QTLC
QUEENSLAND TRANSPORT AND LOGISTICS COUNCIL

Decarbonisation is in the stars

A new environmental star rating for trucks was launched last month. Its creators say a focus on energy efficiency means it could reduce truck emissions while also reducing fuel costs. We dig a little deeper to find out how it works.

Simplifying emissions as trucking gets more complex

Road freight faces many challenges, from rising costs and driver shortages to increasing regulation and uncertainty about new technologies and suppliers. Environmental pressures compound these challenges: pollution standards drive up the cost of diesel trucks, electric trucks cost 2-3 times as much as a diesel truck, and mandatory emissions reporting is adding work and cost to more parts of the supply chain.

The Smart Truck Rating was developed to ease both the environmental and the financial pressures on fleet operations – reducing pressure on fuel costs while also offering a path to cost-effective emissions reductions.

By covering the whole spectrum of emissions pathways including efficiency, the star rating can helps fleets today while most policies like the Net Zero Plan miss the mark by prioritising future fuels only.

Filling the information gap

Developed by FFEH program partners MOV3MENT, there is now an online tool that anyone can use to score a truck out of 6 stars (www.rateyourtruck.com.au). The site also provides tailored recommendations for improving a truck's rating, or when buying new fleet.

RateYourTruck powered by MOV3MENT

Managing Director Mark Gjerek explains why it's needed: "Until now, there hasn't been a standard way to compare efficiency or CO2 emissions from trucks. No regulations, no standard test, no checklist, no rating. With fleets spending 20–30% of their operating costs on fuel, that's not good enough. They need better information, which is the main reason we developed this rating."

The rating doesn't consider truck brands or models, and looks beyond just the fuel type/powertrain. Scores are based on features that reduce energy use & emissions – things like aero kits, efficient tyres, telematics.

Stepping stones to improve the fleet

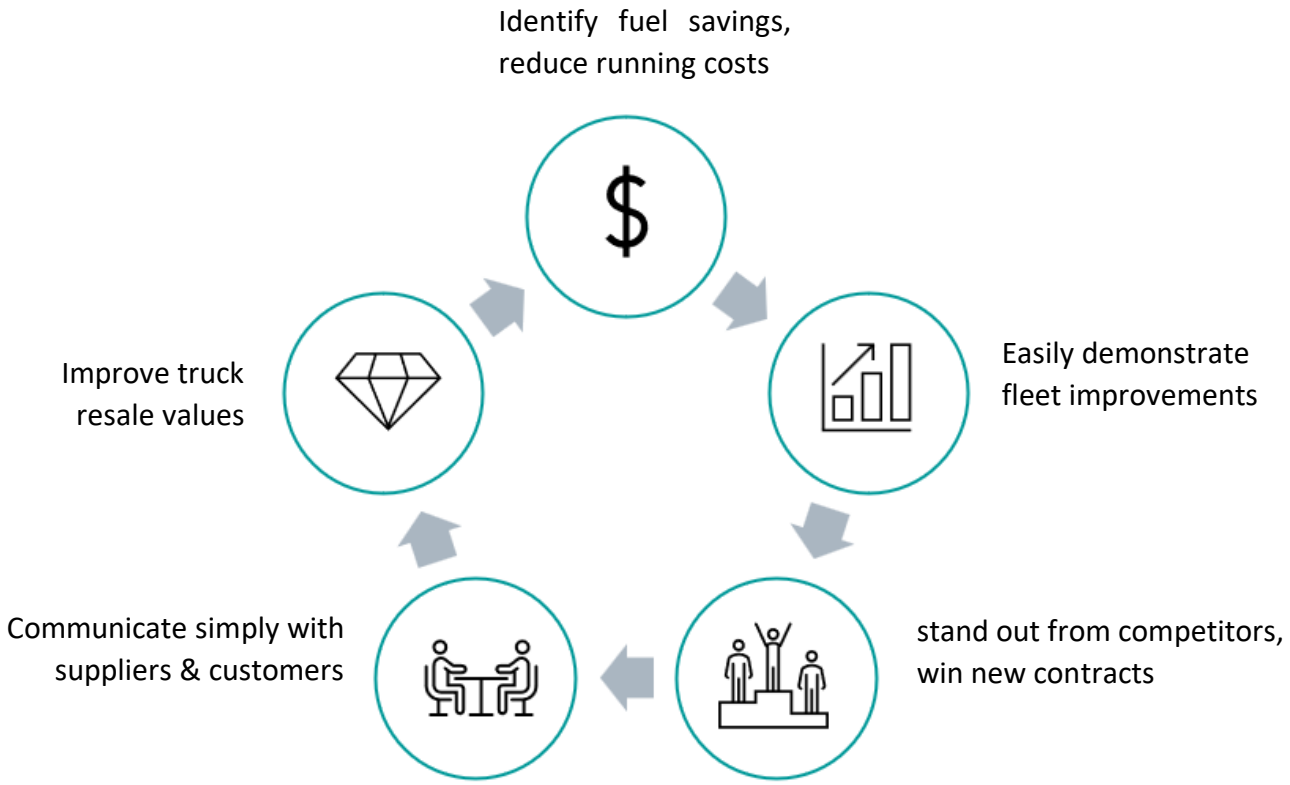
Electric trucks naturally rate highly. But focussing on efficiency features means that even diesel trucks can score well if optimised for their application. There just hasn't been a way to recognise that, until now.

The 6 star levels help fleet managers and freight customers to assess their current performance and plan simple improvements, even if an electric truck isn't yet available or viable in their segment. As Mark says, "At last, freight customers like retailers and manufacturers have a simple, common language to use with fleets. It's a game-changer for the supply chain, helping plan improvements up the star levels rather than one big, risky jump."

It's more than just environmental

While the Smart Truck Rating is intended as an environmental score, its benefits are much broader, including

-



Many of the efficiency features are low-cost, challenging the myth that emissions reductions only add cost to fleets. Mark says improving a truck's rating means less energy, less fuel, lower costs, less emissions, and less pollution. "It's more than a triple bottom line. This is the message fleets need to be hearing from their suppliers."

Cost-effective improvements

MOV3MENT estimates that improving the rating of a 1-, 2- or 3-star truck by one additional star corresponds to around 10% reduction in fuel costs and CO_2 emissions. Many of those features are cost-effective, with payback periods in only months. Low rolling resistance tyres can pay back their higher cost well within the life of the tyre. Driver feedback systems, central tyre inflation, and hybrid systems can achieve payback within 6-18 months, depending on kilometres driven.

More importantly, the savings aren't just in fuel. Tyre pressure monitoring and inflation stystems improve safety, extend tyre longevity, and can reduce downtime – all of which might be more important than the fuel or emissions benefot for some fleets.

A national opportunity

The rating was developed with input from OEMs, dealers, equipment suppliers, fleets, and industry associations. It has already been used with real fleets and dealers to score more than 700 trucks, with trials funded separately by the NSW and federal governments, and Toll Group.

Perhaps the biggest benefit of the rating is that it can be used for all trucks, not just new sales. According to Mark, upgrading the existing fleet to reduce operating costs and emissions is a big untapped opportunity.

“Zero emission technology typically only comes in new trucks, but they’re still only a tiny percentage of new sales. And new truck sales are only a small proportion of more than 600,000 trucks already on the road. This rating can be used to improve ALL those trucks – old and new, diesel or alternatives.”

MOV3MENT is now working with governments and industry associations to turn the rating into a national scheme, complete with fleet tools and guidance, supplier information, and a certification process.

The Queensland Transport and Logistics Council (QTLC) is the respected agent of the Queensland Freight Industry. We aim to drive continual performance improvements in Queensland’s freight and logistics sector, delivering improved productivity, safety and environmental benefits for all Queenslanders. We strive to change the way Government & Industry connect and work together to deliver Sector based improvements.

Queensland Transport and Logistics Council
310 Edwards Street, Brisbane City QLD 4000

QTLC acknowledges the support and expertise of MOV3MENT in producing this paper. MOV3MENT is the only Australian consultancy dedicated to working at the interface of ‘the 3 Es’ of the clean transport revolution: Energy, Economics & Environment. Find out more at www.mov3ment.com.au.