on tracks and trains.



The CBTC technology offers several sustainability benefits. The wireless communication system uses less materials and allows high capacity metro trains to run. The smart system also reduces possibilities of human error and with fewer signalling system components, it is more economical to operate.

[Contents](#)

[Foreword](#)

[Our projects](#)

[RPV
Sustainability
Framework](#)

[Sustainability
Governance](#)

[Environment](#)

[Social](#)

[Education
Programme](#)

[Economic](#)

**Recognition
& Industry
Innovations**

[Highlights
from 2023
Sustainability
Conferences](#)

[Digital
Engineering
& Sustainability](#)

[The Future](#)

Highlights from 2023 Sustainability Conferences



ISC Conference

ISC (Infrastructure Sustainability Council) held their ISC Connect annual conference in September 2023, with the objective of connecting key stakeholders in the infrastructure industry, including RPV. The 3-day conference provided ISC and infrastructure professionals to come together, collaborate and learn from each other and the industry.

Speakers at various sessions spoke on key industry themes such as systemic resilience, pathways towards net zero, circular economy and future trends. Decarbonisation of infrastructure to support reaching net zero and beyond was a key theme and requires behavioural change at all levels, from policy to procurement and throughout delivery. There were many discussions around the importance of a universal benchmark for carbon, so that performance across projects can be measured

consistently. For Australia and Victoria, a consistent approach to measuring, valuing, and reporting on carbon emissions is needed, and ISC is in an ideal position to support.

The conference provided a cross pollination of learnings from other sectors such as energy, defence, building, finance, space, and IT, demonstrating how the same principles can enable our infrastructure to become more efficient and resilient. There are opportunities to make project financing sustainable, improve biodiversity, be more inclusive towards communities, reduce carbon emissions, promote and adopt energy efficiency and circulate resources back into the economic chain.

[Contents](#)

[Foreword](#)

[Our projects](#)

[RPV
Sustainability
Framework](#)

[Sustainability
Governance](#)

[Environment](#)

[Social](#)

[Education
Programme](#)

[Economic](#)

[Recognition
& Industry
Innovations](#)

**Highlights
from 2023
Sustainability
Conferences**

[Digital
Engineering
& Sustainability](#)

[The Future](#)

ecologiQ Conference

RPV and ecologiQ work closely to implement the Recycled First Policy, driving and optimising the use of locally sourced recycled and repurposed products and promoting circular economy principles. In only its second year, the ecologiQ conference is expanding its reach, facilitating the much-needed collaboration to enable a more sustainable infrastructure sector in Victoria.

RPV had the opportunity to attend the conference and celebrate some of its sustainability achievements to date as well as learn what other innovative recycled and repurposed materials are on the market. Kevin Devlin (CEO MTIA) highlighted the scale of MTIA (Major Transport Infrastructure Authority) works and emphasised how we must strive to do more with less.

It is important to set targets that we can measure our performance against, innovate and translate knowledge into practical outcomes.

Waste is a resource, and a change of habits and change of rules along with incentives will change behaviour, allowing us to recover and utilise waste and make the most of it. Simple ideas such as using crumb rubber from old car and truck tyres in roads, or plastic in concrete can prevent it from ending up in the environment. A change of mindset and system is required to overcome barriers; therefore, collaboration is critical. Supply chain, standards, policy makers, projects, end users, all need to come together to successfully achieve these outcomes.

Infrastructure projects can promote the use of recycled materials and reduce the overall contribution to greenhouse emissions, which currently sits at 79% (enabled emissions) There are lots of exciting products available, such as recycled glass sand, low carbon concrete, recycled plastic pipes, crumb rubber in asphalt, and many more. With an empowered industry and strong policies, tangible outcomes will be achieved, and what gets measured gets done.



[Contents](#)

[Foreword](#)

[Our projects](#)

[RPV
Sustainability
Framework](#)

[Sustainability
Governance](#)

[Environment](#)

[Social](#)

[Education
Programme](#)

[Economic](#)

[Recognition
& Industry
Innovations](#)

**Highlights
from 2023
Sustainability
Conferences**

[Digital
Engineering
& Sustainability](#)

[The Future](#)

Digital Engineering & Sustainability

RPV is striving to enable integrated solutions and processes through the way we work within our projects. Integration between Digital Engineering (DE) and Sustainability is one area we are progressing.

The DE requirements at RPV have been developed in conjunction with our supply chain with the aim of supporting better sustainability outcomes in several key areas.

Improved project reporting of material quantities is one area of focus, with the DE requirements allowing consistently-structured data within project 3D design models to support the sustainability reporting needs. This allows our supply chain to continuously contribute data into their design models to populate sustainable material quantities tables for our projects.

Having these quantities available as the project progresses through the design and construction stages enables opportunities for sustainability stakeholders to track the design as it develops and get involved in decision-making.

Moving forward, this can also lead to a central materials database that includes materials from multiple projects, compiling new and innovative materials in one location. Other tools such as a material selector allow the database to be searched and materials to be shared more effectively, which can lead to a broader usage of favourable materials across the MTIA portfolio.

RPV's focus on 3D model-based design and delivery also increases portability and reliability of 3D design models within our project teams, allowing better communication, quality and accuracy of the design as it progresses.

This opens up further technologies such as finite element analysis, computational design, offsite fabrication, digital construction and logistical site planning.

This all contributes to reducing the time onsite for our project personnel and ultimately means less material waste for our projects.



[Contents](#)

[Foreword](#)

[Our projects](#)

[RPV
Sustainability
Framework](#)

[Sustainability
Governance](#)

[Environment](#)

[Social](#)

[Education
Programme](#)

[Economic](#)

[Recognition
& Industry
Innovations](#)

[Highlights
from 2023
Sustainability
Conferences](#)

**Digital
Engineering
& Sustainability**

[The Future](#)

The Future

With processes and policies established, the path forward is continued implementation of sustainability initiatives in all areas.

There is increased focus on collaboration, ensuring our stakeholders and the community are brought along on the journey, so that together we are making a meaningful impact.

Active involvement in working groups furthers an aim to standardise industry practice, especially around decarbonising infrastructure. This will facilitate measuring and improving our performance.



With several projects coming to their completion, there is opportunity to identify and assess opportunities for improvement so that with lessons learned and an innovative approach, we can contribute to a more sustainable future for all.

[Contents](#)

[Foreword](#)

[Our projects](#)

[RPV
Sustainability
Framework](#)

[Sustainability
Governance](#)

[Environment](#)

[Social](#)

[Education
Programme](#)

[Economic](#)

[Recognition
& Industry
Innovations](#)

[Highlights
from 2023
Sustainability
Conferences](#)

[Digital
Engineering
& Sustainability](#)

[The Future](#)



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