




MANUFACTURING & MAINTENANCE



A MEMBER OF THE CIMIC GROUP
 **CIMIC**

A welder wearing a dark protective suit and helmet is working in a factory. Bright sparks are flying from the welding point. The background shows industrial equipment and a brick wall.

We work with some of the most important companies and governments in Australia and around the world, playing a vital role in people's lives every day.



We are UGL

We are sure you've seen us around. We don't splash our name about. That's because at UGL we are comfortable being the people behind the passenger and long-haul trains moving people and freight across rail networks right across the country. We are also the brains behind a whole range of replacement parts for heavy vehicles that keep Australia moving.

We are part of the CIMIC Group, global leaders in engineering-led construction.

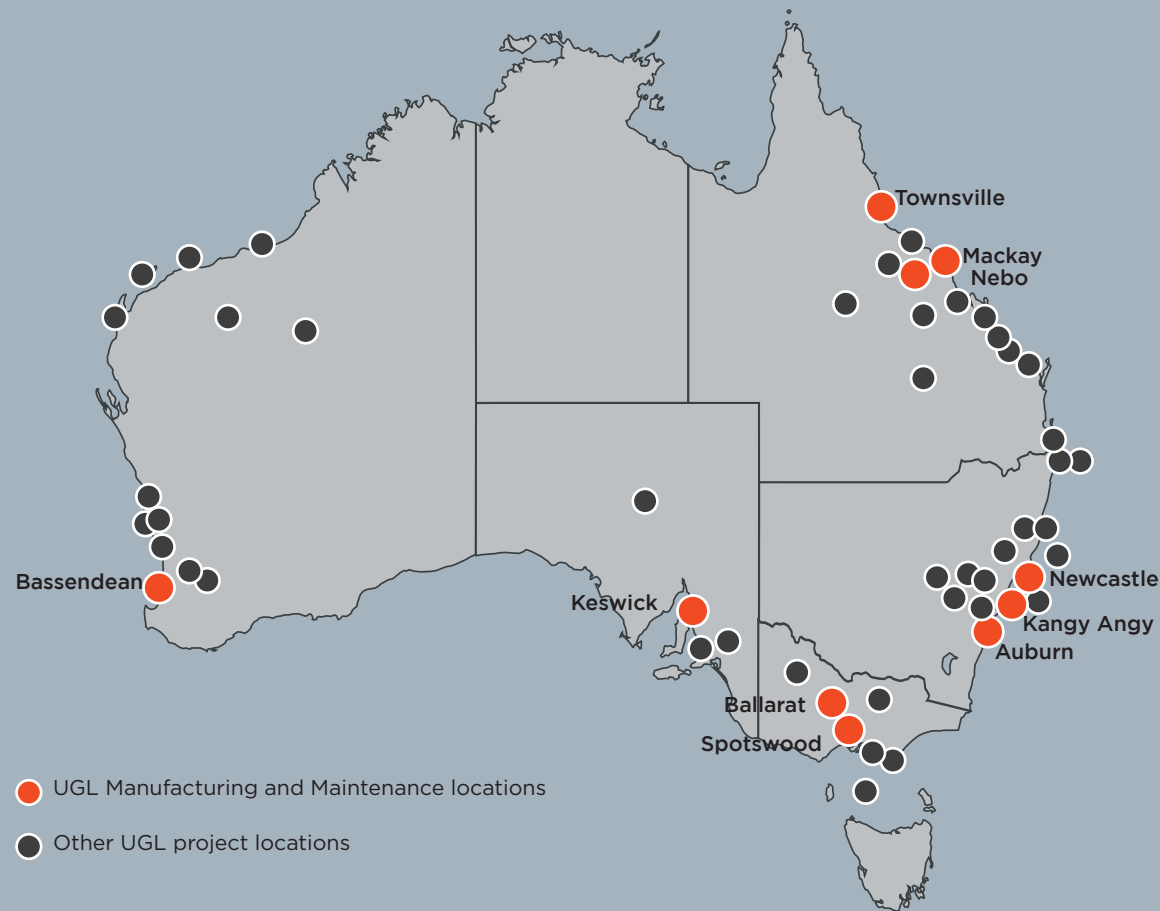
Our company has a rich history in Australia dating back to 1899. Since then, we have grown to be a market leader in many of the sectors in which we operate.

We work with some of the most important companies and governments in Australia and around the world, playing a vital role in people's lives every day.

Across our head offices and 25 operating sites, our 8,000 people keep Australia moving through our transport manufacturing, maintenance and operations offering. With projects, operations and offices throughout the country, our footprint means we are involved in communities across Australia, providing expertise for our customers, and employment and career opportunities for all Australians.



We design and build rollingstock that safely moves freight and people around Australia.



At UGL, we know what it takes to build and maintain locomotives and wagons.



Manufacturing and maintenance are in our DNA and we wear our Australian Made trademark credentials with pride. We are Australia's largest specialist rail engineering company and the only Australian manufacturer of freight locomotives.

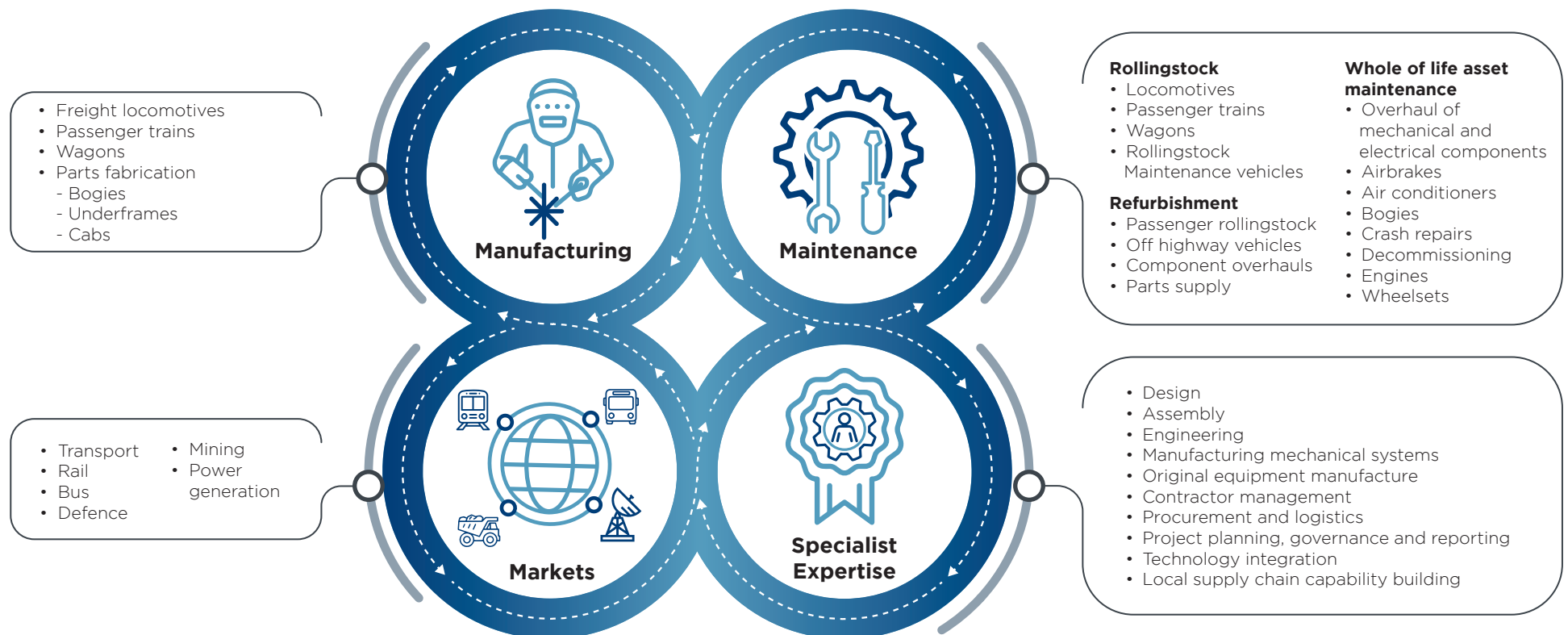
We design and build rollingstock including freight locomotives, passenger cars, freight wagons, bogies and sub-assemblies. If it moves on rail or is used for heavy transport, we are ideally placed to design it, make it or maintain it.

Our teams of engineers and other specialists are locally based and offer the full scope of manufacturing and maintenance planning and delivery services including refurbishment and whole of asset life management.

With our national footprint and large-scale workshops, we have the capacity to tackle the heaviest engineering tasks.

Our services and capabilities

We do it all, end-to-end, to make procuring, manufacturing, managing and maintaining rollingstock and transport solutions easier.



The C44ACi has established a reputation in the national rail freight industry as Australia's premium locomotive.



Leading through design

Locomotives

Every part for every locomotive and bogie we make is built to last and built to work in some of the toughest conditions in Australia.

And when it comes to tough, our industry leading C44ACi diesel electric locomotive stands out in front. Proudly built in UGL's Newcastle facilities, the C44ACi has established a reputation in the national rail freight industry as Australia's premium locomotive.

Together with our long-term technology partner, Wabtec, we produce a 4,400 GHP, standard gauge, AC locomotive solution that can be configured to suit a wide range of haulage requirements. Designed for flexibility, it delivers high performance for heavy haul and high-speed freight operations across Australia's vast and challenging track conditions.

Building on the success of the C44ACi, our new fuel-efficient and environmentally compatible C44ESACi locomotive is being recognised as the most technologically advanced, heavy haul locomotive in the world.

The C44ACi at a glance:

- Mass convertible from 130t to 139t allowing operational flexibility to run on most track axle loads
- Able to haul heavier loads with GE's unique AC individual-axle traction control technology that significantly reduces wheel slip
- Outstanding power output equipped with a 4,400 GHP Wabtec engine
- Meets current Australian emissions requirements
- Isolated operator cab mounting to reduce vibration and noise transmission
- Ergonomically designed low-noise operator cab offers a well-organised, clean and neat style for maximum efficiency.
- Equipped with UGL's proprietary FlexiCurve bogies to reduce wheel flange wear on curves.

At a glance: C44ACi locomotive

Gross Power	4500 Hp
Traction Power	4356 Hp
Traction Motors	5GEB30
Tractive Effort - Starting	600 kN
Tractive Effort - Continuous	520 kN
Mass	130t / 134t / 139t
Axle Load	21.7t / 22.3t / 23.2t
Bogie	UGL Rail high adhesion, FlexiCurve bogie
Maximum Speed	115 km/h
Fuel Capacity	13,500L (limited to 7,300 L in 134t configuration)
Engine	GE7FDL16, 16 cylinder, 4 stroke turbo charged EFI

With a track record of outstanding performance over more than 70 years, UGL's C44ACi locomotive continues to evolve to meet the changing climate for transport, and our customers' needs for hybrid, retrofitted and alternative energy solutions.

Wagons

We design, supply, test and support the entire spectrum of rail transportation products and services.

Over the past 60 years, we've built and delivered more than 11,000 wagons in 40 wagon types.

Whether it's for hauling cattle or containers, ballast or bulk liquids, we have the in-house wagon manufacturing expertise to design, build and deliver. We also audit and sub-contract the supply of partial and full assembled wagons from international suppliers.

Our disciplined, end-to-end approach includes project, design, quality and warranty management for each wagon program to make working with UGL a seamless experience for customers.



Wagon Type	Build Location	Year	Qty
Ballast	Broadmeadow	1978	10
Cattle	Broadmeadow	1959-1970	100
Container	Bendigo	1997	30
	Bassendean	1998	74
	Broadmeadow	1961-1981	575
Hopper	Taree	1986	55
	Ballarat	2001-2003	132
	Bassendean	1997-2011	5171
	Broadmeadow	1973-2000	1142
	Taree	1986-2010	1356
Tank	Townsville	1996-2010	1960
	Bassendean	1999-2011	12
	Broadmeadow	1974-1981	33
Well	Townsville	1998-2007	145
	Broadmeadow	1994	290

Wagon Type	Build Partner	Year	Qty	Scope
Well Wagon	CSR Zhuzhou	2005	25 by 2 pack	Bogies assembled in country
Well Wagon	CSR Zhuzhou	2005	19 by 5 pack	Bogies assembled in country
Ore Hopper	BECY	2014	30	Internal lining, DG, Coupler applied in country
Grain Hopper	BECY	2018	128	Type Tested and Commissioned in country
Container	PT Inka	2020	262	Type Tested and Commissioned in country
Container	PT Inka	2021	2	Type Tested and Commissioned in country
Container	PT Inka	2022	450	Final Assembly, Type Testing and Commissioning in country
Well Wagon	BECY	2022	110 by 2 pack	Type Tested and Commissioned in country

Passenger rail cars

Our passenger cars are designed to transport thousands of commuters throughout Australia every day.

Whether it's an Oscar, Tangara or Hunter fleet, we are accustomed and proficient at building and maintaining new passenger cars & rollingstock. We are delivering for some of the largest and most passenger-intensive rail systems in the country. For the New South Wales Government, our proven Australian know-how and manufacturing expertise has been used to modernise their passenger experiences through a range of fleet replacement projects.

With each passenger car we manufacture and maintain in Australia, we are proud to be creating local jobs and partnering with local suppliers.

We are also contributing our local expertise to world-class consortia delivering the next generation of passenger trains. With our joint venture partners, we are delivering maintenance and asset management services for the \$3 billion New Intercity Fleet (610 passenger cars) and \$1.26 billion Regional Rail (117 rail cars) projects.



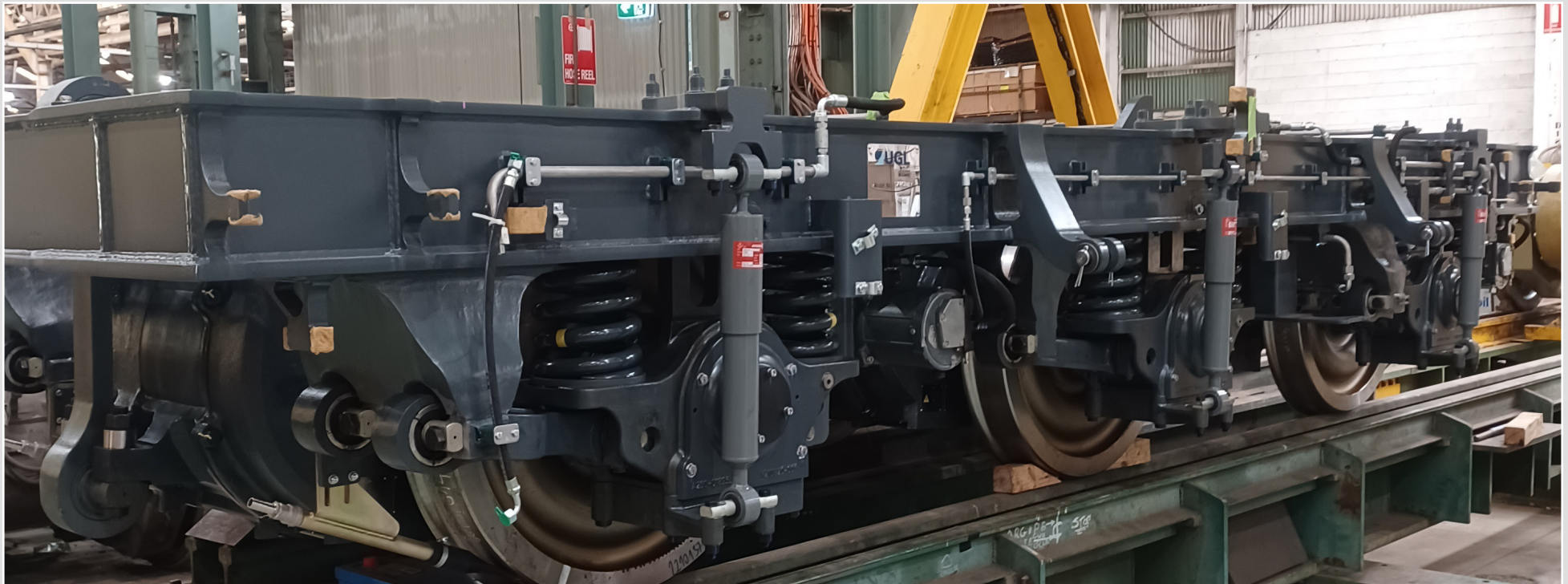
Bogies

We know what it takes to get freight moving so we are continually looking for opportunities to make even better products at a reduced cost to customers.

FlexiCurve™ is one of UGL's latest product innovations – a premium locomotive bogie to reduce wheel flange wear on curves. For heavy haul projects, it delivers track friendly, lower mass steering.

With 660 orders already supplied to customers around the world, this Australian-engineered lightweight fabricated steel product features simplified manufacturing and delivers world-class performance through state-of-the-art design:

- Compact design maximising underframe space (more space/mass for fuel)
- Production optimised frame (lower cost)
- Low parts count
- Common suspension components.



Maintaining excellence

We know maintenance and we excel at it.

What sets us apart is our focus on operational value and superior customer experience.

Since our first wagon project in 1899, UGL has forged a reputation for excellence in maintaining rail fleets of all sizes and configurations to deliver innovative, sustainable transport solutions only achievable by rail.

We are world-class maintainers with the national reputation built by our workforce of highly skilled trades and professionals as proof.

We maintain and support more than 600 locomotives for some of the largest rollingstock fleet operators from our facilities across Australia.

How we help

- Preventative maintenance
- Heavy maintenance and overhauls
- Component overhauls
- Low and high voltage
- Mechanical
- Reliability engineering
- Supply chain services
- Aftermarket services



The legendary Ghan, maintained by UGL

Refurbishment and upgrade

In the lifecycle of rail assets, we know there comes a critical point to decide whether to upgrade or renew.

Refurbishing and upgrading can be further complicated as certain parts may no longer be available from the original equipment manufacturer and may need to be replaced. Often, higher safety requirements must be met.

We help our customers defer new asset investment costs and extend the life of their assets through our nation-wide refurbishment and upgrade services centres. We employ innovative salvage capabilities to restore and renew assets to near-original condition and specifications.

We know rail and transport systems are complex, and so too is the vast range of engineered parts required to keep them running smoothly and safely. Obsolescence management parts is emerging as a critical business driver, and UGL is uniquely equipped to respond. When it comes to replacing parts for ageing fleets, we produce everything from light fittings to door handles, pressure gauges, to valve stems. Beyond fabricating parts, we manage it all from risk assessment to product development, testing and design validation and supply.

How we help

- Decommissioning engineering support
- Major and minor component overhaul
- Procurement and logistics
- Testing and commissioning
- Safety engineering
- Spare parts procurement and supply chain management
- Specialist technical studies
- Obsolescence management.



Mining and heavy mobile equipment

Wherever there's a tough job to be done, we have the parts, and the smarts, to deliver it. We provide Australia's mining industry with cost-optimised plant overhaul, service exchange units and parts supply solutions.

What sets us apart is our depth of engineering and technical expertise, our competitive pricing, and our reputation for delivering high quality and efficient turnaround.

We offer a national workshop support network with mobile repair service, fleet maintenance planning and technical support, through our dedicated workshop facilities in Newcastle NSW, Bassendean WA and Mackay QLD.

How we help

- Heavy mobile equipment maintenance planning and reliability support
- Off highway vehicle (OHV) drivetrain component service exchange program including wheel motor, alternator, blower, front corner assembly and grid box overhaul
- Dragline and shovel machine maintenance including field service support, motor servicing, overhaul motor install and removal
- AC and DC CHPP motor overhaul
- Pump, generator, alternator and fan overhaul
- Balancing, light machining and painting
- Switchboard manufacture and overhaul
- Motor and cable testing
- Shutdown support



Decarbonising with UGL

Like our trains, we are not standing still. We are designing a cleaner, greener and smarter transport future.

We recognise sustainability as a long-term, dynamic and strategic imperative for ourselves, our employees, our customers and the communities in which we work.

At UGL, we are ideally positioned to assist customers and governments in their transition to a more sustainable future.

Our Sustainability Plan 2025 has a focus on delivering decarbonisation outcomes for customers through our leading engineering and delivery capabilities.

Our decarbonisation roadmap recognises our customers have made substantial investments into diesel powered assets with significant remaining life. Our alliance with leading technology partners means we can bring to market solutions that meet our customers' commitments to make progress towards zero emissions.

Low Emissions Freight Rail

UGL is Australia's only manufacturer of Australian-made locomotives. We are striving towards a new generation of Zero Emissions Vehicles.

Transitional Technologies

We are exploring transitional technologies and developing options for reducing the lifecycle cost of these assets as we prepare for alternate locomotive power. For example, we are investing in the capability and expertise to transition diesel-powered locomotives to battery power which significantly reduces emissions. We have also extended battery technology to other areas of our business and are driving several technology breakthroughs that boost transit efficiency and reduce emissions and pollutants.

By packaging a solution that can be retrofitted into existing locomotives, we are striving to:

- Reduce the cost of operation as the cost of diesel increases
- Reduce nitrogen dioxide and carbon dioxide emissions
- Design mechanical enhancements to aid fuel saving.

Valuing our communities

We are dedicated to creating lasting relationships and sustainable investments with Aboriginal and Torres Strait Islander, and local communities in which we operate. Our targets and commitments are detailed in our Sustainability Plan 2025 and Reconciliation Action Plan 2022-2025.

Want to know more about how UGL can support your company's sustainability objectives?

Contact us at mm.sales.inquiries@ugllimited.com for an in-person briefing.



UGL has been a proud member of the Infrastructure Sustainability Council of Australia since 2017

Greening solutions

Introducing EVO

UGL's C44 Evolution locomotive is the most technologically advanced, fuel-efficient, and environmentally compatible diesel electric locomotive in Australia and will further boost rail's credentials as the most environmentally sustainable form of transport.

Designed and manufactured in Newcastle, the EVO is better for the environment with lower emissions and better fuel efficiency than anything Australia has seen before.

The new locomotive features technology that reduces emissions and fuel consumption, reduces maintenance costs, and increases the reliability of operations. From a total cost of ownership perspective, the EVO offers an impressive return on investment.

It will meet and surpass a number of Australian and global emissions measurements including the stringent USA Tier 3 standards for particulate matter.

New EVO locomotives are currently in production. Orders are being accepted and delivered in line with customer commitments and available manufacturing capacity.

TRAPER 2 Intelligent Simulation Software

We are helping rail customers improve their train operations with our TRAPER 2 simulation software – a powerful, cost-effective tool for modelling train operations ranging from the simplest of haulage tasks through to multiple interactive journeys. Whether it's better understanding the impacts of driver capability, braking systems, mixed consists, power usage or identifying ways to optimise fuel usage, section times, throughput and rail asset condition, TRAPER 2 delivers deep insights through interactive graphics and modelling for a range of train operations.



EcoRun; potential fuel savings of up to 9%

UGL's EcoRun innovation is an in-cab driver advisory system that minimises energy consumption and optimises trip duration.

Developed by UGL engineers, EcoRun can be fitted to any class of locomotive to assist the driver to achieve optimum efficiency on all routes across Australia. The system uses a description of the train and route terrain to provide power setting recommendations to the driver for efficient use of the vehicle.

EcoRun is delivering excellent results with potential fuel savings of up to 9%.

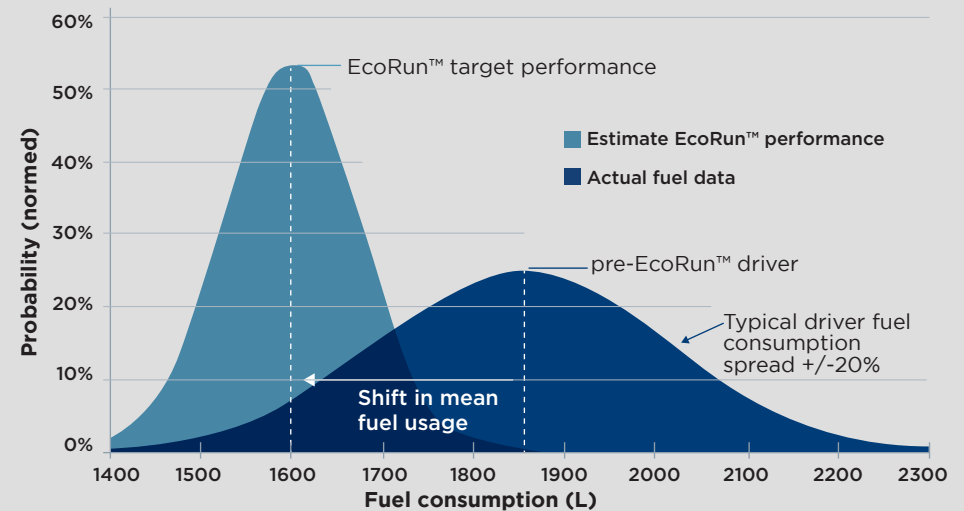
Zero emission buses


We are investing in the next generation of public transport with zero-emission buses (ZEBs) offering an effective and efficient way for Australian communities to reduce their carbon footprint.

Through collaborative arrangements with assemblers and technology integrators, we bring a unique combination of expertise in ZEB solutions, adding value through:

- Manufacture and assembly of components and bus bodies
- High levels of local content at State and national levels
- Warehousing and inventory management
- Field service support with qualified technicians.

Our commercial models are flexible, ensuring intellectual property is protected to the level desired by the owner.





What sets UGL apart
is our people, together
with our long history of
delivering reliable, world-
class products and our
commitment to standing
behind their performance.



Keeping Australia moving since 1899

UGL has long held a key role in rail rollingstock manufacturing, maintenance as well as general engineering with roots that extend back to the 1890s.

What sets UGL apart is our long history of delivering reliable, world-class products and our commitment to standing behind their performance.

By working closely with our customers, we provide long-term cost-optimised maintenance and upgrade strategies across an extensive network of workshops throughout Australia.

Over recent years, UGL has further expanded into public transport network and rail infrastructure, and assets operations and maintenance.

At the core of our commitment to customer success and sustainable communities is being a trusted partner – responsive, collaborative and disciplined. We connect that ethos with the skills and experience of our customers, partners, suppliers and wider stakeholders, because we believe we achieve the greatest results together.

Leading the way in
sustainable manufacturing
and maintenance solutions



For more information please contact UGL:

Level 8, 40 Miller Street, North Sydney, New South Wales, 2060, Australia
T: +61 2 8925 8925
E: mm.sales.inquiries@ugllimited.com

UGLLIMITED.COM

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GET IN TOUCH
WITH US

