ASIA PACIFIC MAGAZINE





SADLEIRS HITS TOP GEAR

Euro 6 Cummins X15 in the spottight



LIVING THE DREAM

Cummins welcomes 69 new apprentices



FULL THROTTLE AT PNG MINE Cummins' key rote at OK Tedi mine







'Not just another transport company...

Passion is driving productivity at Dynes Transport, an iconic New Zealand fleet.

X FACTOR

Cummins' new generation 15-litre engine rated at 660 hp will be a

top talking point at the Brisbane Truck Show. At the HELM of innovation

Cummins' fuel agnostic capability with its X15 engine platform will be on display at the Brisbane Truck Show.

Powertrain integration: A win for truck operators

The remarkable transformation of Cummins in recent years to become a genuine powertrain supplier will be in evidence for the first time in Australia at the Brisbane Truck Show in May.

Leading the pack with a 10

Cummins' new fuel agnostic X10 engine will be showcased at the Brisbane Truck Show.

and buses in partnership with key

Cummins unveils hydrogen ICE Cummins has developed a hydrogen internal combustion engine for trucks

technology partners.

Sadleirs hits top gear

Sadleirs has rejuvenated its Perth-based roadtrain business with the addition of seven new Cummins X15 Euro 6-powered Kenworths.

Living the dream

A comprehensive report on the importance of apprentices to Cummins' operations in Australia, New Zealand and PNG.

Low profile, high standards

Despite a highly visible and impeccably presented fleet, McNaughts Transport of Finley, NSW, is the quintessential quiet achiever.

Powerful medicine

Cummins' proven expertise in critical power installations at major hospital projects is a key reason for its involvement in the new \$1.5b Footscray hospital in Melbourne.

Full throttle for PNG mining lynchpin

Cummins has long played a key role at the OK Tedi copper and gold mine in Papua New Guinea which is commissioning a new haul truck fleet in 2025.

Proactive - not reactive -

Cummins' PrevenTech for Mining is a proven maintenance solution that offers an array of benefits for the industry.

'We've got the advantage...'

Mining services firm National Group makes major investment in fleet to support clients.

In carbon reduction mode

Cummins has acquired the assets of First Mode, a leader in retrofit hybrid solutions for mining and rail operations

Rio Tinto's renewable diesel move

Rio Tinto has acknowledged Cummins for its transition from conventional to renewable diesel for all heavy mining equipment at its Kennecott Bingham Canyon copper mine in Utah.

Cummins extends legendary B-series platform

> Cummins has unveiled an update to its legendary B-series platform, the new B7.2, the largest B-series engine ever with its 7.2-litre displacement.

In recent years, Kobelco has added new Cummins-powered hydraulic excavators to its offerings.

At the cutting edge

Campbell Gilmour has had time-honoured involvement in New Zealand's trucking industry as a driver, fleet manager and fleet owner.

Pumped up

Cummins has recognised National Pump & Energy (NPE) for commissioning the 500th Cummins-powered water pump in its national fleet.

Holograms drive Cummins' parts authentication

Cummins steps up the fight against counterfeiters with a new parts labelling system.

FAILED! Non-genuine QSK engine parts tested

> A Cummins engineering team has carried out extensive testing of 106 non-genuine QSK engine parts from a recognised supplier.

400th Cummins engine for VLocity

Cummins has delivered its 400th QSK19 engine for Victoria's world-recognised VLocity trains.

Cummins' impact on communities Stories highlighting community work carried out by Cummins employees.

Cummins Asia Pacific Magazine ISSUF 4 2025

A powerful start to 2025

As we power into 2025, we can look back on the previous year with a great deal of satisfaction. My sincere thanks to our many loyal customers who rely on us for their success, and also to our employees, the strength behind our brand in driving our aspirational goals.

Looking forward, we are certainly facing uncertain times. However, in the face of this uncertainty you can be assured that our 106-year-old company has endured many business cycles and we are well equipped to navigate these cycles now and into the future.

The culture and values of our company are the foundation of our success, and they will forever remain strong. We will continue to build relationships with our customers and improve customer satisfaction. In the meantime, we will be driving cultural shifts that are critical to position us for the future success, including: decide and execute swiftly, clarify and prioritise, and drive accountability for outcomes.

The transformation of our company in recent years to become a genuine powertrain supplier – from engine to transmission to axles and brakes – is a remarkable achievement. As you'll read in our special five-page Brisbane Truck Show preview, centerpiece of the Cummins stand will be a world-first display showing the integration of Cummins X15 engine, Eaton Cummins 18-speed Endurant transmission and Meritor drive axes and brakes. If you're attending the show, make sure you head to the Cummins stand to catch up with our truck engine business team. Our new generation X15D rated at 660 hp - the highest ever output for a Cummins truck engine – is sure to be a popular discussion point!

Speaking of investment in our talents, I am delighted to share that we have welcomed 69 new apprentices to the Cummins South Pacific family in 2025. This marks significant progress in building a diverse and skilled workforce. We are proud to be exceeding industry benchmarks and continuing to support the development of talented individuals who are ready to make an impact in their careers.

So, there's a lot to read in this issue – about our customers, our products and projects, and our people – as Cummins continues to evolve at incredible pace to meet the ever-changing needs of the future.

As we look ahead, I am confident that the coming year will bring even greater success, driven by our technology transformation, cultural shifts and strong partnership with our customers. With the unwavering commitment from our employees, we are ready to embrace new opportunities, overcome challenges and

achieve new heights together!

Annie Chu

Executive Managing Director Cummins Asia Pacific

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Another value is being "nimble", not over-complicating the business as "we understand the value of agility". The importance of its people, who must be accountable, is also emphasised: "We look after our people and their families, and our people look after our company."

"We focus on logistics environments that are challenging," states Horan with emphasis. "We go after the tough stuff... it's about being productive and utilising our logistics expertise to provide custom packages that deliver high value for our customers.

"The reliability and performance of the gear we have at our fingertips means we can scale and do things other can't, that's why we've been able to grow our business and that's why customers rely on us. It's a combination of our people and our gear."

Long-standing partnership

The start of Dynes' partnership with Kenworth and Cummins dates back to the mid-70s when a W924 Kenworth powered by a small cam Cummins NTC350 was put into service.

"The Kenworth brand is important to us because of what it offers in terms of total life costs. The back half of an asset's life matters most and that's where Kenworth is strongest," Horan states.

"The brand also plays a big part in attracting quality drivers, drivers who are looking for a premium product to drive because it's their workplace.

"Our long-standing partnership with Kenworth and Cummins is a package deal that gives our drivers confidence. I've talked to numerous drivers who say they are at Dynes because we have the best of the best gear here and we don't compromise

Horan hastens to add: "DAF is a very useful platform in certain parts of our business that need good visibility, and it also caters for our older drivers with its European comfort."

Trust is everything

"The mantra at Dynes is that if our partners go the extra mile for us we go the extra mile for them. Loyalty to our partners is

important especially when the going gets tough," declares Horan.

"Kenworth and Cummins have guided us through 50 years of business, through all the recessions and helped grow our

"Trust in partnership is everything, and we've got an awesome partnership with Jade Whiteman and the Cummins team in New Zealand."

He points out that Dynes' focus is on maximising its assets, so the fleet has to be diversified because New Zealand is limited

"Most of our trucks are useful in more than one sector. The twist lock design we have developed enables our trucks to switch between milk tanker, log and curtainside haulage so we're keeping our assets as busy as possible."

The company also has a keen eye on utilising hydrogen to power some of its fleet. In conjunction with HW Richardson Group, a DAF has been fitted with a dual fuel diesel-hydrogen system which, says Horan, is performing well.

Cutting carbon

"Decarbonisation is becoming a reality for success in the long term," says Horan.

"It is very important to us because a lot of our clients are in the dairy industry, selling product to the world, which becomes more challenging without a zero carbon stamp."

HWR is planning to install two electrolysers so that hydrogen can be accessed locally.

"The great news is that Cummins is well advanced with development of a hydrogen internal combustion version of the X15."

says Horan. We need to stay ahead of the curve and the fact Cummins is innovating in this area gives us confidence that this is the right technology to pursue."

Meanwhile, low-emission Euro 6 DAFs are running in the Dynes fleet and the first Kenworths with Euro 6 X15 engines are entering service.

Academy success

Transporting bulk milk is a core Dynes activity.

With a serious shortage of truck drivers in New Zealand, the Dynes Academy is aiming to overcome the problem by providing industry-based learning to young people.

"We're tackling the fact we're losing drivers to retirement and we need to replace them," says Horan. "The academy is about developing and bringing new talent through our system, young guys and girls who are practically minded and want a hands-on role.

Kenworth and Cummins have guided us through 50 years of business, through all the recessions and helped grow our business.

> "It's teaching young people as much about life skills as it is about getting in a truck. It's about getting the basics right and setting them up for success.

"The recruits are exposed to different jobs where they have to make decisions, and they get experience in class 2 trucks doing various local deliveries including picking up waste tyres.





(15D is an entirely new -litre Cummins platform.

Cummins' new generation 15-litre engine rated at 660 hp will be a top talking point at the Brisbane Truck Show.

The X15D – or PX-15 as it is known in Paccar's newly-released DAF XG cabover – is an entirely new 15-litre Cummins platform, available only with Euro 6 emissions compliance.

"Cummins has taken internal combustion to the next level with the X15D," says Sean McLean, Director and General Manager of On-Highway Business for Cummins Asia Pacific.

"It delivers the highest-ever outputs for a Cummins truck engine while setting new standards for fuel efficiency at ultra-low emissions levels."

The top rating is 660 hp at 1800 rpm backed up by massive peak torque of 2360 lb ft which extends from 1400 rpm all the way back to

This rating eclipses the existing X15 peak outputs of 625 hp/2050 lb ft and enhances Cummins' engine downspeeding strategy for improved fuel economy.

This strategy is aimed at lowering cruise rpm for fuel efficiency gains while at the same time providing the performance to meet both driver and trip time expectations.

225 kg weight reduction

Another key feature is the X15D's dry weight reduction of 225 kg compared with the current X15.

A sculpted iron block and composite oil pan are among the weight saving features that result in the X15D having the highest power-to-weight density in the industry.

The lighter engine is also a big advantage in cabover applications, providing significantly reduced front axle tare weight.

The latest evolution of Cummins' XPI (Extreme Pressure Injection) fuel system is used on the X15D as is a standard wastegate turbocharger.

Euro 6 emissions compliance is achieved with single module aftertreatment technology that integrates both the diesel particulate filter (DPF) and AdBlue SCR system.

Australian release

The first example of the new 15-litre platform is already underway with the PX-15 branded engine in Paccar's new DAF XG cabover.

ZF's automated 16-speed TraXon transmission harnesses the high torque of the PX-15 and drives through to Cummins-Meritor MT21-165 rears.

Gross combination mass (GCM) rating of the DAF XG is 97 tonnes.

The X15D will be available for other truck brands to meet Euro 6 requirements into the future, with higher GCM applications in Australia following further field testing and validation.

Eagerly awaited will be an Eaton Cummins automated 18-speed Endurant transmission to handle the 2360 lb ft torque rating.

"Initial field testing of the engine has focused on B-double type applications." says Sean McLean.

Field testing

"Eighteen units rated at 660 hp have been involved in the validation program with customers, accumulating around six million

"The program has met our objectives and that was to gain feedback on fuel economy, performance and durability," he says. "We've had great feedback, especially on driveability and torque."

He points out that Cummins will continue to field test in higher gross weight combinations to ensure durability and performance of the X15D prior to release in these applications.

The X15D is part of Cummins 'fuel agnostic' platform known as HELM – Higher Efficiency, Lower emissions, Multiple fuels - which comprises diesel, natural gas and hydrogen internal combustion engines derived from a common base with high

X15D has a dry weight reduction of 225 kg compared with existing X15.



parts commonality.

PX-15 was subject to

The program has met our objectives and that was to gain feedback on fuel economy, performance and durability.

> X15D features highest ever outputs or a Cummins truck engine.

Cummins' fuel agnostic capability with its X15 engine platform will be on display at the Brisbane Truck Show.

At the HELMof INNOVATION

With its fuel agnostic HELM platform, Cummins is advancing internal combustion engine technology with further improvements in efficiency as well as compatibility with cleaner fuels like hydrogen and natural gas.

"HELM – higher efficiency, lower emissions, multiple fuels – captures the innovation that is powering us forward," says Sean McLean, Director and General Manager of On-Highway Business for Cummins Asia Pacific.

The HELM engines are an important element of Cummins' Destination Zero strategy to go further, faster to reduce the greenhouse gas (GHG) and air quality impacts of its products.

The industry-first fuel agnostic platform basically comprises one block and three cylinder head options – a compression ignition head for diesel, and spark ignition heads for natural gas and hydrogen (a zero carbon fuel at the tailpipe).

So, the different engine versions have a high degree of parts commonality.



Internal combustion engines have a significantly lower upfront cost than fuel cell or battery electric installations, require little modification to today's trucks, and provide familiarity for truck operators and technicians.

The advanced diesel version of the HELM X15 is currently being introduced in Australia in Paccar's DAF XG rated at 660 hp and branded the PX-15.

The natural gas version of the X15 – the X15N – is now also in full production, at Cummins' Jamestown engine plant in the US, while the hydrogen version – the X15H - is expected to become available later in the decade.

The X15N, the first natural gas engine to be designed specifically for heavy-duty truck applications, is offered with maximum outputs of 500 hp and 1850 lb ft of torque.

The X15H will have higher peak outputs of 530 hp and 1900 lb ft of torque.

Key features of the HELM engines include

high cylinder pressure capability, doubleoverhead camshafts. variable valve timing, high pressure fuel injection,

reduced parasitic loads

and all-new software.

Natural gas X15N is now in full production in the US and winning plaudits for its performance.







The remarkable transformation of Cummins in recent years to become a genuine powertrain supplier – from engine to transmission to axles and brakes – will be in evidence for the first time in Australia at the Brisbane Truck Show in May.

A world-first display showing the integration of Cummins X15 engine, Eaton Cummins 18-speed Endurant speed transmission, and Meritor driveline, axles and brakes - will be in the spotlight at Brisbane.

Cummins' acquisition of Meritor in 2022 was the critical piece for Cummins in being able to rollout a completely integrated powertrain.

Several years earlier, the creation of the Eaton Cummins joint venture for advanced transmissions started the ball rolling for Cummins to expand its capabilities to offer fully integrated powertrain solutions.

First for a truck show

Significantly, the Brisbane show will be the first time the combined forces of Cummins and Meritor are displayed together at a truck show in Australia.

While the Meritor business now operates under the banner of Cummins Drivetrain and Braking Systems (CDBS), the Meritor name is retained for drivelines, axles and brakes.

Industry-dominant drive axles spearhead the Meritor presence in Australia and New Zealand but the actual Meritor product portfolio is vast, catering for various commercial vehicle, military and industrial applications.

There's an amazing array of drive axles for single, tandem and tri-drive applications, along with front axles (drive and non-drive), drum and disc brakes, independent front suspensions, trailer air suspensions, power take-off units and even tyre inflation systems.

Of course, the eAxle is where the future lies in terms of full electric integration... but that's another story!

Lower cost of ownership

"The Brisbane show will be a great opportunity to see the result of the Cummins-Meritor integration and the benefits it offers customers as we bring together complementary technologies to seamlessly enhance efficiency, performance and lower emissions across the powertrain system," says David Cole, Managing Director of CDBS Australia.

"For customers this means lower total cost of ownership and having confidence in system dependability, backed by comprehensive Cummins support across the

The Meritor 160-series tandem drive axle has been proven in Australia over many years of use.

The MT21-165GP, the most widely used tandem, is rated at a nominal 110 tonnes Gross Combination Mass (GCM) and has recently been updated with two different specs for Australian linehaul and vocational

In the linehaul version, the oil pump has been engineered out of the tandem axle which provides linehaul customers with a fuel economy improvement of up to 1.5%.

The vocational version retains an integrated pump enabling greater longevity when a broader and more demanding application is required.

Interestingly, the MT21-165GP is used in the new DAF XG, powered by Cummins' entirely new 15-litre powerhouse, the X15D, which delivers the highest ever outputs for a Cummins truck engine – 660 hp and a massive 2360 lb ft of torque.

SCAN or CLICK

Local modifications

The Meritor 160-series drive axles are assembled in Australia with significant local modifications to both the axles and brakes to ensure durability.

The Meritor drive axle portfolio in Australia extends right up to heavy haul applications where the RZ78-388G is used for tri-drive applications and the P610 hub reduction tandem offers a GCM rating up to 250 tonnes subject to application approval.

Meritor Permalube RPL drivelines and universal joints are another critical link in the Cummins integrated powertrain, with many customers in B-double linehaul applications regularly seeing over one million kilometres of trouble-free performance.

These RPL drivelines are permanently lubricated and sealed for life to reduce maintenance costs.

Parts availability through the Cummins and Meritor dealer network, best-in-class field support and proven product efficiency and durability are the key elements that ensure Cummins' powertrain integration is a win for truck operators.



Cummins' new fuel agnostic X10 engine will be showcased at the Brisbane Truck Show.

LEADING THE PACK with a

The X10 is a brand new 10-litre engine platform to be launched in North America and Europe in 2026 and other global markets at a later stage.

While the X10 will have fuel agnostic capability and be able to run on hydrogen and natural gas, the diesel version will be available first, compliant with the ultra-low U.S. EPA 2027 and Euro 7 emission regulations.

Diesel will remain a critical technology for the on-highway market for years to come, and Cummins will continue to support it.

"We are committed to advancing diesel technology while our markets and our customers need it to run their businesses," says Sean McLean, Director and General Manager of On-Highway Business for Cummins Asia Pacific.

The diesel X10 will be available with ratings up to 450 hp and peak torque of 1650 lb ft, outputs that will suit short haul and regional trucking operations as well as bus and coach applications.

The 10-litre engine features the latest evolution of Cummins' XPI fuel system, with extra-high pressure injection and an electronic wastegate turbocharger, enabling fuel savings of up to 7% compared to equivalent Euro 6 engines, dependent on duty cycle.

For further reductions in carbon emissions, customers can use B20 or renewable diesel.

A key design feature of the X-series platform is a double overhead camshaft (DOHC) realising advances in combustion and thermal efficiency. Friction losses across the engine design have also been reduced and a sculpted block contributes to weight saving.

The engine can be paired with a variety of transmissions depending on the application including the Eaton Cummins Endurant automated gearbox to enable additional driveability benefits and efficiency gains.

The X10 is also equipped with Acumen, which provides digital connectivity and direct, immediate access to a range of applications and capabilities.

These capabilities provide value throughout the lifecycle of the engine and include over-the-air calibration, predictive service recommendations and additional features that enhance uptime.

X10 is a brand new 10-litre platform with maximum outputs of 450 hp and 1650 lb ft of torque.



SCAN or CLICK



Cummins has developed a hydrogen internal combustion engine (H2-ICE) for commercial vehicles in partnership with key technology partners.

The 6.7-litre engine, using zero-carbon hydrogen fuel and equipped with an aftertreatment system, delivers a more than 99% reduction in tailpipe carbon emissions and ultra-low NOx, compared to the current diesel engine standard (Euro VI).

Named 'Project Brunel', the project was match-funded by the UK Government and facilitated by the Advanced Propulsion Centre UK (APC). Johnson Matthey, PHINIA and Zircotec were the project partners.

At an event held at the Cummins Darlington UK facility, Cummins and its partners discussed how H2-ICE technology can meet the efficiency, performance and carbon emissions reductions required to accelerate the decarbonisation of commercial vehicles.

Viable power option

Jonathan Atkinson, Executive Director –
Product Strategy at Cummins, said: "Project
Brunel highlights the power of collaboration
between industry leaders and underscores
our ongoing commitment to industry
decarbonisation

"This project has successfully delivered a viable, familiar power option that meets the operating requirements of today's commercial vehicles – with zero-carbon fuel and without the need for a complete vehicle redesign.

"This is a major achievement for Cummins Darlington and for the UK's hydrogen technology leadership.

"We hope the Government recognises this technology's potential for commercial

vehicles beyond 2035 and 2040, to align regulation with other major global markets."

The 6.7-litre engine is based on Cummins' well-established B6.7 diesel platform but reworked to run on hydrogen. It is underpinned by new hydrogen fuel injection technology from PHINIA, aftertreatment catalyst and advanced metals chemistry development from Johnson Matthey, and hydrogen barrier coatings from Zircotec.

While the engine is for medium-duty trucks and buses, the design is scalable to heavy-duty applications, including non-road mobile machinery such as construction and agricultural equipment.

Cummins is already developing a 15-litre hydrogen internal combustion engine for heavy-duty vehicles.

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New Kenworths are operating on triple roadtrain work.

A fleet of new Kenworths powered by Euro 6 Cummins X15 engines is the key to Sadleirs' efficient triple roadtrain operations in Western Australia.

The Euro 6 Cummins is impressive.
Reliability has been very good to date, the drivers love the performance and we've had very good support from Cummins.

There's a strong sense of history at Sadleirs, one of Australia's most established logistics providers.

Family-owned, the company has an incredibly long history dating back to 1829. In fact, it is the oldest family-owned logistics company in Australia.

Sadleirs traces its origins to Lionel Samson & Son, founded by two brothers who established a merchant business in Fremantle on their arrival in Western Australia in 1829. In 1936, the company acquired RC Sadleir, which had opened in 1895.

Today, Sadleirs delivers services across Australia and internationally through multiple divisions, each focused on delivering tailored logistics backed by the kind of timeless customer services that has defined the business since its inception.

While the Sadleirs Resources division is known for its impressive fleet of three-trailer roadtrains powering north through Western Australia's Pilbara and Gascoyne regions to service the mining, energy and oil and gas sites, the company's reach goes well beyond road transport.

The prominent Sadleirs brand also transverses rail, air and sea routes through its specialist divisions in domestic rail linehaul and global freight forwarding and customs brokerage – demonstrating strong intermodal capability and the scale to support local and international supply chains.

Fleet investment

Sadleirs has invested significantly in its fleet in recent years, with a focus on reliability, efficiency and sustainability. A key part of this strategy was the introduction of seven Kenworth T610 SAR prime movers in 2024, powered by Cummins X15 Euro 6 engines rated at 565 hp.

Projected whole-of-life costs were the key reason the Kenworths were given the nod, says Thomas McAulay, National Assets and Facilities Manager for Sadleirs

Resale value, durability, fuel burn, service support and driver acceptance were among the factors that figured strongly in the analysis of which trucks to purchase.

Significantly, Sadleirs is looking at a lifespan of 10 to 15 years for the T610s.

All seven Kenworths are operating on triple roadtrain work between Perth and Karratha, a one-way distance of 1,500 km, hauling freight for the Barrow Island oil fields.

"We're running at gross weights of around 100 tonnes from Perth to Karratha and around 80 tonnes on the return trip," Thomas points out.

"Our oldest Kenworth has done over 130,000 km and we've had no issues," he adds.

X15 performance

"The Euro 6 Cummins is impressive. Reliability has been very good to date, the drivers love the performance and we've had very good support from Cummins."

Sadleirs is operating the 'Performance' version of the Euro 6 Cummins which is evident in the power and torque curves.

The X15 delivers its rated 565 hp over a wide band, from 1600 to 2000 rpm, while this is backed up by peak torque of 1850 lb ft which extends from 1600 rpm all the way back to 1000 rpm.

Sadleirs' Kenworths are equipped with Eaton UltraShift 18-speed automated transmissions, driving through to 4.3:1 rears.

Thomas points out that the ECM download from one of the Kenworths shows fuel consumption of 1.58 litres/100 km, a running time of 90% in top gear, and average engine speed of 1322 rpm.

"Fuel consumption is very good, in line with our expectations for the X15, and it will only improve when we fine-tune the aerodynamics," he adds, pointing out that rooftop wind deflectors are to be fitted.

The Euro 6 engines also fit with Sadleirs' commitment to decarbonisation and supports its aspirational aim of achieving net-zero emissions by 2035.

The X15 is EGR-free and utilises a standard wastegate turbocharger for Euro 6. Single module aftertreatment technology integrates both the diesel particulate filter (DPF) and AdBlue selective catalytic reduction (SCR) system.

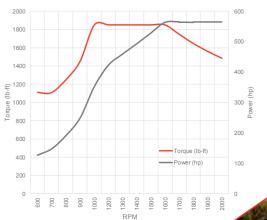
Lower cost maintenance

While Sadleirs relies on OEM servicing of its European trucks, Thomas McAulay is utilising Sadleirs' own workshop to service the Kenworths which he believes will result in lower cost maintenance over the life of the trucks.

"We have a workshop team of 10 and Cummins has been involved in a familiarisation program with our technicians," he points out.

Cummins' support, led by Geoff Ironmonger, is rated highly by Thomas. "When we've wanted something from Cummins, the response has been quick," he states.

565 / 1850 PERFORMANCE SERIES



Impressive power and torque curves of 565 hp X15 Euro 6 rating.

Cummins on-highway account manager Geoff Ironmonger familiarises Sadleirs technicians with X15 Euro 6 engine. Inset: Ironmonger with Thomas McAulay.



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Based at the Newcastle (NSW) branch, Erin Simpson is giving her second shot in trade with a vision to stay for the long-term. Only recently beginning her 30s and giving birth to her child only months ago, she is ready to take on new challenges in this next chapter of her life.

On what drew her to apply for the apprentice program, Erin said she

learned from friends that Cummins was an ideal place to work.

"I've got a lot of friends that work within the transport industry, and they all talk about how Cummins is a pretty good place to work," she said.

"When I did the interview for this opportunity it left a really good impression with me. I wanted somewhere where I would feel included, and Cummins seemed to be just the place where I would find that."

When asked how she found the onboarding program and meeting her team for the first time, Erin responded positively, noting the inclusive nature and opportunity from industry partners as a highlight.

"From day one everyone had taken us under their wing, showed where everything was and took time to get to know us and our stories. Having a 5-month-old baby at home, everyone was understanding," she said.

"We met some people from Tradeswomen Australia and other organisations. Cummins is really trying to help us with our networking and connecting us to people that can help us succeed."

Having enrolled in trade school years ago, Erin did not complete her original course, opting to explore different roles and gain many experiences along the way. Now in a position where she is looking to settle and build a future with her family, Erin has returned to her passion for trade through the apprentice program.

"Compared to the other apprentices, I've already done most of what I have wanted. I've completed half an apprenticeship, moved around Australia, worked in cattle stations and mines!" she said.

"After my apprenticeship, I'd like to do a stint in field service and as I get older, I would use my Cert III in business administration to transfer to an office role. I'm now at a place where I can see myself finishing with Cummins." Based at the Carole Park (Brisbane) branch, Hazeem Deen is no stranger to Cummins products. Hailing from the family behind Deen Bros Demolition Contractors, Hazeem knew since a young age his calling lied within the trade and working with engines.

"Ever since I was seven years old, I was in the workshop sweeping the floor, washing trucks, holding spanners for dad. Doing repairs, it's in my blood," he said.

Prior to starting his current apprenticeship, Hazeem undertook a heavy diesel mechanic course through WECTEC in Springfield, followed by Cert II in Engineering. After submitting his resume to join the apprentice program, the rest was history.

On what his goals are for the next four years, Hazeem simply stated he wants to try his best and make his family proud. He hopes that with Cummins, he will learn the ropes in field service, how to be a manager and eventually have a hand in running the workshop while helping out with the family business.

"Cummins has the leading engines. When you start up a truck with a Cummins engine you know you're going to get a good day's work out of it. You're not going to break down." he said.

"It's the best start in the market, you gotta be proud of that!"





Based in Perth (WA), Shelby has been around cars her entire life, fostering a natural interest in engines. This led her to completing a pre-apprenticeship which sparked her passion to pursue a career working with engines.

Shelby's family directed her towards Cummins as a potential employer.

"It's been really eye-opening, especially seeing the apprentices from other branches since we are all so different but have the same passion for what we would like to do. "Learning about the environment and safety side of things here has also been really good."

On what she's hoping to achieve from her apprenticeship, Shelby states that getting her qualification would be her first step to her future plans.

"After getting qualified, I'm hoping I will be able to go on a mine site and work there for a while. Eventually, I would love to start my own business!" she said.

Meet our apprentices

Based in Pooraka (Adelaide), Ashlee was inspired to pursue the trade pathway by her father who was in the trucking industry. On what she enjoys about the job, Ashlee cites the hands-on approach to the work and the different tasks she can work on daily.

Ashlee first learned of Cummins through her family, having been encouraged by her father to apply for the apprenticeship when it was available.

"When I saw the opportunity to apply on the website, I talked to my dad about it and he said it should be a company I go for because they're very reliable,"

Ashlee stated that the onboarding program had been a good opportunity

to bond with her fellow apprentices and understand the inner workings of the company.

"It's been good to connect with people from other branches around the country and learn about safety, health and the different procedures of how things are done in the company," she said.

"At my branch, we have buddies to work with to make sure we are supported at all times."

Only 20-years-old, Ashlee took a brief break after high school and completed a Certificate II in Automotive Servicing to increase her chance in job hunting. Now at the start of her career at Cummins, she's hoping to further expand her skills portfolio over the next four years.

"I'm hoping that after I finish my apprenticeship, I'll be able to get qualified for field service or move up to a higher position like a supervisor or manager," she said.



Based in Darwin (NT), Seth's passion and experience with engines stretch back to his childhood, helping out his father who worked as a light vehicle mechanic.

Seth discovered the apprentice program while submitting his resume to the local branch, where the workshop manager encouraged him to apply. Flash forward months later, he was officially welcomed as one of the team's newest apprentices.

"Everyone was very welcoming when I got there," he said.

After his apprenticeship, Seth has his eyes set on exploring the marine industry.

"If the opportunity arises, I will definitely stay on with Cummins after my apprenticeship. But a goal of mine in the long-term is to join the marine industry and see what it's like!"



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Bronze is only the beginning

At the 30th Australian Training Awards, Cummins' Apprentice Program team took home bronze place for the Australian Apprenticeships Employer Award category.

The award recognises the efforts in addressing the skill shortages impacting Australia's automotive industry.

"This award is in recognition of the work all apprentice program stakeholders do to support the development of our apprentices at Cummins," said Kate Evans, Training Manager for Cummins Asia Pacific. "This is for the technicians, apprentice supervisors, service team members, apprentice program managers and capability trainers and the functional team members who assist us with the delivery of apprentice onboarding and at various times throughout the year."

Held annually for the last 30 years, the Australian Training Awards celebrates the achievements of individuals, businesses and organisations in the vocational educations and training sector.

With 16 awards up for presentation, the night was filled with a supportive atmosphere along with performances by First Nation artists.







Three finalists in the running

Cummins was a strong contender for HVIA's new Heavy Vehicle Apprentice of the Year Award, with three apprentices making the finalist list.

The new major award acknowledges the individual who has demonstrated exceptional ability as they undergo their apprenticeship in any discipline related to the heavy vehicle industry.

Kate Evans, Training Manager for Cummins Asia Pacific, believes these results are only the beginning for Cummins nominees in the future

"The fact that three of our apprentices have made it this far only shows Cummins is on the right track when it comes to nurturing our talent," said Kate.

"By providing the right resources, support and environment, we can set them up for success early into their careers."

MEET OUR FINALISTS

Adam Pearsall - Cummins Mildura

Adam was recognised for his proactive attitude towards customers. Always trying to reduce downtime during repairs without compromising high-quality results, his work ethic shines through as an inspiration to his team.

Samantha Santi - Cummins Newcastle

During her apprenticeship, Samantha established herself as a role model for other apprentices. She regularly participates in community events to promote the heavy mechanical trade and encourage females to explore the same pathway.

Toby Newcombe

- Cummins Tamworth

Hailing from a family that owns and operates a fleet of coaches, Toby had proven his technical aptitude for the trade. Since the second year of his apprenticeship, Toby has been able to run complete engine overhaul repairs, guiding and directing the qualified tech on the repair.



Tui's advice to apprentices... 'DREAM BIG!'

Tui Toby is a resilient – and very successful – woman. She started working for Cummins as an apprentice in Melbourne 19 years ago.

Along the way, the debilitating effects of breast cancer, as well as having to deal with health issues that beset her three children, have truly tested her resolve.

"I've had awesome support from Cummins leaders both personally and at work," she confides.

We're chatting with Tui while 69 new apprentices, including 30 women, are going through Cummins' extensive 2025 onboarding program in Melbourne in February.

Her advice to apprentices? "Have a goal and dream big. Your dreams can change constantly. Don't be afraid to ask questions. The silliest question is the question you don't ask."

The big move

A New Zealander who came to Australia in 2005 to "have a look around" with her partner and three young children, Tui didn't know what the future held.

She left school when she was 16 and tried a number of career paths in Auckland – merchandising, office administration, computers – without really getting what she wanted most, "hands on" job satisfaction.

Tui learned about Cummins at a careers expo in Melbourne. "I didn't think I'd get a go as an apprentice because I'm a female, but to my amazement Cummins decided to give me a chance," she recalls.

Being a successful apprentice was very important to Tui and she was prepared to give anything a go. "I wanted to develop new skills, I wanted to learn about everything," she recalls.

"Retaining all the info was the biggest challenge initially but the technical aspects got a lot easier as time went on."

After serving her apprenticeship at the Campbellfield and Laverton branches in Melbourne, Tui progressed to the role of workshop manager at Laverton, a position she held for three years and at one stage had a team of three workshop supervisors, 15 technicians and several apprentices.

Not daunted

For some women, doing an apprenticeship as a diesel technician and then becoming a workshop manager would be a bit daunting, but not so for Tui.

"There were new challenges every day and I enjoyed that," she says. "I had people to manage and I dealt with customers too."

She recalls she had a lot of coaching and mentoring sessions, with a focus on managing a team. "The HR people at Cummins were really helpful," she says.

During her time as workshop manager, she earned a reputation for her commitment and willingness to assist others in order to achieve a high standard of customer satisfaction.

Then she took on the role of operations manager for the world-recognised VLocity rail project in Victoria, with responsibility for servicing and maintenance of the Cummins QSK19 engines powering the railcars. One of the most reliable passenger railcars in the world, the VLocity project will take on its 400th QSK19 engine early in 2025.

More recently, Tui has been field service supervisor at Cummins Laverton, another role she has enjoyed.

"I have a great team, they make me look good," she says with a smile. "I organise their schedules and repairs and communicate with the customers."

Tui Toby (far right) with, from left, Mark Luciani, workshop manager Cummins Laverton; Eva Kladas, parts interpreter Laverton; Nic Strong, workshop maintenance coordinator Laverton.

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Despite a highly visible and impeccably presented fleet, McNaughts Transport of Finley, NSW, is the quintessential quiet achiever.

Operating from a head office in a small town with a population of just 2000, the McNaught team has obviously worked hard building relationships with customers and keeping them for the long term.

Importantly, the company has also grown on the back of a culture of looking after the people that do the work.

Obviously a proud family-owned business, the McNaughts are totally content to walk-the-walk rather than talk-the-talk.

Achieving cost-effective life from equipment and maintaining this equipment to the highest standards in high gross weight applications is another strong focus.

The McNaught fleet today comprises around 50 prime movers – Cummins-powered Kenworths are a staple of the operation – and they couple to range of trailing equipment to form A-doubles, AB-triples, B-triples and B-doubles, with gross weights spanning 68 to 114 tonnes.

With bases in Finley, Dubbo and Berrigan in NSW, McNaughts applies its haulage expertise to general freight, a wide range of bulk products including grain and fertiliser, and has high capacity storage facilities for these products.

The company also has a long established relationship with one of Australia's largest rice product producers.

Knowing costs

Daniel McNaught leads the family business today as CEO.

He points out their focus is on business resilience, running the business on their terms and knowing their costs. If there's a problem it's self-inflicted.

Nothing they do is special, it's all about optimisation, looking for better solutions and working the trends better.

As a family company McNaughts works hard at attracting and retaining good people and is proud of its team of employees.

Operations manager Darryn 'Scoota' McDonald has been with the company close to 30 years and has seen it evolve from modest beginnings.

He remembers when he started that McNaughts had four trucks – two T600 Anteater Kenworths with 435 hp Cummins N14 Red Head engines, one Western Star with a 525 hp Red Head, and one cabover Kenworth with a Big Cam 400 Cummins.

Today's Cummins-powered Kenworths are in the hands of a man well-known and respected for his approach to maintenance – Brian Layton.

Brian worked for lan Cootes for 24 years as workshop manager when the IR Cootes operation had a reputation as one of the country's most immaculate fleets.

'Exceptional' support'

He rates Cummins' support as "exceptional", citing Cummins' Newcastle, Wodonga, Laverton and Brisbane branches for special mention.

Discussing engine life, he considers operators are probably "expecting too much" in view of today's much higher demands on equipment.

"Today's trucks are running at higher gross weights while utilisation is higher to counter tighter margins, so engine load factors are consistently higher," he says, pointing to the range of multi-trailer combinations McNaughts operates with gross weights up to 114 tonnes.

The company has settled on a standard X15 rating for its Kenworths – 600 hp with peak torque of 1850 lb ft – to achieve the best balance of performance and driveline durability.

"Engine oil changes are every 40,000 km and we also do oil sampling at this point," Brian point out. "This gives us a very good picture of trends and when engine changeout is likely to occur."

Recruiting mechanics

Drivetrain rebuilds are carried out at the McNaught workshop in Finley where four Filipino mechanics are based. "They're doing a brilliant job," says Brian, pointing out their recruitment has provided skill sets that are often hard to come by in a small town like Finley.

Brian notes that the Kenworths are far from basic-spec units. In recent times, the favoured models are the T909 and K200/220 and all have a fridge, microwave oven, TV, Icepak sleeper cab air conditioning and other options to ensure the drivers are well looked after.

"We're looking and two lives with our T909s, refurbishing them at around 1.2 million kilometres and fitting Cummins X15e5 crate engines," he points out, adding the trucks are still in excellent conditions after 2.4 million kilometres.

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POWERFUL MEDICINE

The new Footscray Hospital is one of the most complex emergency power system projects Cummins has been involved in.

At more than \$1.5 billion, the new Footscray hospital is one of Victoria's largest ever health infrastructure projects.

Cummins' proven expertise in critical power installations at major hospital projects around the country is a key reason for its involvement in the new Footscray hospital.

In fact, the Footscray project is one of five hospital developments and several medical-related facilities that the Cummins Power Generation team in Melbourne is currently involved in.

Due for completion at the end of 2025, the new Footscray hospital spans five buildings and will employ around 5000 people.

With more than 500 beds – an increase of 200 beds over the old hospital – the new hospital will treat around 15,000 additional patients each year and enable around 20,000 additional people to be seen by the emergency department.

The hospital is being delivered as a Public Private Partnership with Cummins having proven experience in hospital-related PPP projects.

Complexity

Four 2500 kVA Cummins Power Generation generator sets and six Cummins DMC8000 digital master control systems are at the heart of the emergency power system.

"The new Footscray hospital is one of the most complex emergency power system projects Cummins has been involved in," says Cummins project manager Nikhil Kathe.

"I want to give a huge shoutout to the Cummins team involved in the project. They are the heroes who have kept it on track.

"The project has been going for five years and has been through several design changes in the last few years. Commissioning of the emergency power system began in mid-November 2024 and is expected to be completed by the start of April 2025."

Team effort

Cummins has had a large on-site team at one stage or another, with up to eight engineers and technicians from Cummins Laverton involved during the construction and commissioning phases.

The team has included project manager Nikhil Kathe, previous project manager Adam Ferrara (2020–2024), sales executive Russell Slocomb, application engineers Kevin Baxter, Nick Rousch and Madonna Tawfik, and technicians Jason Griffin, Prashant Patel, Matt Brown and Sarah Bold.

Long-serving Cummins regional application engineer Kevin Baxter confirms the complexity of the project which involves the six Cummins DMC8000 units networking the third party controls.

These include nine transformers, six HV ring main units, 19 closed transition ATS (automatic transfer switches), 10 load feeder circuit breakers, and two HV incomers from the national grid.

The first of the four Cummins Power Generation generators will be on line within 15 seconds in the event of an outage.

The four 2250 kVA generator sets are designed around Cummins' 60-litre QSK60 diesel engine which are fed with fuel from three 1000 litre tanks in the plant room. Additional bulk fuel supply includes one 50,000-litre tank and three 35,000-litre tanks.

This capacity provides enough fuel for the four generators to run at full load for 2.5 days.

Located on the corner of Geelong and Ballarat Roads, the new hospital will support the increasing demand from Melbourne's booming western suburbs, ensuring families get the care they need close to home.

It replaces the ageing Footscray Hospital on nearby Gordon Street, which was built in the 1950s through community fundraising.







Cummins has long played a key role at the OK Tedi copper and gold mine in Papua New Guinea which is commissioning a new haul truck fleet in 2025.

Full throttle for

Cummins has a long-established relationship with OK Tedi Mining Ltd (OTML) based on trust, service support and product reliability.

In fact, high horsepower Cummins engines have had a presence at the mine for over 30 years, providing high productivity in critical mining equipment.

The first of 15 new haul trucks from XCMG, commissioned early in 2025, are Cumminspowered and will set new standards of efficiency for the mine.

Up to 240,000 tonnes of overburden are mined each day from a pit covering about 2.6 square kilometres. In addition, around 60,000 tonnes of ore are mined each day and delivered to the mill for processing.

Milestones

The history behind OK Tedi and its importance to PNG's development is a story of trials and triumphs.

OTML was established in 1981 to mine the Mt Fubilan copper-gold ore body discovered in the Star Mountains – near the headwaters of the OK Tedi River – in the Western Province of PNG.

This followed the signing of an agreement between the PNG Government and a consortium headed by BHP.

Mt Fubilan was described as a copper mountain with a gold cap after exploratory drilling began in the area in the 1970s. At the time it was believed to be the largest copper deposit in the world.

OTML has come a long way since first production in 1984, with some impressive milestones achieved.

Over these 40 years, the company has mined 5.4 million tonnes of copper, 16.4 million ounces of gold and 38.1 million ounces of silver from the open-cut operation.

Mine life to 2050

OTML became a 100 percent Papua New Guinea entity in 2012 and now has in-principle agreement to extend mine life to 2050.

The company has been a vital driver of PNG's development.

By 2010, OTML was the largest single contributor to PNG's tax revenue. Over the next 26 years to 2050, the company is projected to generate US\$8.5 billion in social benefits including taxes, royalties and dividend payments.

The company has had its fair share of challenges over time, addressing environmental and social impacts.

Massive steps have been taken over the years to improve rehabilitation operations as well as environmental monitoring and mitigation.

The next five years are considered to be a transformational period as OTML reinvigorates the business to ensure longevity and sustainability.

To achieve this goal, the Growth 2050 strategy has been developed with significant investment to extend mine life to 2050 and beyond.

New haul truck fleet

Today, six Cat 6050 excavators, each with dual 38-litre V12 Cummins KTTA38 engines, are the backbone of the operation and are supported with parts and service from Cummins Lae.

A new contractor-owned Hitachi EX1200 excavator with a Cummins QSK23 rated at 760 hp is also joining the fleet.

The first five of 15 new XDE260, 230-tonne haul trucks from XCMG, powered by Tier 2 Cummins QSK60 MCRS engines rated at 2,500 hp, will also enter service at OK Tedi early in 2025.

Cummins is the only global company involved in the mining industry in PNG that owns and runs its branches.

"One of the key reasons customers prefer using our product is because they're dealing directly with Cummins, not through a dealership," said David Leach, general manager of Cummins PNG.

Cummins employs 45 nationals in PNG who work out of two branch locations, Port Moresby and Lae, and most are involved in workshop and field service technical roles.

When rebuilt engines are required for the OK Tedi operation, they are supplied by the Cummins Master Rebuild Centre in Brisbane which has a world-class reputation for quality through best practice manufacturing and planning.

A parts supply and pricing agreement is also in place with Cummins.

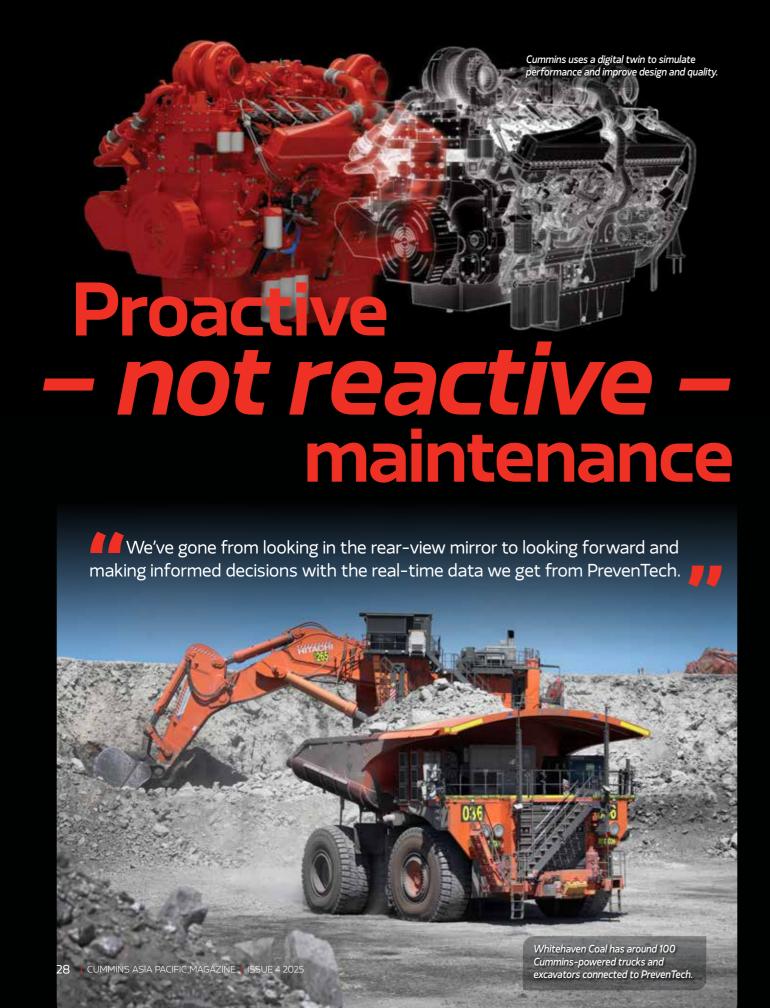
Developing apprentices is a key to building a sustainable business, and Cummins PNG currently has six apprentices. "We have a lot of applications for our apprenticeships because Cummins is recognised in the community as being a good employer and good trainer," said Leach.

"Safety training is also crucial to the success of our business. Our 'safety first' culture is reflected in our record of zero incidents over the last two years."





Cummins' PrevenTech for Mining is a proven maintenance solution that offers an array of benefits for the industry.





Sensor-based solutions are becoming an important part of modern-day maintenance systems.

The trend, which sees mining equipment of all shapes and sizes attached with devices to measure critical metrics, is only going one way, with a growing number of reports from around the world acknowledging the rapid onset and importance of digitalisation in mining.

By predicting potential equipment 'health' issues before they occur, the bottom line for digital monitoring is obvious – reduced downtime and production costs.

Cummins' PrevenTech for Mining is a proven real-time, data-driven digital solution to improve equipment reliability and reduce life cycle costs.

Miners around the world testify to its effectiveness.

Real-time data

PrevenTech works by applying telematics, big data, advanced analytics and IOT (Internet of Things) technology to a machine's engine hardware, helping a mine identify and diagnose issues faster and more accurately.

Features include real-time engine data logging and graphing, equipment mapping, and customised fault code management.

PrevenTech can track every connected engine, securely transmitting alerts

for urgent and potential problems and recommendations for actions and servicing.

Miners can optimise maintenance intervals for each site individually, see the status of equipment in real time, and plan downtime and repair work to minimise disruption.

Alerts and recommendations are sent to the customer by the Cummins Care team via email, phone and a web-based customer dashboard.

The system also increases technician safety and efficiency by viewing live engine data remotely without the need for technician/ engine interaction.

In Australia, PrevenTech is connected to around 100 Cummins-powered trucks and excavators at Whitehaven Coal mines in NSW.

Logical step for Whitehaven

Mark Irwin, Whitehaven's maintenance manager at Maules Creek, saw PrevenTech as a "logical step" for integration in the fleet while the system was being trialled at the mine

"During the trial period we only had 10 engines connected but still prevented a couple of potentially significant downtime events. The machines were diagnosed and

then repaired in a short period so as not to disrupt production," he reveals.

"Anything that helps us trend data and get ahead of issues is important," he says. "We've gone from looking in the rear-view mirror to learn from the past, to looking forward and making informed decisions with the real-time data we're getting from PrevenTech.

"In other words, we're now being more proactive, and less reactive, with our maintenance practices and that means reduced operational and maintenance costs."

Another important element of PrevenTech is the ability to integrate it with FleetguardFIT, or filtration intelligence technology, which monitors oil, air and fuel filters as well as oil conditions.

This allows Cummins to report on the condition of oil and engine filters on mining equipment, thus reducing reliance on standardised maintenance schedules and minimising unnecessary costs.

Customers have reported extended filter servicing intervals – for example, from 500 hours to 2000 hours – by combining PrevenTech with FleetguardFIT.



A successful collaboration between National Group, Cummins South Pacific and Komatsu Australia is delivering efficiency gains and environmental benefits through advanced engine technology.

In 2023, National Group, a leading privately owned mining services firm, embarked on the largest engine upgrade in its history.

The goal: upgrading each engine in 16 Komatsu 830E haul trucks used at the Lake Lindsay and Curragh coal mines in the Bowen Basin in Central Queensland.

National Group's multi-million-dollar project involved converting the Cummins Tier 1 QSK60 engines in the haul trucks to the Cummins 'Advantage' solution.

This solution enables the QSK60 to be upgraded to the latest diesel technology at overhaul time with no major changes to the base 60-litre V16 design. The result is lower fuel consumption and greenhouse gas emissions, and a substantial extension to engine life in the haul trucks.

National Group founder and managing director, Mark Ackroyd, says the engine project is part of his firm's ongoing commitment to provide one of the largest and most advanced equipment fleets in Australia's mining sector.

"National Group continues to invest heavily in its fleet," says Ackroyd. "We are providing more equipment that utilises latest technology to help our mining clients reduce their fuel consumption and carbon footprint."

The engine upgrade is an important part of National Group's broader Environmental, Social and Governance (ESG) strategy. In 2023, National Group launched its Sustainability Strategy to build on its previous sustainability achievements and provide a roadmap to expand its ESG focus this decade.

"The engine upgrade is the largest initiative so far resulting from National Group's new sustainability strategy," says Ackroyd. "We plan to further expand our ESG focus and are encouraged by the early success of the engine upgrade project. The feedback from project stakeholders is very positive."

The QSK60 engines were upgraded on time and on budget, with no safety incidents or project setbacks.

Technical excellence

The project's complexity is reflected in the amount of planning required, the number of people involved across three firms, and the scale of National Group's investment to upgrade 16 engines.

Each engine, about 2.5m high and 3m wide, was removed on-site and then upgraded at the Cummins Master Rebuild Centre in Brisbane, then resupplied as certified as an MCRS (modular common rail fuel system) engine.

The key technology upgrade was to the engine's fuel injection system. The early high-pressure unit injection system (HPI) was replaced with the high-pressure modular common rail system (MCRS) that now features on all of Cummins' latest-generation high-horsepower engines.

Cummins' Advantage solution also includes innovative combustion technology engineered for Tier 4 Final and Stage V emissions compliance – the most stringent off-highways emissions standards in the world delivering a proven 63% reduction in diesel particulate matter.

In addition, the reduction in fuel consumption supports a reduction of scope 1 emissions (CO2) aligned to the National Greenhouse and Energy Reporting Act 2007 (NGER).

Glen Evans, branch manager at Cummins in Emerald, says the engine upgrade required extensive collaboration. "A lot of credit should go to the teams at National Group, Komatsu and Cummins on this project.

"Everyone worked together really well to understand each other's needs, what was required and how to ensure the project achieved its goals. The project has been a good opportunity for Cummins to expand its relationship with National Group."

At the ground level, Evans' colleague, Fredy Cerdan, product support representative at Cummins, liaised with National Group maintenance superintendent Damien Melville.

A larger group of stakeholders from National Group, Cummins and Komatsu was then formed and the group met before the project officially began.

Delivering results

Gary Clarke, regional service manager Queensland at Komatsu Australia, says a unique feature of the Komatsu truck is its modularisation.

"All the engine components are in one module that slides in and out of the 830E. It's a really great design and means we were able to complete all of the upgrades and modifications off the truck which reduced downtime when we completed the installations on site."

Clarke says the engine installations went smoothly. "There were no quality issues with the build or installation, everything was delivered on time and there were no safety incidents. From Komatsu's perspective, the results have been as expected."

Clarke says Komatsu welcomed the opportunity to work closer with National Group. "It's one of the biggest projects Komatsu has ever undertaken for National Group, so it's great that the relationship between our organisations continues to grow. The National Group and Cummins team have been great to work with."

National Group, says Clarke, deserves credit for its investment in the project.

"Costly upgrades of equipment to deliver environmental and efficiency benefits are not something mining contractors in Queensland are required to do.

"The direct benefits of reduced fuel consumption and lower greenhouse gas emissions go to the client rather than the contractor.

"National Group had the foresight to make a major long-term investment in this project for its clients, even though it receives indirect benefits from the engine upgrade."

For National Group's Mark Ackroyd, the main benefit is helping clients achieve their goals. "Our firm's DNA has always been built on being very customer-focused.

Our clients want to use mining equipment that reduces their carbon footprint

through lower fuel consumption. We are responding to our clients' needs through this investment in engine upgrades."

Ackroyd says the project delivers other long-term benefits for National Group. "We've further strengthened our relationship with Komatsu and Cummins and our people have learnt more about collaboration on large projects.

"As we continue to expand and upgrade National Group's fleet, in response to rising demand for our services, collaboration skills with other firms are increasingly valuable."

Another benefit of the project is its alignment with National Group's sustainability strategy. "The risk with developing a sustainability strategy is that it looks great on paper, but ultimately sits on the shelf," says Ackroyd.

"This project shows how serious we are about implementing our new sustainability strategy and expanding our ESG focus through major investments that will benefit our clients, mining workers, communities and the environment for years to come."

Ackroyd expects National Group to further upgrade its fleet in the next few years. "It's something we are looking at. Our business has a lot of momentum and capacity to invest. We see the quality of our fleet, and the maintenance skills behind it, as key competitive advantages that we continue to build on to support our clients as they grow."

We are providing more equipment that utilises latest technology to help our mining clients reduce their fuel consumption and carbon footprint.



IN THE NEWS



In carbon reduction mode

Cummins Inc. has acquired the assets of First Mode, a leader in retrofit hybrid solutions for mining and rail operations. The acquisition includes hybrid mining and rail product lines, and the full IP portfolio which includes hydrogen and battery powertrain solutions.

In addition, Cummins is acquiring First Mode's commercial portfolio, manufacturing and technical teams in Australia, the United States and Chile.

The First Mode technology represents the first commercially available retrofit hybrid system for mining equipment, significantly reducing total cost of ownership (TCO) while advancing decarbonisation in operations.

First Mode will continue to serve customers through the transition and is dedicated to meeting customers' needs by shipping product in Q1 2025.

"This acquisition is an important step forward in our goal to lead our Power Systems customers through the energy transition," said Jenny Bush, President of Power Systems at Cummins. "With First Mode's hybrid retrofit technology, we are accelerating our ability to provide decarbonisation solutions that meet miners' need to drive down operating costs today."

Cummins is at the forefront of developing multiple technology pathways to help the mining industry transition to a sustainable future.

Through product hybridisation and clean fuels such as ethanol and methanol, Cummins is developing bridge technologies that enable miners to maximise the life of existing fleets while reducing carbon emissions.

"Cummins' dedication to partnering with original equipment manufacturers (OEMs) and miners ensures that these technologies are developed and tested in real-world environments," Bush added.

"With hybrid retrofit kits, modular component upgrades and scalable solutions, we are bringing miners the flexibility and confidence they need to decarbonise operations while adapting to evolving technologies and infrastructure."

With its vast global service network, Cummins says it is prepared to support newly developed bridge technologies, ensuring seamless integration and ongoing support for mining and rail applications.

The news follows the 2024 decision of First Mode's majority shareholder, Anglo American, to conclude its funding of First Mode as part of its capital prioritisation program.

Cummins is already field testing a mining diesel-battery hybrid truck solution in China with North Hauler Joint Stock Co., Ltd. (NHL).

In the hybrid NTH260, a 220 t payload mining truck, the hybrid system allows the truck engine to be downsized from the previous 2500 hp QSK60 to the current 2000 hp two-stage QSK50.

Early field test results show 15 – 20% average fuel savings compared to a non-hybrid system.

Retail giant won't meet 2040 GHG goals

Walmart, the world's largest retailer, has been piloting all-electric trucks and other zero-emissions technologies but says it doesn't expect cost-effective zero-emissions transport to be a reality in the near future.

In a report in HDT (Heavy Duty Trucking) magazine, Walmart said it would not be able to meet its ambitious emissions goals, in part because it does not expect cost-effective low-carbon transportation to become a reality as soon as earlier projected.

In 2020, Walmart announced a plan to achieve zero-carbon operations by 2040. Part of that plan was electrifying all of its vehicles, including long-haul trucks, by 2040. But Class 8 electric trucks are still too expensive.

The company pointed out that ZEVs (zero emission vehicles) are up to two-and-a-half times the cost of diesel units.

Walmart is one of the first companies to use Cummins' new fuel agnostic X15N, a step along the retail giant's road to lower carbon emissions. Walmart's first X15N went into service as a trial unit in early 2023 and is fuelled with renewable natural gas which significantly reduces lifecycle greenhouse gas emissions.



In its 2024 ESG report, Walmart said, "While we continue to work toward our aspirational target of zero operational emissions by 2040, progress will not be linear... and depends not only on our own initiatives but also on factors beyond our control."

Among those factors, it said, was "timely emergence of cost-effective technologies for low-carbon heavy tractor transportation (which does not appear likely until the 2030s)."

The X15N recently went into full production at Cummins' Jamestown Engine Plant and is offered with peak outputs of 500 hp and 1850 lb ft of torque. It is being offered by Kenworth, Peterbilt and Freightliner.

Rio Tinto's renewable diesel move

Rio Tinto has transitioned from conventional to renewable diesel for all heavy mining equipment at its Kennecott

Bingham Canyon copper mine in Utah – the world's deepest open pit mine.

Cummins Q5K78 engines fuelled with renewable diesel were part of the Rio Tinto trial.

This follows a trial conducted in collaboration with Cummins in which Komatsu 930E haul trucks with QSK78 HPI and MCRS engines were fuelled with renewable diesel.

Rio Tinto's Kennecott transition to renewable diesel includes its entire fleet of haul trucks and heavy machinery equipment, including 84 Komatsu 930 SE haul trucks powered with Cummins QSK78 engines.

Nate Foster, Managing Director of Rio Tinto Kennecott, cited partnership with Cummins had been critical to the success of this transition.

"I want to recognise our partners Cummins, who spearheaded the trial alongside us, and now HF Sinclair, who has helped implement the full use of renewable diesel today," he said. All high horsepower Cummins industrial engines are approved for use with unblended renewable diesel.

Compared to conventional diesel, renewable diesel can serve as a drop-in replacement, as well as:

- Reduce well-to-work greenhouse gas (GHG) emissions up to 90%
- Reduce tailpipe emissions of particulate matter and smoke up to 50%
- Experience only 1-2% power loss
- Provide no impact to service/maintenance intervals
- Be stored for longer duration

Cummins' Destination Zero strategy for mining includes further development of two bridge pathways: hybrid and clean fuel capabilities.

"While customers like Rio Tinto with access to renewable diesel can already make significant strides in reducing emissions, we intend to expand opportunities for miners with access to clean ethanol or methanol," said John Essegbey, Cummins Mining Market Sensing & Innovation Manager.

"Specifically, dual-fuel systems provide flexibility for engines to run at varying diesel substitution rates based on fuel availability and performance needs."

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IN THE NEWS

Cummins launches first hydrogen ICE turbocharger

Cummins has unveiled a new turbocharger designed specifically for hydrogen internal combustion engines (H2 ICE) for heavy-duty on-highway applications.

This advancement in turbocharging technology follows Cummins securing a contract to supply H2 ICE turbochargers to a major European OEM (original equipment manufacturer).

The turbocharger is specifically designed to power the first hydrogen internal combustion engine for heavy-duty on-highway applications in the European market.

H2 ICE engine technology has been classified as zero-emission by the

European Union (EU) and represents a promising bridge solution for reducing emissions

H2 ICE engine platforms also comply with the upcoming Euro VII emission standards, demonstrating the potential of hydrogen as a viable alternative in the journey toward global decarbonisation.

Showcasing its leadership in hydrogen innovation, Cummins overcame significant design challenges posed by the use of hydrogen as a fuel.

These included adapting aerodynamics to address varying lambda requirements, managing the increased water production resulting from hydrogen combustion, and mitigating the



Despite these hurdles, Cummins has successfully delivered a reliable and high-performance turbocharger for hydrogen powered heavy-duty on-highway truck engines.

hydrogen use.



Cummins has unveiled its most advanced diesel pickup engine yet in the form of the 2025 6.7-litre Turbo Diesel rated at 430 hp for the Ram truck.

The Cummins Turbo Diesel was first used in the 1989 Chrysler Dodge Ram, with projected sales of less than 5,000 engines. Actual sales exceeded 20,000 engines in the first year, signalling to the market that a powerful new combination had been created.

The engine has evolved from the first generation 5.9-litre with 160 hp and 400 lb ft of torque to today's 6.7-litre with 430 hp and 1075 lb ft of torque.

Built in Columbus, Indiana, at Cummins' legendary Columbus Mid-Range Engine Plant (CMEP), production of the Ram engine has reached more than 150,000 units in a single year.

Cummins today partners with Stellantis in the supply of engines for the Ram.

The two companies have extended their partnership through to 2030, paving the way for continued innovation among the most iconic pickup brands in the business.

Stellantis formed in 2021 from the merger of the Italian-American conglomerate Fiat Chrysler Automobiles and the French PSA Group.

The latest 6.7-litre Cummins engine is being offered in 2025 Ram 2500 and 3500 heavy-duty pickups, and Ram 3500, 4500 and 5500 chassis-cab models. The chassis-cab units are rated at 360 hp with 800 lb ft of torque.

The engine is optimised with a brand new

8-speed transmission which contributes to noticeable gains in acceleration and power, driving home stronger overall truck performance and towing capability.

Noise, vibration and harshness are also improved using helical valve train synchronizing gears which enable a quieter ride.

Emissions air handling also introduces a new airflow management design with new high-pressure fuel delivery system and fuel pump. A new variable geometry turbocharger delivers intelligent condition-based power output that is now faster and more efficient.

Cummins extends legendary B-series platform

Cummins has unveiled an update to its legendary B-series platform, the new six cylinder B7.2, the largest B-series engine ever with its 7.2-litre displacement.

This latest evolution throws the spotlight on one of the most successful diesels ever developed by Cummins, with millions now in service around the world.

The first B-series engine came off the production line on July 1, 1983, and was the result of a joint development project with JI Case.

The original displacements were a 3.9-litre four cylinder and a 5.9-litre six cylinder.

Featuring a slightly higher displacement than the current B6.7-litre engine, the new B7.2 improves unrestricted top-end performance ratings, providing 240 to 340 hp and 650 to 1000 lb ft of torque.

The higher displacement allows for a wider range of torque offerings, creating flexibility for different applications and duty cycles.

Global platform

The B7.2 is a global platform with roll-out to vary by region, market and emissions standards. The engine will go into full production in North America in 2027 to meet the ultra-low U.S. EPA 2027 and Euro 7 emission regulations.

The B7.2 is part of Cummins' HELM platform, HELM standing for higher efficiency, lower emissions, multiple fuels.

The HELM engines are an important element of Cummins' Destination Zero strategy to go further, faster to reduce the greenhouse gas (GHG) and air quality impacts of its products.

The new engine will bring state-of-the-art technology and continue to serve a variety of medium-duty and vocational applications, including bus, pickup and delivery, and utility trucks.

It will have automatic engine shutdown and stop-start capability for improved greenhouse gas emissions and will offer a compression engine brake and extended oil drain interval pan option.

It will also be equipped with Cummins' full suite of digital technologies, which help enhance performance, maximise uptime and reduce total cost of ownership.

The B7.2 will provide digital connectivity and immediate access to a range of applications and capabilities through Acumen, Cummins' smart computing hardware.



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Steeles

In 1999, three companies came together to form the Kobelco that we know today globally: Kobelco Construction Machinery Co., Ltd.

The three companies were, Construction Machinery Division of Kobe Steel, Ltd., Yutani Heavy Industries Ltd. and Kobe Steel Kobelco Construction Machinery Co., Ltd.

Kobelco Construction Machinery Co., Ltd. is wholly owned by the Kobe Steel Group which is also known as just Kobelco in Japan.

Today's range of Kobelco Construction Machinery excavators span operating weights from one-tonne to 85 tonnes and in recent years new models have been added with Cummins power for both the Japanese and export markets.

In 2018, Cummins Japan collaborated with Kobelco Construction Machinery Co. on the installation of the F4.5 engine in the 20-tonne excavator and also the B7 engine in the 30 and 35-tonne models, all for the Chinese market.

The latest project has involved the installation of the Cummins X12 engine - Stage V emissions compliant - in Kobelco 50-tonne class excavators for the Japanese market.

These are the SK470/500LC-11 with the Cummins X12 rated at 280 kW and the demolition model, the SK550DLC-11, also rated at 280 kW.

Cummins Japan Off-Highway Account Manager Takatoshi Murase (left) with Toru Nagai, Commercial Leader, Engine Business Unit Cummins Japan.

Manager - Hydraulic Excavator Engineering Group, Hydraulic Excavator Meet Toshinori Sengoku

Engineering Department and Product Development Engineering Division.

In this exclusive interview, we sat down with Toshinori Sengoku, a seasoned engineer who has been with Kobelco Construction Machinery Co., Ltd. since 2013. Over the years, he has transitioned from working on engines and components to managing overall product development.

In 2023, he began collaborating with Cummins. Through this partnership, he shares insights on the journey, experiences with Cummins, and the collaborative efforts that have led to successful product development.

Join us as we delve into the details of this fascinating career and the impactful collaboration with Cummins.

Q: Cummins started working with you in 2023. How much did you know about Cummins before that?

A: I knew that Cummins provided engines for other construction machine manufacturers but I didn't know much about the size of the company or other details. It was before this new product development, so I didn't know what to expect at first.

Upon meeting, we discussed going to Columbus (Cummins Inc. world HQ in Indiana, US). Interestingly, I was researching Conexpo (construction trade show)internally and learned that Cummins was participating, so a trip to Columbus made sense.

Q: At that time, you visited Cummins facilities, including the **Cummins Technical Centre. What was your impression?**

A: After the trip, I started to learn more about Cummins. I discovered that Cummins was a major player with factories in many locations and a focus on areas like fuel cells, not just engines.

Q: Now we have the 50-tonne product manufactured. You and Takaaki Matsumoto (lead Cummins Japan engineer for the project) talk on a weekly basis. What is your impression of **Cummins now?**

A: I've been working with other engine manufacturers for about a decade but they were all domestic. I found that a multinational company like Cummins wasn't much different. There were differences in areas like technical documents, which were very detailed and took time to understand. The requirements were specific, which was positive, and the checklist was extensive.

Domestic companies usually have fewer checklists and more tests. The actual machine testing areas had already been discussed thoroughly, so after the prototype, things went smoothly. This process involved less work compared to domestic engine manufacturers.

Q: Can you elaborate on which areas had less time invested compared to domestic engine manufacturers?

A: Heat balance measuring is a good example. Domestic companies typically use around 200 heat sensors while Cummins used less than half. This was a major difference. Japanese manufacturers tend

> to check rigorously, even with the same components, area by area, while Cummins focused more on the bigger outcome. It felt rational. I was also thankful that the aftermarket parts cost and discussions were done thoroughly at a reasonable cost.

Q: So you were able to communicate and discuss across other teams within Cummins and Kobelco. What did you find useful?

A: Just by reading the application manual, there were things that were hard to understand, but with active relationships across teams, I could ask questions directly, which was very helpful.

I think there could be more projects on the way, and I look forward to continued support like this project. Active discussion is really needed because the documents and materials are in a different format. Some felt culturally different, hard to read, and difficult to find critical points.

Weekly catch-ups helped. This project was possible in a short time period by working together.

Q: What was your impression of Cummins employees?

A: I always thought multinational companies would have a topdown approach from headquarters, but Cummins employees worked hard to communicate with their headquarters to ensure our requirements were met. That left a positive impression.

I also think a lot of work is being done by a small number of employees in Japan.



Kobelco SK500LC hydraulic excavator now with Cummins X12 power.





Campbell Gilmour has had time-honoured involvement in New Zealand's trucking industry as a driver, fleet manager and fleet owner.

Born in the deep south in Invercargill, Campbell spent most of his formative years in Alexandra in central Otago and started working for Alexandra Transport when he left school at 17.

"I've been in transport all my working life and in the logging game for around 32 years," he says. "I started in the industry as a driver when I left school and worked my way up to fleet management and then ownership of Gilmour Transport with Warwick (Wilshier)," he recalls

Gilmour Transport was established in 2021 when Campbell and Warwick Wilshier – another man immersed in New Zealand's timber industry – bought log transporter Alan Forbes Transport in Tokoroa in the North Island's Waikato region.

Forbes had been a highly respected contractor at NZ Forest Products' Kinleith mill since 1979.



CUTTING EDGE

The Forbes business was rebranded Gilmour Transport, and the operation today is moving around 450,000 tonnes of logs annually.

Twenty-five Kenworths with Cummins X15 power are the foundation of the business. Most of the red engines are in K200s while some T610s and T659s have also come into the fleet with the 15-litre Cummins.

Support that counts

Service support is the key to doing business with Gilmour Transport. Loyalty received is deserving of loyalty in return, an adage that obviously carries weight within Campbell's business.

"We have a very good relationship with Cummins and Southpac (the Kenworth dealer)," Campbell states with conviction.

"As much as you want a foolproof product, it's just not realistic. It's the back-up that counts and we can only sing the praises of Cummins and Southpac and the people we deal with in those organisations.

"We never have a cross word, we work with each other. It's a partnership which is important because we'll be working alongside each other for a long while yet."

Damian Nicholls, operations manager for Cummins Bay of Plenty, keeps a firm finger on the pulse of the Gilmour operation.

Campbell recounts: "We had an engine component failure a few days out from Christmas last year and Damian pulled out all stops and had the truck back in our yard for our Christmas line-up.

"That's typical of the support we get from Cummins."

The standard X15 rating is 550 hp – peak output is actually 578 hp at 1800 rpm – while the preferred Gilmour configuration is an 8x4 prime mover coupled to a five-axle trailer which operates at 54 tonnes over a 23 -metre length.

Fuel consumption for each truck is calculated monthly, and Campbell cites a fleet average of 1.59 km/litre which he says is in line with expectations.

"Fuel consumption is a huge consideration," he says. "Long gone are the days when we didn't worry about fuel."

Gilmour Transport has two mechanics on site who carry out all repair and maintenance work, apart from warranty jobs.

Safety a core value

Running an efficient company isn't Campbell Gilmour's only business focus.

He has been on the Log Transport Safety Council since 2005 and on the executive since 2016 and is immensely proud of the work the council has done in lifting the standard and maintaining the professionalism of the industry.

Safety has become a core value, not just a priority, he says.

Log trucks are the public face of one of New Zealand's biggest export industries and since the council was formed in 1996 – a time of chronic log truck roll–over accidents – the safety record of the sector has gone from being one of the worst in the transport industry to the best.

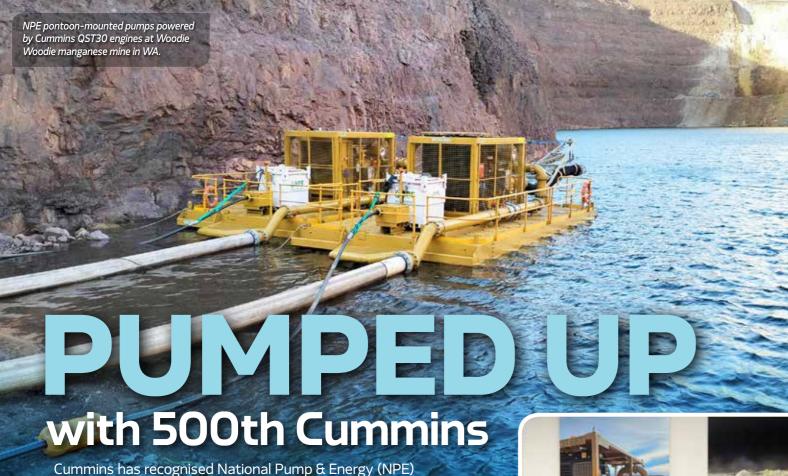
"It's a credit to all logging operators who work together to make our industry safer," says Campbell. "A lot has been done with the introduction of longer-lower trucks for greater stability and other initiatives such as improved driver training and safety awareness campaigns."

Campbell Gilmour looks back on his career in road transport with a great deal of pride – the years he spent with the Dynes family, for example, as a shareholder in Dunedin Carrying Company, and when he started working in the logging industry as a driver for Warwick Wilshier.

He even had a stint driving roadtrain triples in Western Australia.

As far as the future goes, Campbell has a positive outlook. One thing is certain, his pride in the industry will never diminish.





Annie Chu, Executive Managing Director -Cummins Asia Pacific, presented a plaque to Jeremy Collins, General Manager of NPE, in recognition of its achievement.

pump in its national fleet.

for commissioning the 500th Cummins-powered water

Collins points out that the partnership between NPE and Cummins has proven highly successful across a range of industries and water management projects.

NPE's fleet of Cummins-powered water pump and power generation units is used in remote mining sites, large-scale construction projects, and oil and gas operations.

The reliability and efficiency of the equipment has played a significant role in the successful completion of these projects.

"NPE and Cummins have a shared commitment to delivering best-in-class products and services," says Collins.

NPE had its origins in 2001 when Campbell Mining Services (CMS) was formed in Mackay, Qld, with a vision to one day be the largest dewatering pump company in the country.

In 2014, CMS – trading as National Pump Services – merged with Perth-based Resource Equipment Ltd (REL) to become National Pump & Energy.

Toughest projects

It's worth recounting a memorable event in REL's history which occurred in 2011 when frantic efforts were being made to prevent a meltdown at Japan's Fukushima nuclear plant following the 9.0-magnitude earthquake and subsequent tsunami.

Television news was dominated by the headline: GIANT WATER CANNON ARRIVES TO HELP BATTLE JAPAN NUKE CRISIS.

The 'REL' brand was prominent on the cannon and associated equipment, including a Cummins generator set, Cummins Custom Pak and Cummins V12 engine, as the gear was offloaded at an air base in Japan and readied for deployment at the nuclear plant.

REL was contacted by foreign government representatives asking if they could urgently help with the emergency relief effort in Japan. There was an overheating problem with the nuclear reactors at Fukushima, and the plan was to pump seawater into the plant to cool the reactor cores.

REL's remote-controlled hydromining cannon became a critical factor in the emergency effort to help stem radiation bleeding into the environment.



Today, NPE's expertise in water management projects, from the supply of a single pump to the design, construction and installation of turn-key custom-built equipment and systems, is no less impressive.

NPE's ability to work closely with Cummins' engineering team ensures that the power generation systems and pumps are optimised for the toughest conditions and projects.

This collaboration continues to evolve, with both companies leveraging their strengths to tackle new challenges and meet the growing demands of the global energy and industrial markets.



X15 Integrated Powertrain

Why integrate?

With Cummins integrated power, the pieces fall into place.

Higher efficiency

By optimising factors like gear and axle ratios, Cummins integrated power maximises fuel economy. Further, the integrated design reduces parts proliferation and simplifies OEM integration, improving the total cost of ownership.

Lower emissions

As a leader in emissions technology, Cummins provides integrated power solutions that support compliance with Euro VI emission standards and align with Australia's emission regulations, benefitting both our customers and the planet.

Performance

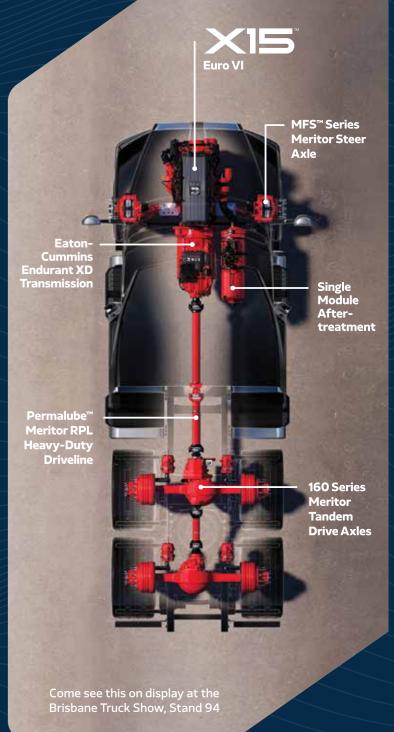
Cummins engines offer superior horsepower ratings and productivity for their size. Eaton-Cummins transmissions and Meritor drivelines, axles and brakes ensure that power is delivered seamlessly where it's needed.

Support

Scan here to learn more!

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With Cummins integrated power, customers can be confident that Cummins supports the entire powertrain. Assistance is never far away, with unrivaled nationwide parts and service availability.





cummins.com

Holograms

drive Cummins' parts authentication

Cummins has introduced a new leading-edge parts label system, featuring hologram technology, to help customers confirm they are buying the genuine product.

"Counterfeit parts are increasingly being sold as 'Genuine Cummins Parts' across the globe," says Kyle Miller, Cummins' aftermarket business development manager for mining in the Asia Pacific region.

Due to the magnitude of the problem in Australia, Cummins has recently engaged Australian Border Force to help identify and stop shipments of counterfeit parts entering

Sophisticated reproductions of original parts have made it incredibly hard for even the trained eye to distinguish real from fake. These illegal imitations of engine components, oils and lubricants manufactured from inferior materials can lead to serious safety and product issues.

To put the cost into perspective, counterfeit goods are estimated to be a US\$500 billion-per-year industry globally.

"Counterfeiters have become so sophisticated that even their labelling, packaging, barcodes and QR codes appear authentic, so many consumers are misled into thinking they are buying the genuine article," says Miller, explaining the importance of protecting customers with advanced labelling.

Hologram development

The development of holograms, whose effects cannot be completely replicated or simulated by normal reprographics methods, has introduced a new level of brand protection.

To differentiate from counterfeit products, Cummins' new labels feature a Cummins-specific hologram as well as a verification website. Customers can scan a QR code on the label to reach the site (see link to site below).

The new labels were expected to be fully implemented by the end of 2024, although parts that were labelled prior to the implementation will not be relabelled.

Hologram technology now features

on Cummins' new parts lab

To verify the authenticity of Cummins products using the new label, visit www.cummins.com/ genuinepartsauthentication. Customers can also visit a Cummins branch or authorised Cummins dealer for

"Cummins Genuine parts sourced from the extensive network of Cummins branches and authorised Cummins dealers across Australia and New Zealand are the only parts approved and warranted by Cummins," says Miller.





The high risk of using counterfeit or non-genuine parts in a high horsepower diesel engine hit home at a mining operation in Western Australia.

Detailed in Cummins Asia Pacific magazine in 2023, a Cummins K50 – a 50-litre V16 renowned for its reliability and durability - failed at only 6,000 hours powering an excavator when it would have been expected to clock up to 16,000 hours after midlife maintenance at 8,000 hours.

Teardown of the 1,800 hp engine showed total destruction inside one cylinder. The reason was glaring: Counterfeit parts, including the cylinder liners, had been used by a third party repairer to rebuild the K50.

The downfall of using an unauthorised Cummins repairer to cut costs was clearly evident to the customer.

"At the end of the day you get what you pay for with quality products. If you want to take risks to save a few dollars, you are likely to incur greater losses in business impact through downtime or performance issues," says Kyle Miller, Cummins

aftermarket business development manager for mining in the Asia Pacific region.

Latest testing

A Cummins engineering team has carried out extensive testing of 106 non-genuine QSK engine parts from a recognised

These parts were put through the same rigorous test procedures Cummins uses to manufacture Genuine Cummins parts.

Many failed on visual inspection. Some failed because the metal was too soft or brittle. Other parts failed for different reasons.

Part categories tested were piston, piston pin, piston rings, cylinder liner, valves, bearings, thrust bearing and exhaust manifold gasket.

Testing included multiple parts per component category. Test results confirmed every part category failed in measurement or material inspection compared to Cummins standards.

One example of the difference is connecting rod bushings. For QSK45 and QSK60 engines, Cummins only sells these bushings with the connecting rod to ensure quality, durability and precise fit. Competitors sell the parts separately, ignoring Cummins engineering

"Cummins High Horsepower Genuine parts sourced from the extensive network of Cummins branches in Australia and New Zealand are the only parts approved and warranted by Cummins," says Kyle Miller.



Cummins engine for / Locity

Another major milestone has been achieved in Victoria's VLocity rail project with Cummins delivering the 400th QSK19 engine for the world-recognised trains which operate on the state's regional network.

When the project is completed 2025, a total of 426 QSK19 engines will have been delivered for the current generation VLocity.

Cummins has worked closely with the railcar manufacturers – originally Bombardier and now Alstom – to ensure high availability and on-time performance of the VLocity fleet. In fact, VLocity is one of the most reliable passenger railcars in the world today.

When the 200th QSK19 was delivered in 2017, it was pointed out that the key measurement of the reliability of a rail fleet was the MDBF, or mean distance between failures. The MDBF is based on any delay in station arrival time of five minutes or greater.

'Unheard of' reliability

"The original expectation for VLocity was an MDBF of 100,000 kilometres, but the actual long-term MDBF average exceeded 150,000 kilometres which was unheard of in the diesel railcar industry," says Mark Pellington, who heads up the VLocity business for Cummins.

The first VLocity trains went into service in Victoria in late 2005. Operating at speeds of up to 160 km/h, they are powered by 750 hp horizontal Cummins QSK19 diesel engines.

Each car in the latest three-car VLocity trains has 19-litre Cummins power as well as a 182 kWe load-sharing Cummins generator set powered by the QSB6.7 engine.

When the VLocity project was mooted in 2002, Cummins was considered the only diesel engine manufacturer capable of providing the engineering expertise to ensure its success.

The VLocity railcars are manufactured by Alstom at its Dandenong facility, while production and assembly of the propulsion, cooling and electrical power generation modules is carried out at Cummins' South Pacific headquarters in Scoresby

(Melbourne).

The innovative module concept was developed by an engineering team at Cummins to significantly reduce maintenance downtime. Each module is designed for quick replacement with a standby unit, meaning fast turnaround during scheduled servicing and maintenance.

When the modules are removed they are taken to the Cummins Laverton branch for refurbishment in readiness for the next train scheduled for a major service.

"VLocity is a great success story with the trains providing outstanding service reliability and passenger comfort," says Pellington.

VLocity is a great success story with the trains providing outstanding service reliability and passenger comfort.

Rob Sweeney's retirement comes after an extraordinary 50 years of service.

His journey began in 1975 as an apprentice diesel mechanic at the Lansvale (Sydney) branch, working on iconic Cummins engines like the C160, NH250, and VT903.

Rob honed his skills across a diverse range of applications, including automotive, agriculture, construction, marine and power generation.

Rob has held pivotal roles throughout his tenure, including service manager, northern territory account manager, branch manager, manager – Cummins Used and most recently, on-highway account manager based in Sydney.

His strategic vision and ability to foster strong business partnerships have significantly contributed to Cummins' growth. His leadership, technical acumen and unwavering commitment to customer support have not only shaped Cummins' success but also inspired colleagues and customers alike.

Rob's last day at Cummins will be Friday, July 11, 2025.



Sweeney, Paddison call it a day

Two time-honoured Cummins employees, **Rob Sweeney** and **David Paddison**, both notable in the on-highway truck engine business and other key roles over the years, have announced their retirement.



David Paddison retired in January 2025 after an exceptional 46 years of service.

His journey started in Tamworth (NSW) where he worked for Blackwood Hodge, the Cummins distributor at the time. After finishing his apprenticeship at the local Ford dealership, he began working on a wide variety of engines, including V903s and NTC855s.

Early in his career, David took on a field service role at a tin mine in Emmaville (NSW), providing hands-on support for six months. After that, he continued field service work until 1983, when Cummins took over the Tamworth branch.

From there, David quickly moved up, becoming workshop manager in 1985 and service manager in 1989. In 2002, he became branch manager in Tamworth and, in 2010, he joined the on-highway team as a business manager, looking after Tamworth, Newcastle and Grafton.

David built strong relationships with customers and colleagues over the years, and his hard work was recognised with three On-Highway Business Manager of the Year awards in 2012, 2016 and 2020.

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Cummins supports Cre8tive Dreamtime

Cummins and Cre8tive Nations proudly celebrate Aboriginal and Torres Strait Islander heritage through the Creative Dreamtime Engineers Project.

The partnership first came to life in 2021 and 2022, when Cummins proudly sponsored Cre8tive Nations' one-day Meet the Cre8tive Dreamtime Makers workshop for 10 teachers and 600 students in two locations through Queensland Manufacturing

The program aims to showcase culture through science, technology and the history of Australia's First Nations People and their innovative engineering and manufacturing methods.

Already successfully implemented in Mackay and Townsville in Queensland, with Cummins' ongoing sponsorship and collaboration, Cre8tive Dreamtime has now become a successful initiative that is set to expand across Australia.

Through supporting this program, Cummins empowers four to six First Nations educators to lead and facilitate the workshops, enhancing their ability to deliver this cultural education to all students. This support not only respects and raises the profile of Traditional Owners but ensures the program's sustainable and enduring impact through embedding cultural education within the community long after the program delivery.

The Cre8tive Dreamtime program has created this significant and lasting impact in many ways. Through the engagement of 1,200 to 1,500 students and 10 teachers in each location, the program provides a deeply immersive cultural education experience.

Students gain first-hand insights into the technologies and cultural practices of Aboriginal and Torres Strait Islander Peoples, enhancing their understanding of STEM subjects with real-world historical and cultural context.

This learning experience connects students with the innovative spirit of First Nations cultures, fostering further appreciation and respect, and creating a more inclusive and understanding environment extending beyond the classroom and into broader communities.

Aboriginal and Torres Strait Islander-owned and operated, Cre8tive Nations specialises in cultural knowledge, creative industries, special events, and educational programs. Founded with a mission to support and foster productive and sustainable communities, the organisation wishes to promote and preserve culture, diversity and equity.

Cre8tive Nations' lasting influence through their Cre8tive Dreamtime program not only supports ongoing efforts toward reconciliation but proudly celebrates Aboriginal and Torres Strait Islander heritage.

Cummins

HIGHER EFFICIENCY. LOWER EMISSIONS. MULTIPLE FUELS.

What is Cummins HELM™?

Cummins HELM™ is our industry's first fuel-agnostic platform strategically poised to help customers meet their sustainability goals and business needs.

HELM is a loose acronym for Higher Efficiency Lower emissions. Multiple fuels.



Each platform is derived from a common base engine. Below the head gasket each engine has similar components, while above it, the components vary based on fuel type.

Why Cummins HELM™?

Cummins HELM™ platforms will help customers decarbonise today and simplify adoption of alternative fuel types for tomorrow. These products support Destination Zero™, Cummins' strategy to help fleets reduce emissions while providing solutions that are economically viable and scalable.

Cummins HELM™ platforms deliver on the Cummins promise of power, performance, durability and connectivity.

















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