







#### Dear friends.

Welcome to this new issue of Roads, your magazine about UD Trucks.

In our guest to make the trucks the world needs today, UD fully supports smart logistics for our customers.



And in a world of smart logistics, having the right truck for your business activity is crucial.

In this issue, you will discover how UD made evolve our two heavy-duty trucks, to match our customers' evolving needs.

For our Japanese customers who need an even higher payload and a reduced fuel consumption, our flagship Quon is now proposed with a new downsized 8-liter engine. Mated to the ESCOT-VI gearbox as standard, not only 8-liter Quon offers better fuel economy and increased payload, but it preserves all of the outstanding drivability and ease of operation drivers expect from a UD truck.

It is these dependable UD traits - flexibility, durability, low running costs, comfort and drivability - that have turned the New Quester into a heavyduty reference in growth markets. Now available with the renowned ESCOT automated manual gearbox, and even more powerful engines, New Quester is roaring ahead. Read how driver Manachai Bunsin, who works for Nannon in Thailand, has been appreciating the multiple evolutions during his cross-country long-haul drives.

Making the trucks the world needs today, means working now on the truck our customers will need in the future. Autonomous trucks are set to largely transform the world of transportation. In our vision 2030 development plan, UD introduced its ambitious roadmap, focusing on Fujin & Raijin, automation & electrification. In these pages, we reveal our Level 4 autonomous Quon Fujin prototype, which, before a group of international media members, did an impressive demonstration of the potentialities of a technology that will be with us in the not-so-distant future.

The future is promising, for UD and for our customers.

Keep trucking,

Takamitsu Sakamaki President, UD Trucks Corporation

#### **UD** around the world

08 **8-liter All New Ouon** Downsized engine, higher payload



#### **Quon 15 years**

Fantastic voyage



#### Lucky year

Testing an All New Quon for 12 months

#### 18 **Australia**

Total package

#### The future of smart logistics

Autonomous trucking in confined areas

#### 24 **South Africa**

A century of waste management Decades of partnership



#### 26 **New Quester**

A smart move for your business

#### **Thailand** 30

Riding the highs and lows



#### 34 A day in the life of a driver

Driving adventure with New Quester

#### Roads is published by UD Trucks Corporation www.udtrucks.com

#### Publisher

#### **Kenneth Hagas** Vice President Brand Strategy &

Marketing Communications



Editor-in-chief

#### Vanessa Maternini

Digital and Publications Manager

#### Produced by



contact@alineaproductions.com Tel: +86 139 111 55 788

JAPAN

#### New 8-liter Quon praised at the *Touch & Ride* test-drive in Japan

A Touch & Ride event for the 8-liter engine model Quon was held for the media in January at the Japan Automobile Research Institute test course at Shirosato. The event was the prelude of a series of test drives organized to introduce customers to the new 8-liter version of All New Quon.



Guests were invited to test in various tricky conditions, such as riding in the tipper truck on the high-speed test circuit, over hilly terrain and across pitted road. They could deliberately drive into a ditch then leave the trucks to get them out with the Escape function. Drivers tried hill starts and tested the power of auxiliary brakes in downhill; and experienced the touch and handling of this latest Quon.

The media came out impressed by how "well-balanced" this downsized-engine version of Quon feels, "between drivability, comfort, quietness and increased payload". Others praised the excellent transmission, and the braking, which felt "like a passenger car." The shortage of drivers in Japan's logistics industry is becoming increasingly acute, so downsized and lighter engines allowing higher payloads are urgently required. It is estimated that each small-engined lighter truck with a higher payload can save an operator several million yen a year (a million yen is about 9,000 US dollars).



Read about 8-liter All New Quon on P8-11

#### All New Quon snow plow truck on display at 2019 Yukimirai Snow **Removal Machinery and Technology Exhibition in Northern Japan**

UD Trucks is the only manufacturer of heavyduty all-wheel drive snow removal trucks in Japan. In a country where half receives heavy snow fall, affecting around 15% of the population, snowplow Quons play a vital role by maintaining a stable logistic network and a safe and secure service infrastructure. Fully aware of its social responsibility in ensuring safety in snowy regions, UD Trucks will enhance its offering with a back-up system that provides a wide range of professional services in addition to the snow plow Quons.



**LATIN AMERICA** 

#### A new fleet of 20 Quester CKE 280 for garbage collection delivered in Nicaragua's capital, Managua

A year and a half after the launch of Quester and Croner in Nicaragua, these 20 new Questers are now part of more than 30 already operating in the country. "The trucks were specifically designed to meet customer requests for a reliable and robust vehicle. They are performing an important mission for the local communities," says Fábio Freitas, Head of UD Trucks Sales in Latin America.

"This tender started in July 2018, and after many rounds of negotiation, UD Trucks and our importer Maquipos won the deal. From that moment, we had the full support of the entire organization to meet the tight delivery schedule. From the confirmation of the orders, production, bodybuilder and delivery department, everyone was fully engaged and committed to meet the delivery date in Nicaragua. A true Gemba Spirit," says Eduardo Marcos, Marketing and Strategy UD Trucks Latin America. UD Trucks, along with Maquipos, will provide full maintenance support so the trucks can go the extra mile for the city of Managua.



## 150<sup>th</sup> UD delivered to John West Logistics

The trucking industry is an exciting one, one that's changing, and changing for the better. That's what John West Logistics managing director John West thinks.

"The industry is much better than it was five years ago, significantly better than 10 years ago and you can't put a number on how much better it is now than it was 20 years ago," he said.

Mr West, who has more than 40 years of experience in the transport and logistics industry (20 of those were spent working for the Mayne Nickless Group), started up his Brisbane-based contract logistics business in 2000, and now has depots across Australia and in New Zealand too. *Roads* readers may remember Mr West

from a feature in our 2/2014 issue. He recently celebrated an exciting milestone when UD Trucks, a major partner in his expanding business, handed over the keys to his 150<sup>th</sup> UD truck.

For as long as he's been in business, the majority of Mr West's fleet has been made up predominately of Volvo Group trucks, with Macks and UDs. His relationship with the company goes back as far as the 1980s, when he bought his first truck.

"It's been a great partnership and it was nice to celebrate the 100<sup>th</sup> (UD) milestone and now the 150<sup>th</sup>. Now we're looking forward to the 200<sup>th</sup>!"

Volvo Group takes care of all the servicing and maintenance and has worked closely

with the company

to find the specific trucks to suit JWL's unique applications.

What will the 150<sup>th</sup> UD to join the fleet be doing? Carting empty beer bottles in Queensland.

UD Trucks National Fleet Manager Grant Walford said the prime mover was the first to be delivered of the "new generation" and includes a suite of safety features.

Mr West praised the safety features of the truck, saying "most trucks on the road these days are better than most cars," adding that all his drivers enjoyed driving the trucks.

All of his trucks were fitted out with telematics, he said, which also kept drivers happy.

"It's great, it protects them and it protects us."

News published on bigrigs.com.au website



#### Southern Africa Quester and Kuzer launch and Dealer Awards 2019



This Feburary, New Quester and light-duty Kuzer were launched in Southern Africa region. Guests and media joined UD Trucks at the spectacular Sun City Resort in North West Province, to test drive the two new ranges of UD trucks.

It was also a great occasion to hold the 27th UD Southern Africa Annual Dealer Conference. Besides discussing products and services in the region, the conference is also an opportunity to exchange



ideas. Following UD's comprehensive plan on supporting smart logistics, this year's discussions focused largely on the incorporation of smart modern technologies and solutions into daily business, to the advantage of customers. As every year, the conference ended with a Dealer Awards Gala which saw the top dealership achievers celebrated. Spanning 39 different categories in various disciplines such of sales, parts, service, administration and



finance, it was clear that UD Trucks' dealers have once again raised the quality bar. Motruck, in Swaziland, Dulys Trucks Harare, in Zimbabwe, Produkta Trucks, in Nelspruit, South Africa, and McCarthy Commercial Alrode, in Johannesburg, took away the top Dealer of the Year awards. The passion and spirit of the UD Trucks brand is certainly alive and well in Southern Africa, and the team is ready to take on the challenges of 2019.



**THAILAND** 

#### Handover of 15 units of New Quester with ESCOT transmission to customers

Following the successful launch of New Quester on the Thai market in February, UD Trucks Thailand has officially handed over 15 units of New Quester to customers. The first three trucks were delivered to Zizler Transport as part of a 10-truck deal, and are the first Japanese trucks in the company fleet. Zizler transports fruit across the border between Thailand and

China. They require high performing, reliable, fuel-efficient trucks, with optimum uptime as they transport perishable goods. The company chose New Questers to complete their fleet because of the new technologies and ESCOT transmission, as well as the aftersales services.

Another 12 New Questers have been

delivered to Pornputhip Transport, to be used for their business in syrup transportation. The company has more than 100 trucks in their fleet and has been a UD loyal customer for more than 20 years. It was the new technology integrated in New Quester that won them over. New Quester is one of the most advanced trucks currently on offer in Thailand.





#### Over 360 people gathered for the launch of New Quester in Thailand

50 journalists, 260 customers and 60 UD Thailand employees gathered for the

thoroughly detail the manufacturing appreciate the driving pleasure proposed by the ESCOT automated manual

The launch was also live-broadcasted



Read about New Quester on P26-29







## New 8-liter All New Quon

The New Quon with higher payload, excellent driving experience and outstanding reliability powered by a downsized engine.

ince its launch in 2017, the qualities of All New Quon have been acclaimed in Japan and worldwide by customers, specialized press and transportation professionals. In Japan, All New Quon is now available with the GH8 engine with smaller 8-liter displacement, addressing the specific needs of a wide range of customers who operate cargo trucks, tanker lorries, tippers and mixers. Keeping all the drivability and smoothness of operation appreciated in its renowned 11-liter

sibling, 8-liter Quon allows, thanks to the extra reduction of weight permitted by its lighter powertrain, an increased payload. An answer to the needs of smart logistics in a country whose specific regulations drastically limit the gross total weight.

To better understand the particularities and benefits of this new version, we interviewed seven UD team members involved in the planning and development of the 8-liter All New Quon.





A downsized 8-liter engine in the heavy-duty All New Quon? We asked Kazuhito Hosono, Vehicle Chief Project Manager and Yukio Tsujita from Product Planning, how this idea was born and brought to life.

Kazuhito Hosono: An 8-liter version of the GH engine had been developed by the Japanese Technology team since 2007, and then passed on to the Volvo Group engineers. Now there are more than 30,000 vehicles equipped with it currently serving in fleets in Europe and Asia, proving its solid reliability and operability. For the version equipping this new Quon, we developed the engine further to meet the requirements of the very demanding Japanese environmental regulations (pPNLT, exceeding Euro 6 regulation requirements). There have been many requests for small-displacement engines from our customers, and we believe that the 8-liter engine is an useful addition to the Quon engine lineup, enabling UD Trucks to meet a wide range of customer needs.

Yukio Tsujita: We think that trucks with small-displacement engines have been long-awaited by customers who want to improve transport efficiency. This 8-liter engine is available on cargo trucks, tanker lorries, tippers and mixers, and we are convinced that it will be a great asset for customers who want more payload, and companies doing mostly mid- and short-distance transport.

#### 300kg weight reduction

A 300kg weight reduction, for an equivalent extra payload. Senior Project Manager for Powertrain Engineering, Takefumi Mochizuki, and Junichi Kawahara, Chief Project Manager for Power Train from Product Management Division, explain how it could be achieved.

**Takefumi Mochizuki:** Reducing weight had already been a priority on the development process of All New Quon. The 11-liter engine versions had already achieved significant weight reduction with the adoption of disc brakes and the use of robust and lighter high-tensile steel for its chassis. Keeping all these advantages, the 8-liter versions add an extra 300kg weight saving by reducing the weight of the powertrain. One of the reasons is that, though small-displacement engines usually use two turbos, we adopted a single turbo to further reduce the weight.

Junichi Kawahara: Technically, we can do both, single or dual turbo. In fact, when we introduced an 8-liter demonstration vehicle at the Tokyo Motor Show in 2013, ahead of other companies, it used a dual turbo. However, as a turbo weighs several dozen kilograms, we prioritized weight reduction and adopted a single turbo. From there, we worked on delivering as high power and performance as a dual-turbo engine. The high-power output of 357 PS with a single turbo engine is made possible thanks to the excellent design of the base engine, with a high peak cylinder pressure ratio and efficient fuel injection system. In addition, besides being lighter, a single turbo is easier to maintain and more cost-effective. When balancing the overall benefits of each solution, it became obvious that the single turbo was the best choice for our customers.



## New high-capacity version

Even more payload? UD introduces a brand new high-capacity version, with 200kg extra payload over the standard 8-liter version. Shigeo Nagamatsu and Takayuki Miyanoiri, Managers from Product Planning and Engineering, together with Sadahiro Shimizu, Senior Project Manager from Product Development tell us more about this new high-capacity 8-liter Quon version.

**Shigeo Nagamatsu:** Even more payload is now available on the brand new high-capacity version we developed for the 8-liter Quon. In addition to the lighter chassis of All New Quon, and the lighter 8-liter engine, we worked on further reducing the overall truck weight by decreasing body weight.

In comparison with the standard 8-liter version, where the payload of the rigid cargo version has been increased by 300-500kg, on this high-capacity version the payload has been increased by 500-700kg compared to the GH11 engine model. On the rigid cargo version, for example, the floor frame is now in aluminum, and the lining is replaced by a lightweight material, reducing the body weight alone by over 200 extra kilograms compared to the standard version. The high-capacity version will be available for gull-winged vans, tippers and mixers.

**Takayuki Miyanoiri:** For the mixer truck, the payload benefited from the 300kg weight reduction due to the lighter 8-liter engine, increasing the standard drum capacity to 4.4 m<sup>3</sup>. The high-capacity version extends the capacity to 4.5 m<sup>3</sup>, the highest allowed in Japan.

**Tadahiro Shimizu:** Note that the mixer version of Quon reached this capacity without requiring the use of aluminum wheels, which we preferred to avoid as they are expensive, easily discolored by cement, which is also difficult to remove when it adheres to.

**Takayuki Miyanoiri:** For the tipper, the powertrain weight reduction enabled us to achieve a payload of 9.8 to 10 tons for the side-tipper standard version, and 10.4 tons for the high-capacity version with the telescopic cylinder rear-tipper type. As it requires less power for dumping up compared to the side-tipper, the mechanism is lighter. The telescopic rear dump is popular in Europe and we are now considering introducing it in Japan.

#### Another perfect match: 8-liter GH engine and ESCOT-VI

When UD launches a new engine, the whole powertrain is redesigned. Mated to a recalibrated ESCOT- VI automated transmission, the new 8-liter model delivers fully on Quon's outstanding drivability, efficiency and dependability. Junichi Kawahara and Takefumi Mochizuki, Chief Project Manager and Senior Project Manager of the Powertrain Engineering department give insights into the tuning process aimed at providing Quon's proverbial qualities.

Junichi Kawahara: Usually, when we work on the development of a new powertrain we divide engine, transmission and rear axles into three projects. This time however, as the main focus was downsizing the engine from 11L to 8L, we integrated the work into a single project.

Takefumi Mochizuki: We fine-tuned the matching of the ESCOT-VI and the 8L engine thoroughly. Starting with simulation, we did test drives on the usual test courses and on public roads. For the public road test, we checked compatibility with ESCOT-VI, fuel efficiency and the status of UD Particulate Cleaner in traffic, city and highway situations, reproducing actual customer conditions. Not only the test drivers, but also the engineers test drove the vehicle. We want our engineers to drive the vehicle they are developing, to help finetuning with the highest precision, in order to provide our customers with the best possible vehicle. As a result, not only the GH8 engine delivers a driving experience as pleasant as the GH11 engine, fully compliant with most recent Japanese pPNLT exhaust gas regulation, but all models also exceed by 5% the JH15 fuel consumption regulation. We believe this new 8-liter Quon is a very well-balanced truck.



## The passion and rigor behind New Quon's ultimate drivability

All New Quon is designed with drivers at heart. How did the UD development team stay loyal to this very idea, and deliver Quon's ultimate drivability in the 8-liter powered model? Shimizu and Hosono from the Product Development and Project Management Divisions share some of the stories behind the building of a truck for ALL drivers.

Tadahiro Shimizu: We did a thorough tuning by driving the vehicle ourselves until we thought "this is it!". One of the big advantages of Quon is its superior drivability and ease of operation, which allows inexperienced drivers and elderly drivers to drive effortlessly, smoothly, and safely. The credit goes in large part to the electronically controlled automated transmission, ESCOT-VI, that makes driving Quon as simple as driving a car. All versions of 8-liter Quon are equipped with ESCOT-VI. We searched for the best match between the 8-liter engine and ESCOT-VI, so that our customers could experience superior drivability in any driving environment.

Kazuhito Hosono: In the early stages of development, I had decided to organize a test drive. I wanted our sales people to test drive the truck, as well as our factory members who normally don't have a chance to take part in test drives. The result was very positive: we received feedback from many team members, which helped us to further improve the accuracy of our fine-tuning. This team involvement was a real motivating factor and it ended up becoming a major driving force behind the project.



## Now, it's for the customers to test it

How does a smaller-engined Quon feel behind the wheel? To answer this question, the UD development and product teams want to hear from their customers and have been holding a series of customer test-drive events.

Yukio Tsujita: We have been running various test drive events. We would like many people to drive the 8-liter Quon and experience its performance, and especially the benefits of ESCOT-VI. For example, mixer trucks require experienced skills, such as hopper alignment. ESCOT-VI is set up to make such subtle operations easy, and I would like drivers to feel by themselves that "with ESCOT-VI, there is no problem even though it's an automatic transmission".

Shigeo Nagamatsu: I think that drivers are proud of their driving skills, patiently acquired over years driving manual transmission trucks. If we manage to change preconceptions and demonstrate that ESCOT-VI does the job better than a manual gearbox, then daily operations will become significantly easier.

Kazuhito Hosono: I believe that drivers who operate a truck daily are not only concerned with performance but also the truck's capacity to brake safely. Usually, when the engine displacement decreases, engine brake effectiveness also decreases. So, to address this point, we have fine-tuned the control to make full use of the automatic downshift to support the auxiliary brake. As for engine power, we have tuned this engine to emphasize a feeling of power, while also preserving the long-term reliability and durability our customers expect from UD.

**Takayuki Miyanoiri:** UD Trucks will be holding a series of test drive events of the 8-liter Quon. We look forward to inviting drivers and owners to experience the superb quality of our new trucks.



Kazuhito Hosono
Vehicle Chief Project
Manager
Project Office, Product
Management Division,
UD Trucks Technology



Tadahiro Shimizu
Senior Project Manager
Vehicle Engineering,
Development Division,
UD Trucks Technology



Senior Project Manager, Powertrain Engineering, Development Division, UD Trucks Technology



Junichi Kawahara
Powertrain Chief
Project Manager,
Project Office, Product
Management Division,
UD Trucks Technology



Yukio Tsujita
Senior Manager,
Product Planning/
Engineering Department,
Vehicle Sales Division,



Takayuki Miyanoiri Manager, Product Planning/Engineering Department, Vehicle Sales Division, Japan Sales



Shigeo Nagamatsu

Manager, Product

Planning/Engineering

Department, Vehicle

Sales Division,

Japan Sales



In February, previously unknown university sophomore Mark Zuckerberg launched the beta version of a new social networking site, at that point known as TheFacebook.com.

Other advances with major implications, meanwhile, included the birth of Gmail, the unveiling in France of the Millau Viaduct – still the world's tallest bridge – and a slew of successful space missions.

All these disruptions were of course hugely significant. But for those with an interest – vested or otherwise – in the transportation and logistics industry, the hottest debut of the year came not in Silicon Valley or in the gilded halls of Harvard, but at the Tokyo Motor Show.

Automotive history was made when UD Trucks first unveiled its Quon showpiece heavy duty truck at the show. Gasps of surprise and spontaneous rounds of applause from the crowd greeted the appearance of the vehicle. There was good reason for all this acclaim.

Years of painstaking research and hard work had gone into development of a flagship heavy-duty truck that incorporated ground-breaking emission clearing technology, IT-enabled features and advanced driveability, comfort and safety.

One of the most revolutionary features of that original Quon was its SCR Urea system, a process of cleaning thin particles from exhaust gas – a genius idea drawn from the urea catalysts used to process emissions at thermal electric power plants. The solution has gone on to become a standard in the industry.

So, when it premiered as the world's cleanest diesel truck at the time, Quon was rightly hailed as a remarkable achievement in keeping with the reputation of UD Trucks as benchmark for quality and willingness to go the extra mile.

Just as Facebook has honed its formula over the past 15 years – going from a relatively niche way of sharing events and information with "friends" to the globestraddling tech behemoth it is today – so too has Quon (and, for that matter, UD Trucks) moved with the times.

UD Trucks has long shown its ability to develop its product based on the changing needs of customers. Indeed, a commitment to move with the times has been written into the brand DNA since its very early days when company founder Kenzo Adachi spent years honing and refining diesel technology for use in his vehicles.

Core values of the brand were instilled from the very beginning. Durability and dependability are key planks of truck design – and UD's unstinting devotion to these fundamental "two Ds" has earned it an enviable reputation in all corners of the globe.

From the craggy peaks of Ethiopia to the highlands of Asia and the vast empty spaces of Australia, the brand's various models – both legacy and Quon – are running round-



A sense of perpetual motion is far from confined to the punishing schedules kept by UD vehicles in fleets around the world. In recent years, UD Trucks has increased its efforts to support "Smart Logistics" – fusing its reputation for dependability with cutting-edge innovations that look boldly into the future. This centres around extensive research into ACE (automation, connectivity and electromobility).

And, in many ways the evolution of Quon since its launch 15 years ago can be seen as a barometer of how UD Trucks has applied its various breakthroughs in practice: turning ground-breaking new ideas into reality and rising to the fresh challenges of modern transportation.

In fact, the history of Quon is inexorably

The history of Quon is inexorably intertwined with UD Trucks' own journey towards smart logistics that "put people first", benefitting everyone from drivers and fleet managers to society as a whole.

intertwined with UD Trucks' own journey towards smart logistics that "put people first", benefitting everyone from drivers and fleet managers to society as a whole.

With three significant upgrades since 2004, the story of Quon is rich in landmark moments. Smart components were integral from the word go. When Quon debuted in 2004, features such as a voice assist function and internet-based remotechecking announced an intention to transform the heavy-duty truck into a "smart" vehicle for the next generation.

An upgrade in 2010 was another leap forward. By this time UD Trucks was

able to harness its own engineering and technological strengths to the technologies, resources and knowledge of the global Volvo Group, which the company had joined in 2007. This led to the introduction of fuel efficient GH11 and GH13 engines and the 2-pedal robotized-clutch ESCOT-V gearbox, which offered improved safety and driving pleasure.

even higher. New features in this model included a Lane Departure System and an Advanced Emergency Braking System, with front radar sensors making Quon capable of braking by itself if a risk of collision were detected. The vehicle also benefitted from an improved ESCOT-V

with updated software and an ECO mode to maximize fuel efficiency.

The perfectionist engineers at UD Trucks maintained their record of delivering profound advances from model to model with All New Quon, introduced to the market in 2017.

A revolutionary advance in a number of ways, All New Quon was widely recognised as a statement of intent by UD Trucks in support of smart logistics. Technologies on board include a driver fatigue surveillance system to keep track of potentially catastrophic weariness.

The built-in Nenpi Coaching system works like an on-



ESCOT-VI
The automated manual ESCOT transmission on Quon, a reference in drivability and fuel efficiency



board driving coach, helping drivers by making suggestions on gearshift changes, acceleration or brake actions. Fuel consumption reports are automatically generated by the system and records are kept for convenient consultations. The sixth generation ESCOT-VI, meanwhile, offers even smoother gear changes and more assertive, well rounded gearshift management through enhanced software.

Other highlights include an ingenious Foretrack function which, when paired with ESCOT-VI transmission, memorizes every hill the truck tackles and helps drive the truck in the most fuel-efficient way. Additional innovations are almost too long to list, but include advanced disc brakes with superior heat dissipation, a reduction in vehicle weight, improved load handling and suspension, the fuel-efficient and clean GH11 Engine and a cabin that was completely redesigned to enhance driver comfort.



When it premiered as the world's cleanest heavy-duty diesel truck at the time, Quon was rightly hailed as a remarkable achievement in keeping with the reputation of UD Trucks as benchmark for quality and willingness to go the extra mile.

Smart logistics though are not just about technological advances. Humans remain central to the UD Trucks, and All New Quon, with its improved drivability, fuel-efficiency, safety, productivity and uptime, has been a boon to drivers and fleet managers alike.

Indeed, All New Quon went a long way to addressing one of the most pressing challenges facing the logistics industry: a growing shortage of qualified drivers. With its various innovations making it much easier and appealing to pilot, the new vehicle helped open a career path to less experienced drivers and to candidates who had not previously considered pursuing such a role.

The road towards even smarter logistics though is one that extends into the distant future and one that is likely to see further twists and turns for Quon. Last year, UD Trucks announced the launch of its Fujin & Raijin – Vision 2030 innovation roadmap

that aims to deliver a variety of solutions for smart logistics, including fully-electric and autonomous trucks by 2030. Last year also saw All New Quon join the world's first public road demonstration of multi-brand truck platooning with the aim of gathering data for maturing the Cooperative Adaptive Cruise Control (CACC) technology. Quon Fujin truck ably demonstrated level-4 autonomous driving in front of a group of journalists.

"An unparalleled rate of transformation is sweeping through society," comments Douglas Nakano, Senior Vice President of Technology at UD Trucks. "The many transformations of technologies will reshape the landscape of logistics."

Quon has come an incredible distance over the past 15 years. But the willingness on the part of UD Trucks to anticipate the shifting needs of the global logistics industry mean that its flagship vehicle is sure to keep advancing.





omething had to give for Lance Law. Innisfail Carrying Company's managing director admits success in competitions has long been a stranger. However, not any longer. Perhaps it was the pent-up pressure that finally broke his roadblock of luck, leading to his winning free use of a All New Quon for a year.

Faced with some rugged terrain in the western regions of Queensland and New South Wales, the truck is now under pressure to show its true colors. Law will be testing the truck on some of his tougher long-haul routes, as well as some shorter Far North Queensland routes, as he seeks clues to his company's future fleet puzzle. As he said, in the 25-words-or-less he had to impress UD: "Being a combination of shortand long-haul contracts, I believe the Quon can give me the best of both worlds."

This belief encapsulates the message UD Trucks wants to get across. The trial will allow All New Quon to demonstrate to other Australia customers the strength and advantages it offers across all distances.

#### They were the mighty trucks

This will be Law's first UD and, he admits he knew little about All New Quon before now.

But he was exposed to the make at the start of his career when carting road and construction material, saying the CWs were "awesome" and "you couldn't kill the old UDs".

"Back when I was a young fella, I worked with a company in sand, gravel and concrete, and a couple of our subbies had UDs," Law recalls. "They were mighty trucks back then, with running gear that was second to none, so I've always had a bit of a soft spot for them."

#### A long-waited boost for business

But, what lured Law to enter is nothing heavily profound. Really, it was to distract himself from the pressures that all trucking company owners and managers must deal with and clear his head, as much as anything. It's telling that, even by the time he told wife Diane the good news, the magnitude of what had fallen into his lap had yet to sink in fully.

Innisfail Carrying Company (ICC) is a familyowned business that started in 1995 with one prime mover; It has since expanded to include several depots across Queensland



UD Trucks Australia vice president Mark Strambi helps Lance Law get to grips with All New Ouon

#### The ultimate test drive

"New Quon has created a lot of interest in the trucking industry and that's reinforced by the numbers we've sold so far for the year," UD Trucks Australia vice president Mark Strambi says. "The Ultimate Test Drive", as this prize has come to be known in Australia, works both to the benefit of UD and its future customers.

"It gives us the opportunity to get honest open feedback from a customer who's going to use it in an area where we wouldn't normally have a test vehicle running, over an extended period.

"I know the way Lance runs his business and they're very interested in the telematics side of it, which this vehicle offers. Telematics will enable us to give him quick feedback as well on the truck and on his drivers. "We're going to work closely with him over the 12 months to make sure it does everything we said it would do." A year was chosen to allow it to work in a variety of tasks and conditions to give a comprehensive and measurable

As the handover ceremony took place, there was more than a ghost of UDs

based in Far North Queensland was apposite as Stramb has history there

He points out that 1970s-vintage CKs can still be found working up there and he had come across a fair few as a regional manager

It's a heritage that resonates for the brand and a refurbished 1973 CK40 graces UD headquarters in Wacol, Queensland.

#### Support team

For Ross Gordon, the branch manager in charge of UD in Townsville, along with showcasing All New Quon and getting fresh-eyes feedback, the exercise aims to introduce Law to the group's back-up services.

"It will give us the opportunity to show just how the Townsville dealership can support him in what he does, Gordon says. "He's looking to use it on the run from MI has to Townsville, and we have ways of looking after him

"The diversity of Lance's business and the region he operates in, really will showcase the benefits that this



Make/model: UD Quon GW 26 460 6x4

Engine: UD GH11TD Power: 338kW (460hp) Torque: 2.200Nm

Transmission: UD ESCOT-VI automated 12-speed

**GVM:** 26 tonnes **BBC:** 2,247

Emission Control Type: SCR and DPF
Emission Control Standard: Euro 6

where it operates a fleet of 38 trucks.

Law's fleet consists mostly of American trucks and trucks from another Japanese brand, but he is looking forward to the change and being able to get a better idea of what the options are.

His is a relatively modest operation where brand new vehicles are a luxury and taking one on just for testing purposes would always be an unlikely proposition without this change of luck. "This prize here has given me the chance to do it," he explains.

All New Quon features a complete cabin redesign and a focus on enhanced

ergonomics. Refinements to the whole driveline have improved fuel efficiency, as well as complying with pPNLT Emissions Standards that exceed Euro 6 emission requirements. Other technologies include Traffic Eye Brake and Lane Departure Warning.

Law plans to have the truck start on B-double work with fertilizers in Innisfail. "When that season finishes, we'll trial the truck on two runs a week from Mt Isa to Townsville," he adds. That is more than 1,800km for a roundtrip.

"It'll be perfect to compare them to the two trucks we have doing that run now."

## Total package

The Luff family's Border Express is one of Australia's largest privately-owned transport operations. Under Direction of CEO Mostafa Kassaby, Border Express continues to evolve through its dedication to being at least one step ahead.

Prime Mover, May cover story by Peter Shields
© Prime Creative Media



he Australian transport market continues to undergo numerous changes and successful operators have to be on their 'A' game to merely survive, let alone prosper. A significant factor in the Border Express journey so far has been recognising that the company's client base itself has evolved as well. "There was a time about seven years ago when we weren't much involved in parcels and were virtually 100 per cent bulk, yet today parcels account for around 35 per cent of the business," says Mostafa Kassaby, Border Express CEO. "Previously we were probably carrying goods that many in the industry didn't want to carry and today we are carrying products that many would be in envy of doing."

#### From bulk transportation to parcels delivery

Border Express initiated its parcel business in September 2014 and the rapid growth has been largely organic with no acquisitions of existing operations other than Ross Freight in New South Wales (NSW) which was ultimately consolidated into Border Express in May 2018.



Border Express continues to perform a significant amount of traditional freight that was the foundation of the business which Max Luff created in 1981 and still has ongoing contracts that the company has serviced for more than 30 years. With the transition to more parcel deliveries the business has evolved to where it is today and significant changes have taken place affecting equipment, facilities, and even the service network. Driving the organisation has required an understanding of not just what the market needs but also trying to get ahead of other market players. Border Express is a place of continuous development which extends to the various equipment acquired to suit the current and future requirements.

"We didn't have any electric mezzanine deck floors three years ago," says Mostafa. "Today we have more than 20 because we look at what is efficient and what is safe."

A similar philosophy extends to truck purchases where the current driver shortage affecting the entire industry was anticipated by Border Express management years ago.

"We haven't bought a manual truck for

seven years," says Greg Maytom who is in charge of Network and Infrastructure at Border Express and has the responsibility of overseeing the development of the organisation's equipment requirements. "Typically most of our bulk fleet and our main core of express vehicles are UD Trucks. It's been the case for about seven years and there are now well over 100 UDs in the fleet."

#### UD, a partner of choice

Both executives are impressed with the technologies available with the current model of the UD Quon ranging from its advanced safety features to the analytics available via the telematics systems.

"For us to reduce accidents as well as our costs in maintenance these are the type of vehicles for us," says Mostafa. "That's why we've invested in UD trucks which has put us in a good position to be able to get good drivers into these vehicles and want to drive them."

The Border Express fleet is largely company-owned and has quite regimented requirements for its sub-contractors in terms of vehicle type and age. The sub-contract vehicles also carry the



Border Express livery truck colours, with presentation and driver behaviour both important factors.

"It's fair to say most sub-contractors in the bulk fleet will go with UDs as well," says Greg. "And not just for consistency." Last year the company, according to Mostafa, purchased a particular new UD truck with a new body with an electric mezzanine deck. "The driver loved it so much he asked if he could buy it and become a sub-contractor," says Mostafa "That's a real testament to that type of vehicle."

The UDs are contributing to the rigorous management of compliance at Border Express which operates its own service workshops with support from the CMV dealerships from which they acquire their UD Trucks.

"We've got a great relationship with CMV," says Mostafa. "They come out onsite and do on-board training in the UDs and they spend a lot of time with us in the understanding of the equipment itself. CMV have really catapulted us to another level altogether and their support for Border Express has been fantastic. I have

to give them a plug in that respect because the team there have done everything they possibly can to mentor us and to train us. It helps us feel comfortable from a Chain of Responsibility perspective that we are compliant and we believe they are advising us in the right way. Their partnership with us and support for our own national compliance team has given us a confidence we are doing the right things in this area."

Greg agrees. He says the support of the UD Trucks factory through CMV cannot be underestimated.





"There is nothing I have asked for through CMV that the factory hasn't helped us with particularly in configurations and specifications and different little things we have asked for throughout the journey they have supported. We certainly hope that continues," he says.

#### **Expanding by focusing on details**

Border Express has built its own new terminal facilities in Victoria and on the Gold Coast and early this year moved into its new company-owned purpose-built premises at Tuggerah on the NSW Central Coast. With the eastern seaboard covered, Border Express has also entered into partnerships in regional South Australia and Western Australia which has resulted in a national service network. Third party logistics (3PL) is also the subject of increased investment with major facilities at Barnawartha just outside of Border Express' original base of Albury, as well as in Adelaide, Melbourne and Perth.

"At the end of the day we are an Australian family-owned business and we are more than happy to continue to invest in Australia," says Mostafa. "We don't off-shore jobs or processes, unlike some of our competitors who are starting to do it. That includes our call centres and back of house services because once you hand over to an agent you lose some of your control and visibility."

Mostafa's preference has always been to keep jobs in Australia and that remains a focus point for future growth.

"We'll probably double our business within the next five years so we need to have the right partners on board.

For example, we used to have our own forklifts, now we don't have to because we hire them off Linde Material Handling. The industry is going through some significant change and if you're not at the front of it and looking for different ways to evolve your business you're going to get left behind."

#### Rethinking transportation activity

The evolution of Border Express hasn't merely been about facilities and trucks. It's been about the entire company embracing a culture of relentless improvement and a passionate commitment to high ideals. One of the values introduced into the



organisation has been simply looking at being better every day.

"Seven years ago we had 'committed to deliver' as a position statement and I remember saying to the Board what are we committed to?" Mostafa recalls. "We need an exclamation mark on it and it is not just about delivering a parcel. We are committed to returning a phone call or an email and getting back to our people. We are also committed to support our partners 100 per cent of the time, not 98, not 99. Only then the by-product is delivering the parcel. That's what really shook the business up and it's how we are with our business, our people, and our culture. We have to stay ahead of it and we have got to be ruthless in that." Border Express hasn't been immune from the universal shortage of competent drivers and has an active policy of internal advancement for employees who want to perform other functions. Mostafa is also supportive of an industry-wide approach

to make working in road transport more appealing.

"The fact of the matter is we are an industry with a low attractiveness to some degree. We need to ask how we make it attractive for the younger talent to come through the businesses. And that's a question for every transport company. The industry is rapidly changing and it's driven by technology with cutting edge tools and innovations and ideas that can provide opportunities to get ahead."

#### **Expanding into airfreight!**

Mostafa is excited about the future of Border Express and expects the growth rate to remain rapid without sacrificing service. "Our bulk freight business has led us into the parcel business. We're serious about warehousing and now the parcel business will lead us into airfreight. That's our next succession as an organisation and it's what our customers are telling us they are wanting from Border Express," he says.





### Autonomous trucking in confined areas

ith its ambition of supporting smart logistics and providing the trucks the world needs today, UD is tackling challenges facing society and particularly the transportation industry: the booming development of e-commerce, driver shortage\*, requirements for increased safety and less CO<sub>2</sub> emissions, all concur with requiring a great leap in operational efficiency.

#### Autonomous trucks: an answer to many issues confronting the logistics industry

In a not-so-distant future, technologies like automation are set to transform logistics, and deliver more value to producers, suppliers, consumers and drivers.

In confined areas, such as ports, container yards, mines, quarries, where public access is not permitted, trucks will soon be able to operate fully autonomously with enormous benefits. With automated trucks moving containers inside the yard of a port for example, ports can operate 24 hours a day, increasing efficiency during non-peak hours and reducing daytime traffic. Central control centers monitor each truck's position as well as direct pick-ups and drop-offs.

Helping to improve efficiency, safety and productivity, autonomous driving is a major part of UD's vision for the future of smart logistics, and its engineers are already testing fully-connected automated trucks in confined areas.

Last December, the international press was invited to UD's headquarter in Ageo, Japan, to discover a Quon *Fujin* prototype, operating fully autonomously in a confined area on the UD test track. Focusing on autonomous driving, *Fujin* is part of UD's Vison 2030 *Fujin* & *Raijin* development plan to engineer the future of smart logistics.

#### A fully autonomous Quon based on ESCOT-VI All New Quon

Working together with Quon's standard technological features, such as Traffic Eye, Active Emergency Braking, Lane Departure Warning System and Adaptive Cruise Control, a combination of guidance systems and obstacle detectors allow Quon *Fujin* to see its environment. A GPS, a radar and a lidar (Light Detection and Ranging - LiDAR - a pulsed laser to measure distance precisely) constantly communicate with an ECU and a control system.

On the UD test track, the course emulated the real-use conditions of a heavy-duty truck in a confined area, with nine different tasks to showcase Quon *Fujin*'s autonomous operation. These included reversing into a warehouse within a boxed-out section marked by cones; driving between conedoff areas simulating a loading or unloading zone; and various turns and maneuvers in both forward and reverse directions. A demanding program that Quon *Fujin* completed without a hiccup.

Simplicity is key to real-life adoption. The system is programmable by customers – via the in-cab control unit – by driving and recording a defined path just once.

#### A major step in a consistent plan towards the future of autonomous driving

UD Trucks is also part of the Japanese government's highway platooning projects, which see significant improvements made to this technology, including multi-brand platooning communication.

Quon Fujin is a major step towards full automation, showing a convincing glimpse of a future of autonomous truck operation within controlled environments; a future that promises more safety, comfort and efficiency. A step further in UD's vision of smart logistics.

## A century of waste management Decades of partnership







The versatility of this truck, that's the main thing for me. That's how it helps me. The drivers are happy, they enjoy the drive. So in that instance, Quester makes my life much easier.

**Clayton Fischer** Operational Manager, SA Metal

"Any UD is user-friendly, and I think with this one, they have simplified a lot more." says Fisher. "It's an accommodating truck. It's comfortable. The drivers enjoy the drive. So that's another reason that Quester makes my life much easier."

"Questers have made a huge difference in our operation compared to other models," Fischer says, "The trunnion-mounted springs and rubber towers are an excellent design and have proven fruitful in keeping costs to a minimum."

The company also operates on rough terrain, and these trucks show comfort and durability despite the tough surroundings. They also achieve excellent fuel consumption, explains Fischer. "We bought these trucks to perform specific tasks but also to be flexible, and they perform on/off road functions without any hassle, which is a plus for us. These trucks have proven over and over that they are worth the buy," he adds smiling.









# Meet the New Quester range

aisen - an essential concept of Japanese engineering. Kaisen defines the idea of constantly perfecting an object, to keep it on top of its game and answering the evolution of its users' needs.

In today's world of smart logistics, constantly evolving, improving, perfecting, is a smart move.

Building on the success of Quester, and its proven reliability and fuel efficiency, New Quester receives numerous improvements and introduces an impressive range of new key features, such as ESCOT automated manual transmission, retarder, electrical cab tilt, more powerful engines, improved comfort and user-friendly telematics. These deliver even greater productivity, fuel efficiency, uptime, driver efficiency and safety. New Quester is, more than ever, a smart move for today's transportation business.

#### A smart move for productivity

Combining even more powerful engines with a lighter tare weight, New Quester can transport even more payload.

Productivity starts with a powerful and fuelefficient engine. GH 11- and 8-liter never lacked power and low-end torque, and are now proposed in an even larger range of power, topping at 440 for the GH11 and 350 for the GH8. These new engines add to the wide range offered, giving even more flexibility for customers to pick the engine exactly matching their activity.

As lighter wheels and lighter fuel tanks bring a lower tare weight, New Quester offers a bigger payload which translates as being able to transport more over longer trips. New Quester also offers the possibility to pick additional axle ratios, for even more flexibility for all kind of operations.

#### A smart move for fuel efficiency

Adding to the extended range of low-end high torque and fuel-efficient engines, the renown manual automated ESCOT gearbox is now available on New Quester.

Making the best of the engine torque resources, ESCOT enables every driver, even inexperienced, to reach superb full efficiency. The GPS-connected Ascot-Roll function memorizes every slope and corner of each route, to anticipate and pick the possible gear every time, even automatically coasting in neutral when safety allows. Additionally, the cooling system of all New Questers receives an e-viscous actuation which contributes to reducing fuel consumption.

#### A smart move for driver efficiency

Driving safely and smoothly takes



We have made sure that New Quester captures the essential needs in markets around the world today. The truck will keep evolving together with our customers' journey.

Toshi Odawara,

Vice President, UD Trucks Quester Product Line

### Interview with Mr. Quester

Toshi Odawara, the Vice President of UD Trucks Quester Product Line accidentally or not earnt his nickname from inside the company where he is known as Mr. Quester. His work has been dedicated to this particular model since the very beginning. Perhaps, he is the best suited person to talk about Quester's evolution as a smart and modern transport solution.

Why upgrade the existing Quester to New Quester?

Upgrading the Quester is an answer to a market change. The essential needs in growth markets around the world keep changing depending on economic situation and transport industry trends. This means our transport solutions must also adapt and deliver.

What do you believe are the most important challenges that customers face today?

Definitely managing the transport operational cost which in most cases will be managing fuel efficiency. Securing skilled drivers is also becoming crucial to fleet operations.

*In what way can New Quester be the solution to these challenges?* 

New Quester has ESCOT which supports fuel efficient driving, avoiding fluctuation of performance per driver. This will improve overall fuel costs of the fleet. Any driver can perform well with ESCOT. This reduces the pressure on fleet owners to hire good drivers.

How much does the largest cab in UD Trucks' history contribute to making long-haul operations easier?

There are operations in several markets which require two drivers or one driver travelling for more than a week in one trip. It means the drivers will need space to live in the truck – changing clothes, cooking, sleeping and resting as they do at home. New Quester's high roof cabin provides sufficient space for drivers to have a more comfortable life on the road.

How do you see New Quester as a part of UD Trucks' evolving customer partnership?
Since the birth of Quester as a totally new range for UD Trucks, we keep learning from our customers to make sure we provide proper performance and support. And keep improving our products the right way. In Japanese we call this Kaizen. It is the spirit to continue improving things and getting better and better. New Quester is just one step on this road.











Making driving much easier, and providing consistent fuel economy, ESCOT is now available on New Quester



GH11E



concentration and anticipation. For long hours every day behind the wheel, it is crucial for the driver to feel rested and relaxed.

The large, spacious cabin of Quester now offers air suspension, which greatly reduces vibrations and improves comfort on poorly paved roads. A new air-suspended seat with lumbar support, and optional armrest, adds up to offer a cushier ride, which lessens driver fatigue and enables better productivity.

#### A smart move for safety

Fully ECE compliant, with braking system offering ABS and ADR, Quester is already a paragon of safety.

New Quester now proposes a hydraulic retarder, to make downhill driving easier. Particularly useful when the vehicle is loaded, the hydraulic retarder allows the speed to be controlled without applying the service brake, reducing brake wear and avoiding brake fade.

#### A smart move for uptime

Built for ultimate dependability, every part of Quester is designed to last long and require minimum maintenance. New Quester now receives an eclectic cab tilt, to make maintenance checks safer and easier.

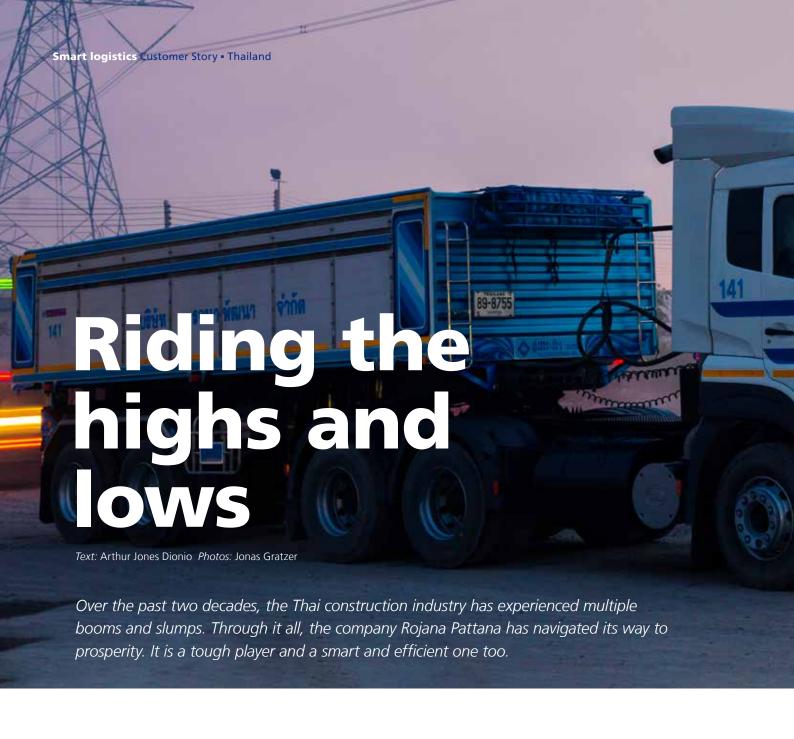
An enlarged choice of hub reductions ensures easy and reliable operation for rough and hilly tasks.

Regarding the clutch, ESCOT's clutch lasts much longer than a manual gearbox clutch, while it is no concern on the Allison automatic gearbox, which uses a hydraulic converter.

UD Telematics Services receives some new features on New Quester, toward optimized productivity and uptime. Designed to improve transportation companies' competitive position through business improvement and efficiency, UD Telematics Services is a smart, high-tech wireless communications system supported by UD's network of dealers and specialists.

Remote diagnostics monitor truck health and performance, helping to reduce fuel and operational costs, and maximizing vehicle uptime and optimizing fleet management.

Regarding the latter, UD Telematics Services now supports geofencing functions, allowing to draw virtual boundaries and monitor speed limits. When the defined thresholds are crossed, customized alerts are automatically sent through the UD Telematics mobile app, helping to keep track of the fleet operation.



orty kilometers north of Bangkok, dozens of trucks form a line inside Rojana Pattana's depot, moving one by one to a gas station for refueling. The hum of engines breaks the silence of dawn to signal another busy day.

#### Behind the scenes of a modern city

At 5:30 AM, a convoy of semi-trailer trucks snakes through rural roads. The fleet is taking gravel from nearby provinces for use in the ever-expanding infrastructure and property development projects in metropolitan Bangkok.

During peak months, the trucks operate from dawn well into the night. On average, the trucks make three delivery rounds per day, bringing thousands of tons of gravel from the neighboring provinces to Bangkok and its suburbs. By the company's own calculation, each truck covers a distance of about 700 kilometers per day.

"We feel that we helped build the foundations of high rises and infrastructure of modern Bangkok," says Nattanicha Pannapat, who runs Rojana Pattana's day-to-day operations. "We supply a good number of construction sites in the capital and our clients rely on our deliveries."

Rojana Pattana's client base recently grew to include a host of condominium developers, the Bangkok metro rail system, large industrial estates and government roadworks.

#### Stay alive to thrive

As Assistant Managing Director of Rojana

Pattana, Nattanicha Pannapat was prepared by her father to become the company's future leader. "My father made sure I learned how to reach out to all types of people, make proper judgement and turn challenges into opportunities."

Rojana Pattana's history is full of stories about overcoming challenges and about being able to consistently provide a trustworthy service to clients. When the company was founded in 1995, it was in the midst of a property bubble in Thailand that eventually triggered the 1997 Asian financial crisis. The property and construction industry crashed along with swathes of other industries. Thousands of companies went bankrupt.

But being a new company meant Rojana



Pattana's base was still small, so the financial impact was not overwhelming. Nevertheless, surviving the economic collapse was everyone's main preoccupation at the time.

The company ended up working as a subcontractor for the Siam Cement Group (SCG), Thailand's largest cement company, which was expanding its sub-brand of ready-mix cement. Even at very low profit margins, the company kept working with SCG to keep the business afloat and avoid degrading its assets.

The strategy paid off.

#### **Efficiency enabled flexibility**

"Business took off. SCG wanted to change its service by adding the new aspect of on-



We feel that we helped build the foundations of high rises and infrastructure of modern Bangkok.

#### Nattanicha Pannapat

Assistant Managing Director, Rojana Pattana



Detchai Chairat, Rojana Pattana's head mechanic, says UD's onsite repair service provides a very convenient solution

Building trust meant Rojana Pattana had to

always deliver on time. This required reliable equipment at a price deemed reasonable for a startup company. It became an early adopter of UD Trucks in Thailand.

Specifically built for logistics operators in fast-growing economies, Quester gained immediate praise from the company's drivers and technicians. Detchai Chairat, Rojana Pattana's head mechanic for the past nine years, says: "Questers are quite durable. We hardly have to do any repairs during the first few years of usage. Our drivers find them comfortable, smooth to handle and quite stable during deliveries." Fuel savings are notable, he adds, because Quester runs between 3.5 to 3.9 kilometers per liter of fuel, giving it a significant edge over other brands in the fleet.

Apart from the truck itself, UD's aftermarket services have also impressed Rojana Pattana. A mobile maintenance service is available for trucks within the

the fact that we can call their key people directly when we need support. They've also been accurate about delivery times for spare parts and repairs. This is important because our business requires certainty," Nattanicha Pannapat explains.

In past years, political turmoil has cast economic uncertainty in the country. For Rojana Pattana, the impact was a ten per cent decline in revenue in 2018 because a significant number of government infrastructure projects were put on hold when elections were announced for 2019. However, when it comes to looking forward, Nattanicha Pannapat beams with optimism. "After the election, there will be a new wave of investments in construction and property development. We will be ready to respond to these opportunities and break into larger markets."

The story was published in Volvo Group Magazine, Issue 1, 2019





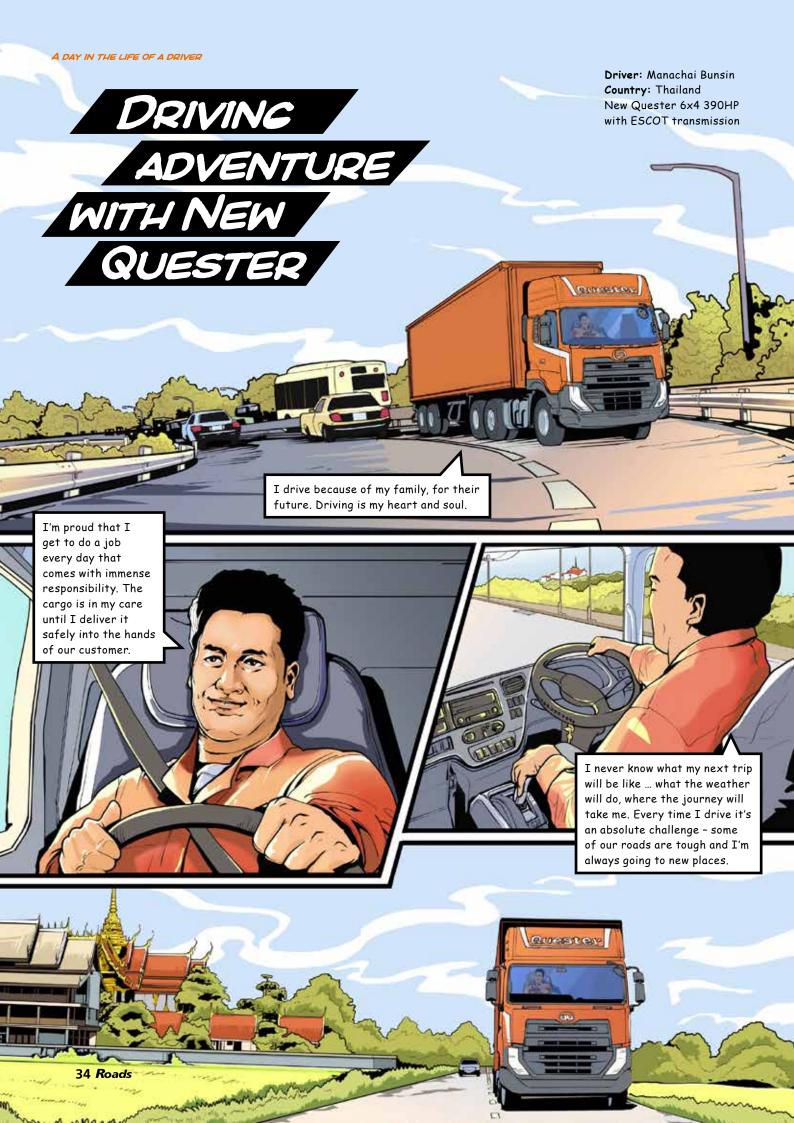
#### WHO IS THE ULTIMATE DRIVER?

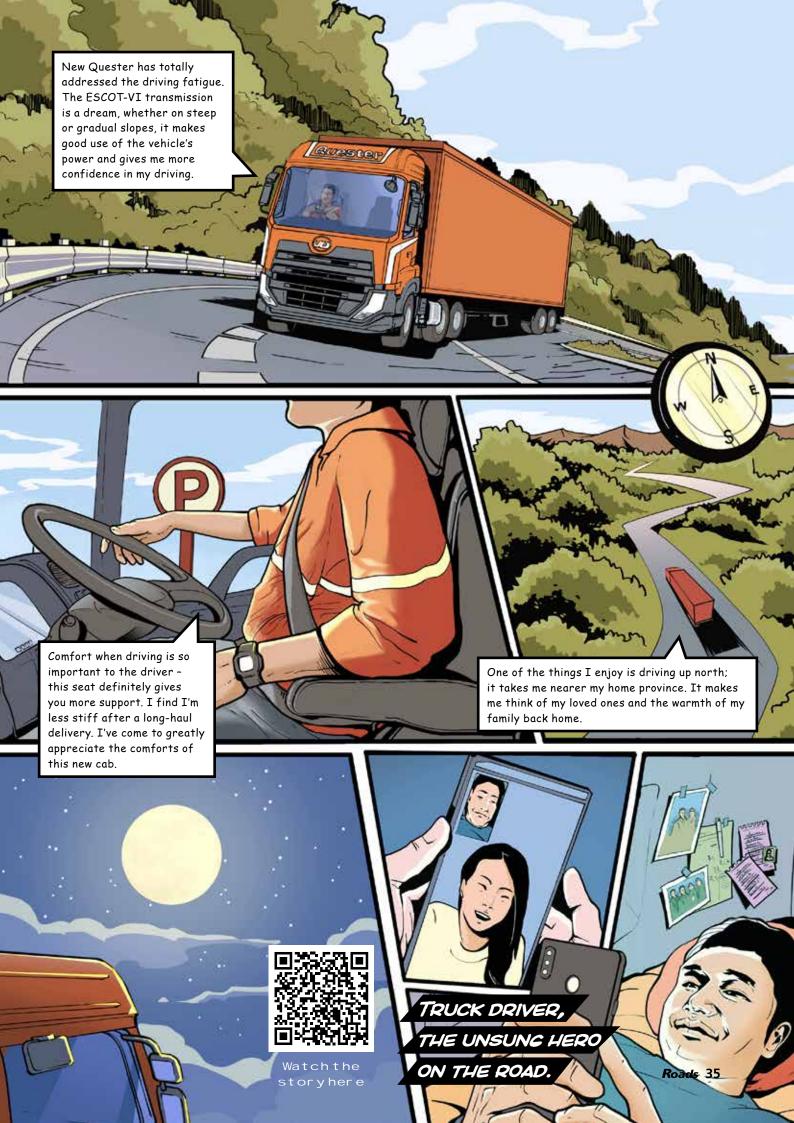
There is an unsung hero at the very heart of smart logistics: the truck driver. The driver that cuts fuel emissions, saves money and makes the roads safer. UD Trucks is out to find the very best drivers out there. That's why we created the Extra Mile Challenge driver competition. Because we know...

#### ULTIMATE DRIVERS KEEP THE WORLD MOVING

For more information please contact your nearest UD Trucks representative.

\*Please note the conditions may differ by market.

















### The UD Gemba Spirit

people. It is being close to the ground to identify the essentials, and the driving force that allows us to excel on them.









**Going the Extra Mile**