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CONTENTS





30 - EDITOR'S NOTE

MARKET UPDATE

- 32 DAF is starting the future with New Generation XF, XG and XG+
- 34 Easing Cargo Burden with City Zone Express Truck-based Solution
- 36 Trust the Professionals with Your UD
- **38** Firama Engineering Sets New Direction

CELEBRATE

40 - Asian Trucker Photo Contest – Cool Truckers

FUTURE TRENDS

42 - Electric Vehicle Outlook 2021







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Authorized Sales & Service Dealers:

CONTENTS



DONATION DRIVE

46 - Rolling out: Volvo Donation for Kechara Soup Kitchen Society

TEST DRIVE

48 - A Longer Isuzu ELF is Better

HOW IT'S MADE

50 - Design innovation the STEELBRO way

COVER STORY

52 - Foton EST Super Truck Development





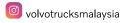
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CONTENTS





59 - CLUB UPDATE

TRUCKER OF THE MONTH

60 - This Driver and his Deliveries are Unstoppable

HEALTH AT WORK

62 - It is Health and Safety First for Daihatsu

E-MOBILITY

64 - Volvo Trucks Reveals the Technology in its New Heavy-duty Electric Trucks





CONTENTS





BUSINESS TOOLS

66 - LinkHaul adds Functionality that helps Hauliers Reel in Business

THOUGHT LEADERS

68 - How Sustainability Drives Scania

PARTS SUPPLIER

71 - Keltruck Scania Vehicle Recycling

SAFE ROADS

72 - An Introduction to Weigh-In-Motion:A Future Implementation in Malaysia





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CONTENTS





TRAILER TECH

74 - Big Data from Head to Trailer

TYRE TECH

76 - Kit Loong to the Rescue!

TRUCK FEATURE

 78 - Medium-Duty Isuzu Fvr300 – Built To Deliver Flexible Business Efficiency, Safety And Comfort







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CONTENTS





IN THE WORKSHOP

80 - A Contract is a Promise

TECH TALK

82 - Considering the Chassis Brand/s Selected by Specialist Body-builders

EQUIPMENT GUIDE

84 - Equipment Focus: Yale UX 4-5 tonne Forklifts

HEADLIGHTS

85 - Local Trucking Heroes

86 - NEWS & NOTES



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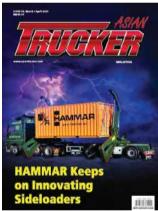
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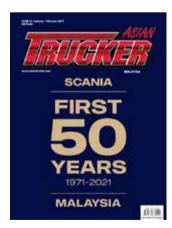
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EDITOR'S NOTES ASIAN TRUCKER I 30



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The Tipping **Point**

ot only has the end of June marked the second half of the year to commence, but I personally feel that there has been a storm of changes. For many topics we have, as I feel it, reached a tipping point at which things are now accelerated. Not least is the delivery of vaccines is one such item on my list as it requires the support of trucks and the logistics industry.

Over the past months I have had a number of calls with industry players that kept telling me that the rates for sea freight keep going up. I believe that this will have a huge impact on how companies plan their deliveries. Land transport might be the answer, although transporting goods between Malaysia and Europe or China taking to the highway may also have its challenges. For now, the truckers shine again as they can come to the rescue of the manufacturing sector.

The attention of the public has also tipped now towards the frontliners being busy administering the vaccine. For over a year, the spotlight was on the truckers that kept going and the country going. In a recent conversation, I heard that there is now a lot of confusion as to which goods can be moved, who's trucks are allowed to roll out and where they can go, if they are allowed to. With all the rules and regulations in place, I think that there is now a point were we need more clarity, cutting down on all the red tape and rules the slow the industry down.

In my daily evaluations of the news I also note that a massive shift has taken place in the way that truck manufacturers are operating. I have always argued that just selling a truck is not good enough and that the vehicles need to be backed up with services and support. I noticed a drastic change in the narrative of most manufacturers over the past 15 months. There is clearly now more creativity in how the service is being delivered and what services each company is offering. It is no longer the truck that is the hero, but the infrastructure and the offerings around the vehicle that shine and take the limelight. In summary, I would say that these are great news as innovations will help the operators in their jobs.

The most significant shift, in my view, has taken place in the last six months when it comes to alternative fuels. While I have reported a lot about these in the past as being viable options to replace Diesel, I am now seeing an avalanche of new trucks being put to work. No longer is this technology something that could be possible, but it is fast becoming a common sight on the roads. The industry should prepare itself for a dramatic change as the way transport operates might be challenged. If anything, the need for lubricants needs to be re-assessed. This, among other aspects, is heralding a new dawn of transportation. Many might not hear the electrification coming (pun intended) and might struggle to keep up.

The verdict is not yet out on how business will adapt to the post-pandemic: will we continue to work from home or are offices a central instrument in the operation? If anything, the last months have thrown up some very valid questions, especially in terms of last mile logistics and staff commutes. Personally, while I really enjoy working from home at times, I would think that we are going to go back to the office as a place of business. While being stuck in the morning rush hour may certainly be annoying at times, there are other benefits that might outweigh this. It might be that the pandemic is giving way to some new thinking and it might accelerate the push for Diesel free cars, better public transport among other things.

Interestingly, a sad shift has also happened when we all retreated to our homes to wait out the pandemic. Depending on delivery riders, this group of workers has seen a significant rise in accidents. It may seem bizarre that with no traffic on the roads there are more and more severe accidents. This, however, is not something specific to Malaysia. I have recently seen statistics from the US that confirmed the same. Less traffic results in more accidents!

I am looking forward to an exciting second half of the year where we shed the pessimism and carry on with the innovations. On that note, as you will have seen, we have worked on a coffee table book. As an experience, this was valuable, however, I can tell you that it was also a lot of work and I will certainly not tip over to becoming a full time author of books. Do have a look though as the book itself has turned out to be a really solid publication.

Stay safe, drive slow,

Stefan Pertz

Editor, Asian Trucker Malaysia





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he European Commission has introduced new masses and dimensions regulations with the objective to push the boundaries in terms of both emissions (CO2) reduction, road safety and driver comfort. DAF is the first of the European truck manufacturers to introduce a new generation of trucks featuring a highly attractive and very aerodynamic design, using the additional freedom offered by the new regulations. Class-leading efficiency, safety and driver comfort come together in the game-changing New Generation DAF, which sees production start in October.

Since the reveal of its first generation in 1997, the DAF XF has always been an image leader – the customer delight and the driver's dream. No less than 650 000 XF trucks have been sold in total. It is delivering its owners excellent quality and profitability in over 50 countries world-wide. Various generations of the XF have been awarded 'International Truck of the Year'.

New Generation XF

Now, DAF introduces the New Generation XF. It features a full new cab design with a 160 mm elongation at the front for industry-leading aerodynamics, highest energy efficiency and lowest CO2 emissions.

The New Generation XF has a 75 mm lower cab datum compared to the highly acclaimed and still available XF Super Space Cab and Space Cab. In combination with a large windscreen and ultra-low belt line, this results in unmatched direct vision, contributing to industry-leading safety, especially regarding Vulnerable Road Users. Standing height in the new XF is excellent and is between 1 900 and 2 075 mm, depending on the position within the cab.

New Generation XG and XG+

In addition to the XF, DAF is introducing the XG and XG+, creating a new top class market segment, which takes maximum benefit from the new masses and dimensions regulations. Next to the 160 mm elongated front, both flagship models feature no less than 330 mm extra length at the rear of the cab for unmatched space to work, live and sleep. The cab datum of the XG and XG+ is 125 mm higher than the New Generation XF. The semi-flat floor provides the optimal combination of an easy access with only three steps and a great seating position for excellent direct vision.

The DAF XG cab interior offers a standing height from no less than 1 980 to 2 105 mm and - thanks to the elongation at the rear - an enormous interior space.

The new XG+ outperforms every truck on the market when it comes to interior space. The height of the roof is increased even more to offer a standing height of up to an impressive 2 220 mm. This XG+ is DAF's true top-of-the-range model, offering a dazzling level of living comfort and spaciousness which are unique in the entire industry. With a volume of 12.5 m3, the DAF XG+ has even 14 percent more volume than the industry-benchmark, the current DAF XF Super Space Cab.

Attractive and modern design

The New Generation XF, XG and XG+ feature a beautiful, distinctive exterior design, characterized by an attractive tapered cab shape with seamlessly fitting body panels and sleekly mounted windscreen and doors for outstanding aerodynamic efficiency.

The front-end combines a beautiful design with the regulatory envelope. This results in an aerodynamic shape and enhanced safety for Vulnerable Road Users.

The New Generation XF, XG and XG+trucks all feature a stylish grille with chrome accents. It is topped with a distinctive logo bar with a glossy inlay to accentuate the vehicles' class. The air intake is neatly integrated in the front, adding to the sturdy yet elegant design which is further enhanced by the prominent grille, accentuating the elongated front.

A key design feature are the stylish full LED headlights, crowned with characteristic Daytime Running Lights and integrated cornering lights, creating a stalwart signature and providing unprecedented vision at night. The great looks of the truck are supported by the beautiful LED Skylights – standard on the XG and XG+ – featuring a specific design for each model.





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Trucks are once again in the limelight as they are already rolling between major hubs on the continent, moving goods desperately needed by the manufacturing sectors.

t is the truckers again that are the heroes of the transport industry. This time, the manufacturing sectors could be the ones that find that trucks could come to their rescue. Currently, the situation in ports around the globe is chaotic: goods are not being shipped, containers are stuck and the shipping rates have reached levels that make let anyone despair that needs components or raw products for their factories. Even with enough money, there is a severe shortage of space on container vessels. We spoke to, Pirithivaraj Selvarajoo (Raj), as Director of City Zone Express Sdn Bhd about how the truck has once again come to the fore in solving problems resulting from the pandemic.

Right on Time

Several years ago, City Zone Express (CZE) has laid a foundation for what could now be one of the best options to keep a supply chain between Europe and our shores here in Malaysia and Singapore. Using land transport, instead of sea freight, City Zone Express is currently moving 25 containers per month between their hub in China and Malaysia.

LCL and FCL

Where the offer from CZE shines is the LCL capabilities. Having secured base loads, adding goods to be moved all across the continent is now easier than ever. "What makes our offer very attractive is that we can be faster than sea freight and much cheaper than airfreight. With a bit of planning, the extra days that we may need compared to air freight are well compensated for in terms of savings," Raj told Asian Trucker.

The Relay Run

Infrastructure and planning is the key to a flawless system. CZE has their own staff to manage customs clearance and documentation, which means that the truck captains can focus on the most important task: driving and getting the consignments from country to country. Making use of the Green Lane, the ASEAN Custom Transit System (ACTS) for movement of goods, goods move quickly and with reduced tax burden. At each border, CZE will swap containers, applying the lift on lift off method. The trip from Singapore to CZE's Chinese main hub in Chongqing takes only eight days.

Train Take-over

Chongging has been identified by CZE as the best suited railway hub for shipments across the China and into Europe, with many other destinations along the way. Here, the trucks receive new containers to be transported across Vietnam, Laos and Thailand, onwards to Malaysia and Singapore while picking up and delivering cargo to be distributed along the way. Raj explains that "In several places, like Hong Kong for instance, we have our own feeder fleet and collecting or delivering small consignments is made easy thanks to that." With several warehouses owned by CZE, the operation boasts a lot of infrastructure to support the supply chain between the continents. **Untapped Potential**

According to Raj, there is a lot of potential for land transportation, especially now that sea freight rates are becoming prohibitive. Meanwhile, he points out that transportation by truck is more than just a viable interims solution. "For instance, batteries for electric vehicles have huge potential for land transport. There is massive potential at the moment and we are glad to be the first to offer such a comprehensive service between Malaysia and Europe."



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What is called UD Trust is the official UD Trucks service agreement program. When signing a UD Trust Service Agreement, it is to ensure that your truck is running at peak efficiency by making sure it gets the essential UD Genuine Service and UD Genuine Parts it needs.

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"We know every business is unique, which is why a representative from UD Trucks will visit you to find out what your operations are like in order to provide a customized quote based on the needs and usage of your business and your fleet," said Say Teck Ming, Executive Director of TCIE. According to him, there is no paying for extra services you won't need. Once the service agreement contract has been signed, you'll receive a monthly invoice. It's as simple as that.

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Genuine Parts, you'll maximize the uptime, efficiency and the lifetime of your vehicles. When you sign with UD Trust, you'll know exactly what service will cost you during the duration of the agreement. With no hidden costs and simple monthly invoices, you'll enjoy greater control over costs, easier administration and enjoy more time to get the most important things done.

What does UD Trust Cover, Exactly?

There are two service agreement plans: UD Trust Standard and UD Trust Ultimate. UD Trust Standard covers the annual and basic services your individual UD Truck requires. This includes all essential service areas such as scheduled inspections, lubricants and maintenance parts. UD Trust Ultimate offers comprehensive and total coverage for all aspects of your UD Truck. It delivers maximum reliability and peace of mind paired with the highest level of cost control and efficiency.

UD Trust Benefits in Summary:

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Better truck performance

"We constantly find ways to improve our service offering to enhance our brand experience. With UD Trust, business owner can now manage their operating cost and fleet efficiently, he concluded.





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Firama Engineering Sets New Direction

With the appointment of a new Managing Director, tasked to inject new thinking, Firama Engineering is gearing up to come out of the pandemic stronger and better equipped.

uietly, during a time of low economic activities, Firama Engineering's top management has changed. Handing over the baton to Yoong Hau Wen, newly appointed Managing Director, Firama Engineering, the founders are slowly retreating into their well deserved retirement. In this Asian Trucker-exclusive interview, Yoong talks about how his past work experience is to help him to prepare the brand and business for the times ahead. While his appointment as Managing Director has been recent, he has quietly been working with the founders for over four years to learn the ropes.

Different Ideas for an Established Business

Having worked in consulting and banking industries prior to his change of career, Yoong brings with him a lot of experience in change management and a different approach to how a manufacturing business should be run. "At some point I looked at my work and realised that I needed a change. It so happens that Firama Engineering was looking towards strengthening its 'corporate infrastructure' and doing some thinking and planning towards the future," he said. Admittedly, the welding, steel types, manufacturing processes and the culture of a factory have all been eye-opening changes for him. Taking to his new job, his approach was to be humble as everyone around him has decades of experience in this industry, while he has to learn from scratch.

Analysing and Addressing Needs

"One thing I do not miss at all is the politics that are played in the world of big corporates." With what he calls "Transferrable Skills" he sets out to find ways to improve the overall business of making trailers, tankers and customised transport solutions. One thing he found is that both management as well as the staff were highly experienced with a deep understanding of the work, but it was all mostly intuitive with little documentation. "When you start documenting processes, you can actually identify issues and address these with better ways." Here, Yoong is planning to build a culture of using data on top of an already existing corporate culture that he found the be extremely cooperative with a lot of respect for everyone involved in the business. "We want to make more decisions based on data, to complement the organisation's acumen honed through the years."

Kickstart into Downtime

In April 2021, the management decided that the worst was over in terms of the pandemic as the overall situation has seen improvements by leaps and bounds. It was then that Yoong was made Managing Director with the founders stepping into the background. "I was prepared for a hectic time ahead as we had a decent order book," he recalled. During 2020, a number of projects have been keeping the business going while standard trailers were seeing reduced demand. Then the next lockdown hit, just as he got up to speed. Now just running on a skeleton staff to nudge the business along, Yoong is taking this downtime to reflect on the tasks at hand. "Right when I took over it was a difficult time. With reduced demand and suppliers coming with notices that raw materials were going to get expensive, we really were given a double



whammy." Getting the raw materials to the factory was another nightmare given the disruptions in the global supply chain.

The Trail ahead Clearly Laid Out

Once the lockdown is ended, the market will see a revamped Firama Engineering emerge. The thinking will lead to a burst of action to position the business for continued success. "I have been given a tremendously exciting task by carrying on what the founders have started." The immediate task will be to manufacture the trailers on backlog. "Four years ago, we also realised that the dependence on foreign workers is not a sustainable situation." Firama Engineering is addressing this by implementing automation wherever sensible as well as having created their own Firama Technical Centre. The latter is to constantly improve the skills of workers, share knowledge and to give impetus to improvements. "We are confident that the market will respond with an increased demand after the pandemic. The issue is to ready ourselves to serve the needs of our customers." 🔽



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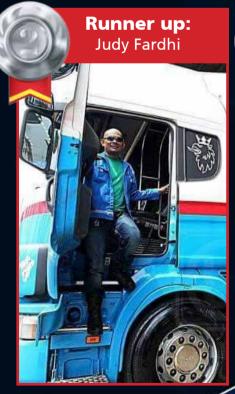




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by Link Effect (M) Sdn Bhd



Electric Vehicle Outlook 2021

obility is at the core of modern civilization, and the way people and goods move impacts many aspects of life. The years ahead will bring significant changes as electrification, shared mobility, vehicle connectivity and, eventually, autonomous vehicles reshape automotive and freight markets around the world.

BloombergNEF's, in its sixth annual Long-Term Electric Vehicle Outlook (EVO), presents a status update and outlook on the industry with regards to electromobility: There are over 1 million commercial EVs, including buses, delivery vans and trucks, and there are over 260 million electric mopeds, scooters, motorcycles and three-wheelers on the road globally. Battery prices continue to fall, policy pressure toward 'Net Zero' is rising in many countries, and compelling new EV models are hitting the market.

Snapshot of the Market

There are currently almost 600 000 e-buses on the road globally, representing 39 percent of new sales and 16 percent of the global fleet. China accounted for the vast majority of all e-bus sales in 2020, with over 74 000 units sold, and continues to account for 98 percent of the global e-bus fleet.

This share begins to decrease as some Chinese city bus fleets start to saturate and adoption picks up in Europe, North America, South Korea, South East Asia, India and South America. By 2025, e-bus sales outside of China hit 14 000, up from 5 000 in 2020. Buses and two- and three-wheelers are the biggest near-term opportunity for electrification in emerging economies.

Adoption of EVs in the commercial van and truck market is further behind, but is picking up speed. The combination of more models available, corporate fleet commitments, favourable economics and rising concern about urban air quality are set to tip the light commercial-van segment over to electrification in the next few years.

Expanding Applications

Electrification is also making inroads into heavier vehicles. In urban duty cycles, battery electric trucks of any size become the cheapest option for several use cases in the 2020s. That is due to a combination of factors, including rapidly declining battery costs, modest driving ranges, and the relatively large efficiency penalty of diesel trucks in urban traffic, which tend to consist of congested and recurring start-stop operation.

Heavy-duty electric trucks are already economically attractive in urban duty cycles by the mid-2020s. Megawatt-scale charging stations and the emergence of much higher energy density batteries by the late 2020s result in battery electric trucks becoming a viable option for heavy-duty long-haul operations, especially for volume-limited applications.

Shared mobility is set to rebound to 2019 levels within the next two years globally, and by the end of 2021 in most major markets. By 2025, shared mobility's share of annual passenger vehicle kilometres travelled globally exceeds 6 percent for the first time.

Impact on Fossil Fuels

Oil demand from road transport peaks globally in 2027 in the Economic Transition Scenario, due to the growth of alternative drivetrains, fuel economy improvements of combustion vehicles, and the proliferation of shared mobility services, which go electric faster than privately owned vehicles.

Consumption in the U.S. and Europe has already peaked; China follows in 2026, while India continues to consume increasing amounts of road fuel until 2038 in the Economic Transition Scenario. Commercial trucks remain the only segment globally yet to see a peak in demand.

In the important passenger vehicle segment, oil demand never gets within 1 million b/d of its 2019 peak. EVs and fuel cell vehicles displace 21 million b/d of oil demand by 2050 in the Economic Transition Scenario.

The Net Zero Zenario

In the Net Zero Scenario, oil demand from road transport remains broadly similar until 2030, as it takes time for changes in vehicle sales to flow through



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Figure 1: Zero-emission vehicle sales share outlooks - ETS versus NZS

Source: BNEF. Note: 'ETS' is Economic Transition Scenario and 'NZS' is Net-Zero Scenario. 'LCVs, MCVs and HCVs' are light-, medium- and heavy-duty commercial vehicles. 'Zero-emission' includes battery-electric and fuel cell vehicles. All values alobal.

Not on track

Positive trajectory

to the fleet. From then, the rate of decline in oil demand accelerates, more than doubling the rate in the ETS.

Almost on track

In 2030, oil demand in road transport is some 0.7 million b/d lower in the Net Zero Scenario compared to our Economic Transition Scenario. By 2040, this gap widens to over 12.5 million b/d, and by 2050, to almost 25 million.

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Peak in Oil Demand

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NZS

ETS

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Rolling out: Volvo Donation for Kechara Soup Kitchen Society

n early 2019, Volvo Trucks Malaysia kicked-off the fundraising initiative on a truck donation to the non-profit organization Kechara Soup Kitchen Society (KSK) and invited Malaysia's trucking community to participate to the betterment of the underprivileged communities. Now the truck with a customized body, specially fabricated by Seri Zenith Engineering Sdn Bhd (Seri Zenith) is ready to perform its duty.

Anthony O'Connell, Managing Director of Volvo Trucks Malaysia says, "We are very delighted to handover the Volvo FM330 to KSK. The design of the truck incorporates the function of food collection and distribution, mobile clinic and educational mobile space will allow the truck to serve multiple purposes. We strongly believe that this charity course will make a difference in improving the quality of life of the underprivileged communities. To me, this is more meaningful than cash donation, as it facilitates the food bank program in the long-run."

The idea of the multi-purpose truck was inspired by the exhibition trailer that Volvo Trucks Malaysia owns. The initial idea was to have a trailer; but considering the narrow roads in rural areas and the turning radius required, it was compromised to have a smaller rigid truck with a shorter body.

This Volvo FM330 4x2 rigid truck is the first vehicle of its kind in Malaysia, which is built from scratch through various brainstorming sessions between the user (KSK), Volvo Trucks, and the bodybuilder (Seri Zenith). The truck comes with full stainless steel and insulated truck body to help to hold the temperature when carrying perishable goods. For easy maintenance and durability, the floor is made of aluminum checker plate. It is designed with a 2.4-meter extendable side canopy for mobile clinic and outdoor learnings. The vehicle body is equipped with an air-conditioner, lightings, water, and power supply to facilitate traveling to rural areas.

When Volvo Trucks Malaysia first bounced the idea of donating a multipurpose truck to Justin Cheah, Operations Director of KSK, he very quickly responded with a big positive "YES"; This was a wish he had for long - to have a bigger truck which can do more to help the community in need. With his assistance, a proposal was submitted to Volvo Group. During the Christmas time in 2018, the good news arrived about the Seasonal Gift award. Volvo Trucks Malaysia was one of the seven recipients of the Seasonal Gift and the only country market which had proposed a donation of a multi-purpose truck.

The truck usage will be prioritized for its core purpose where it was designed for food collection and distribution. This truck will enable KSK to channel the food resources they received in Klang Valley to its sister branches like Johor and Negeri Sembilan. Some of these areas are less developed and have more need for the food, but fewer donors compared to what KSK received in Klang Valley. Many underprivileged people live far from cities; KSK can now reach them more effectively. Justin is looking into either starting the Volvo FM maiden delivery trip somewhere near, either Bentong or Seremban.

"We will now be able to assist more people in need with the extra capacity of the Volvo FM330. When I heard the truck will be cleared from the port, I rushed to Volvo to have the first view of our new baby. I just can't wait to see it!" Justin shared his feeling when he was informed about the arrival of the truck. He drove straight to the Volvo Trucks HQ in Shah Alam and waited for the truck to arrive from Westport.



In 2019, KSK started its collaboration with International Medical University (IMU) to set up a clinic to offer basic health screening and medical services. Now KSK can use the truck to reach the people in the rural areas and offer some basic medical checks. He particularly refers to the Orang Asli community in various states.

KSK will also be looking into conducting some educational workshops for the children in the rural areas, who are restricted by the mobility to learn. There are many more plans in Justin's head that he wanted to achieve with the truck. Now he has ample time to go ahead with his plan, and tick off the item one by one from his list with the truck in hand now.

We shall see the truck in full use in the coming months. Not forgetting the generosity of the sponsors, Volvo Trucks would like to thank the sponsors again for realising this CSR initiative in a good way:

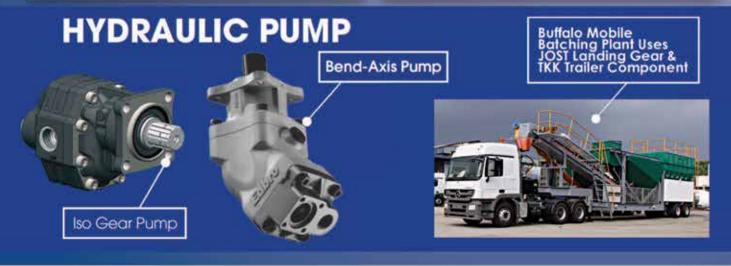
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A Longer Isuzu ELF is Better

Factory-fitted long wheelbase Isuzu ELF trucks are all gearedup to deliver extended productivity.



or further supporting the growth of business whether for companies that offer transportation and logistics services to others or for companies that are managing the delivery of their own products, changing or upgrading their vehicles to achieve more productivity and efficiency is often the logical step forward.

Two such customers of Isuzu Malaysia Sdn Bhd, Alor Setar-based OneF Express Sdn Bhd, which is a logistics service provider and Bukit Mertajam-based Igloo Ice Sdn Bhd, which is an ice cube manufacturer and distributor. Both have advanced from using the standard Isuzu short wheelbase (SWB) trucks previously to Isuzu long wheelbase (LWB) trucks to better manage the increased volume of their deliveries.

The wheelbase of a vehicle is described as being the distance between the center lines of the front and rear axles. The term 'long wheelbase' refers to a wheelbase that is longer than the vehicle's standard wheelbase option. This means that there is more space to build a larger or longer body for greater hauling volume.

Long wheelbase offerings by Isuzu Malaysia Sdn Bhd (Isuzu) are available with the Isuzu ELF NLR Pro, NLR130 and ELF Smoother models. These models come in the normal factory-fitted wheelbase of 2 475mm, but customers can choose to enhance their trucks' capability further by fitting it with a factory-fitted long wheelbase of 3 345mm.

Citing the need to increase productivity and efficiency as key reasons, Jeffrey Leow, Director of OneF Express Sdn Bhd began using Isuzu long wheelbase trucks from the NLR series several years ago to support his expanded logistics business in the northern region of Malaysia. He started the business 27 years ago and bought his first used Isuzu standard light-duty truck two years later.

Since then, he has become a true and long-time supporter of Isuzu trucks. Currently, he maintains 44 Isuzu trucks out of 46 trucks in his fleet. His Isuzu vehicles consist of 4 and 6-wheeler trucks, including 17.5 and 21-footer long wheelbase units, and more than 50 of his employed drivers rely on all the vehicles to transport cargo such as motor spare parts, electrical goods and a variety of hardware in Kedah, Perlis, Penang and Perak.

"During the first two years of running my business, I used a variety of second-hand trucks and I experienced the best and longest uptime with most reliability with the Isuzu units. So, when my business expanded and I decided to opt for brand new ones, I did not think twice about sticking with Isuzu."

"The trucks' safety features, fuel efficiency and reliability, as well as the Isuzu dealership team at Indah Utara here have so far exceeded my expectations and as such, I see no reason to switch to other makes. In fact, I intend to buy more Isuzu

trucks as I plan to expand our fleet to 200 trucks within the next five years," shared Leow.

Not as long a user, Igloo Ice Sdn Bhd has only been a customer of Isuzu for five years with the first purchase of a standard short wheelbase truck. Within this short time span, the company has already made a switch to using Isuzu ELF NLR model long wheelbase trucks. The extended capacity helps cater to its business needs delivering ice packs to food and beverage outlets, hotels and ports from its three factories in Bukit Mertajam, Alor Setar and Perlis.

Johny Ang, Director, Igloo Ice Sdn Bhd said, "With the standard 10.5-footer short wheelbase Isuzu trucks we were using previously, our driver could transport 300 ice packs but with our current 13-footer Isuzu long wheelbase we can transport 380 ice packs. This is a lot more productive and efficient for our business, that is why we use mainly long wheelbase trucks now."

He also added that his company has a total of over 200 trucks in its fleet and is employing over 300 drivers. More than 60 units in the fleet are Isuzu long wheelbase NLR series trucks.

The Isuzu ELF NLR series is the longest factory-fitted wheelbase truck in its segment and customers are presented with advantages including ready to install rear body without secondary modification, standard cost in chassis price and Isuzu's warranty of five years or 200 000 km, whichever comes first.

Koji Nakamura, CEO of Isuzu Malaysia Sdn Bhd commented, "Our factoryfitted long wheelbase Isuzu ELF NLRseries trucks allow our customers to scale up their business productivity and boost profitability as they can maximise cargo carrying capacity and rear body application to suit a variety of business needs."

addition load to capacity, performance, safety and comfort are paramount factors too. The trucks are equipped with a 4-cylinder engine and 5-speed manual transmission for high torque.

The truck's cabin interior offers the best-in-class comfort and ergonomicallydesigned spacious cabin with ample room for three adults, and well-positioned interior panels for improved visibility. The excellent all-round visibility supported by wide-angle mirror offers extra visibility of surroundings and minimising blind spots, thus enhancing safety at all times.

The halogen reflectors fitted to the trucks provide outstanding illumination over a broad area to improve night time visibility and safety. The headlight leveling enables the driver to choose the preferred beam position which can be maintained when truck is loaded and when it has no load.

The 100-litres fuel tank for the Isuzu ELF NLR77UHE and NLR85UHE models ensures greater range for volume deliveries and helps to reduce number of stop time for refueling.

"We buy value. That is why I don't see the need for me to compare Isuzu trucks with other brands as I am a very satisfied owner and happy with the performance, safety features, fuel efficiency and reliability," said Leow.

The extent of his satisfaction with the trucks has given him full confidence in recommending Isuzu to several of his close business comrades. He also counts the solid after sales support and friendliness from the Isuzu dealership team as a key factor that contributes to his voluntary recommendation.

He added, "It's easy and credible dealing with the Isuzu team. They handle everything based on my requests and the trucks were delivered to me 100 percent ready with the required body installation, which saves time and cost on my part. All I need was the key for my driver to start using it."

Adding to all the advantages, the trucks are B20 biodiesel compatible and equipped with ISUZU Safety Plus platform featuring four main safety features which are Anti-lock Braking System (ABS), Electronic Brake Force Distribution (EBD), Anti-slip Regulator (ASR) and Supplemental Restraint System (SRS) Airbag. 7







Design innovation the STELLBRO way

Have you ever wondered what goes in to designing a Sidelifter Crane? In this article we unpack this with STEELBRO.

hat you might not know is that all STEELBRO Sidelifters are designed in Christchurch, New Zealand. This is the location of the STEELBRO head office and our world class design team. You may also be surprised to know that the history of the STEELBRO company dates back over 142 years to 1878 when the Steel brothers started making horse-drawn carts in Christchurch!

One of the things that is special about STEELBRO is all the elements of the Sidelifter are designed in house. This includes both the crane and chassis components of the Sidelifter. The chassis designs are modified to meet local requirements of STEELBRO markets around the world in partnership with local branches or partners.

The design team consists of qualified Mechanical, Electrical and Mechatronic Engineers. The average period of employment of our engineering team is 16 years' at STEELBRO. These team members have an in-depth knowledge of Sidelifter design and our customers' requirements. The team also draws upon the expertise of long-term supplier partners to incorporate the latest

technology developments available, be they hydraulic, electronic or power train.

The innovation journey for any Sidelifter design starts by listening to the needs of customers and identifying the product attributes that will help solve the problems or issues that customers are facing.

Once the requirements are clear the design phase begins with Geometry Analysis. This identifies the best crane geometry for the desired application to optimise for outreach and rated capacity. It identifies the location of the pivot points and hydraulic cylinder size requirements. The demanding environment that these Sidelifters work in means that the different



jobs required of a Sidelifter must be considered from day one. For STEELBRO this includes trailer to trailer, trailer to ground, double-stack and Intermodal work, as well as keeping compact low-lying cranes as a signature feature of the majority of the STEELBRO Sidelifters. This is a challenging job as a small adjustment in one parameter can have a major effect on the performance of another so there are many functional trade-offs to consider.

The Mechanical Engineering team take the next step to create the overall structure and put it through its paces using Finite Element Analysis (FEA). This is computer modelling to strength and fatigue test the designs by performing thousands of virtual loading and unloading cycles to mirror the expected lifetime of a Sidelifter. This process allows any stress or fatigue issues to be identified early in the design and rectified to ensure the structure is optimised for strength while minimising tare weight.

The hydraulic system is then developed in detail to suit the mechanical structure and the load requirements. An example is our recent SB363 single proportional control valve technology coupled with the new load sense piston pump. This enables 30 percent quicker deployment speeds by making optimal use of the power available from the engine.

The electrical system including printed circuit board design is all done in-house. The system features easy fault tracing by LED indicators for each circuit. New improvements that need to be implemented can be done quickly and seamlessly. The electrical team have the technical expertise plus a deep understanding

of the Sidelifter product and applications it's a win-win.

The final piece in the puzzle is the Software Engineering. For STEELBRO this is the heart of the SMARTlift Sidelifter Load Monitoring System. This controls and monitors the Sidelifter to enable work within the safe working envelope. It utilises intelligent software and sensors to monitor and control the Sidelifter operation. This allows customers to have the peace of mind that their investment is being used safely and within its capabilities. There is also the benefit of being easy to diagnose faults and access data on the operation of their Sidelifters through the display screen. In an increasingly data driven world this information can be invaluable to customers.

Throughout the design process STEELBRO engages with 'best in class' global suppliers to provide the components needed. Components selection is a key input to a robust design ensuring reliability for the customer and easy access to parts in all global markets.

The design process ensures the Sidelifter you receive is reliable and optimised for the job it needs to do.





Foton EST Super Truck Development

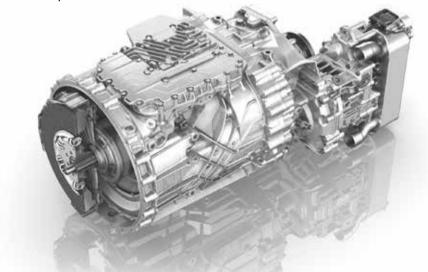
Now a common sight on Malaysian roads, the Foton EST Super Truck has proven to be a valuable addition to many transport operations. We take a closer look at this vehicle.

hile the vehicle itself maybe China-made product, there is more to it than meets the eye. The Foton EST is the result of for four years of research and development, based on European standards. Putting the vehicle through the ringer, it has also been subjected to 10 million kilometres of actual road tests. EST stands for Energy Super Truck, which indicates the approach taken by the designers when they conceptualised this truck. As the official distributor, Dato Billy Goh, Managing Director of Mpire Group, describes it as a "Type of highquality and high-performance super heavy truck built using European science and technology through the European test and listing.

Energy Super Truck (EST) AMT

Foton has technical supply agreements with transmission specialists Getrag and ZF (Germany) and Aisin (Japan), BorgWarner (USA) for two to four wheel drive transferu nits, BOSCH (Germany) for electronics and dependent systems, Dana (USA) for axles and differentials and Cummins (USA).

One of the cornerstones of the vehicle's design is the drivetrain A powerful engine and transmission which could transfer power with precision have to be used in order to conquer the difficult terrain and ensuring work efficiency. ZF Ecosplit is the optimum power transmission and thereby provides the solution to these requirements.



Safety for You

Besides performance, safety was a major concern during the development phase. The cab has been designed to conform with the European Union collision regulations. The World Forum for Harmonisation of Vehicle Regulations agreed in March 2010 on the need to review and update the 1958 Agreement. Regulation (EC) No 661/2009 on the general safety of motor vehicles (the GSR 6) repealed numerous EU Directives and replaced them with UN ECE Regulations. As of 31 December 2010, the EU had acceded to 106 Regulations under the 1958 Agreement and to all 11 Global Technical Regulations under the 1998 Agreement (see box below). Discussions started in 2010 to develop a new GTR concerning the safety of vehicles with hydrogen propulsion. Also, a working group has been established to develop another new Global Transportation Regulation on pole side impact.

Considering the size and weight of trucks, accidents are a smaller but treatable part of vehicle problems, though heavy vehicles have disproportionate involvement in fatal accidents. In case needed, iBrake engine braking provides an extra stopping power. The Foton EST further features a hydrodynamic retarder. In such hydrodynamic retarder a rotor and a stator wheel oppose each other, separated by oil. The volume and pressure of oil determines the amount of braking torque available. The oil acts on the rotor with a damping effect hat opposes its movement, which in tun brakes the retarder shaft. Adding such system reduces wear and tear of the brakes and provides additional deceleration.

Fuel-saving

Using a ZF Manual Transmission or Automatic Manual Transmission (AMT) gives the EST another advantage. The ZF TraXon is the new standard in many respects. It is light, therefore the truck can pull larger loads compared to other vehicles using different transmissions in the same performance class. Pulling power is key to reducing fuel consumption. Here, the extra high transmission spread along with an exceptionally powerful torque keeps the truck moving forward in every situation. As an intelligent gearbox, the ZF-supplied design achieves a 0.72s interval for gear shifts.

Versatile software functions support fuel-efficient driving and create additional customer value. Goh describes this as product image of Foton EST AMT being a "Money master with German quality". By using a ZF transmission, Foton is redefining the meaning of AMT truck from automated manual transmission to be the AMT truck: Advanced. Money making and Trusted.



Thanks to the innovative design of the exterior, the wind drag coefficient of driving cab reaches 0.564, which is the minimum value in the industry. ZF's original hydraulic retarder reduces the amount of long-distance downhill braking, thus avoid brake failure caused by brake overheating. This reduces driving fatigue and significantly improves safety at the same time as improving fuel economy.

Why Foton Choose ZF Traxon for Foton EST Advanced Technology all Around



The technical specifications read like an accumulation of all the latest advances in technology. Owning an EST means that one has a Cummins ISG engine with lightweight and modular design ready to provide ample power. The 2 000bar ultra-high pressure injection technology is managed using LBSC intelligent rotation speed control and i-Telligent vehicle management.

Through Intelligent automatic gear-shifting, drivers can operate the truck left foot and left handfree. Easing the burden on the driver, our pilots experience less driving fatigue. On the road, maneuvering, breaking-out, liquid transportation and other functions can be customized for various road conditions and cargo. And when needed, the driver can use the unique creeping mode for traffic jam to ensure safer transportation.

Buy the Truck, Make Money

With highly dependable components, operators reduce the number of number of maintenance stops. the chassis bridge needs an oil change only every 100 000 kilometres, which is significantly reducing the frequency and cost of maintenance. Being easy to operate, it is easier to recruit drivers.

Auman calibration matching gives owners more advantages. Thanks to the benefits of having a supplier alliance in place, the super powertrain (Cummins engine +ZF gear box+ Meritor axle) realizes calibration based on Auman heavy duty truck for better matching. As a result, the truck is running over 70 percent of the operating time within the economic range. This alone can potentially save three to five liters of fuel per 100 kilometres. Pointing out its lightweight structure, Goh explained that "the vehicle structure upgrade and application of new materials and technology results in a vehicle that is sturdier, yet can take a higher payload. This heavy truck is produced by Foton-Daimler Automotive IV in China and complies with German production standards with guaranteed guality. It may be a China brand, but there is a lot of European know-how in it."

COVER STORY ASIAN TRUCKER I 54

Torque Calibration Unit

In order to receive the best fuel efficiency and transmission power output, Foton China, together with the assistance from ZF China and Mpire Commercial Sdn Bhd has organized a ZF TCU (Torque Calibration Unit) adjustment for Malaysia's Foton EST AMT vehicles.

In September 2019, one unit Foton EST 6X4 AMT from Mpire Commercial has been used for this ZFTCU experiment. Over the course of two weeks, the vehicle travelled 3 000 kilometres, with different cargo and load carried. The vehicle was driven through various Malaysia road conditions: highway, urban roads, country roads, off-road, continuous climbing and downhill road sections. This is a severe challenge for both the vehicle and the driver. From this experiment, valuable data has been collected by Foton China and ZF Engineers, whereby the data will be input into the TCU for future Foton EST AMT units exported to Malaysia.





For the Malaysian market, Goh lists fuel saving, high efficiency, safety, cost reduction, as four factors that address the indicators that are most important for transport industry companies. "From the market feedback in China, in the first half of this year, Foton EST AMT continues to maintain the lead. Having achieved 13 000 units sold, this signifies a year–on-year increase of more than six times. It is an outstanding performance," he proudly said.

While the gearbox may be a major consideration, a good AMT transmission alone is far from enough. Developing a truck that is fit to meet the needs of the market also involves the matching between the engine and the transmission, the axle, as well as the matching and calibration of the powertrain and the vehicle. Thanks to the perfect layout of powertrain resources by Foton, the EST also incorporates technologies at its core. For high horsepower for example, the diesel engines from Cummins are mated to the automatic transmission.

In Malaysia, AMT gearboxes are a relatively new option. However, the development of AMT has been going on for over four decades. This offers strong and mature technology, offered through the cooperation with global brands involved in the development of commercial vehicles and passenger cars, such as ZF. Meanwhile, a trusted source of power, Cummins engines are synonymous with 100 years of quality assurance. In the USA, Cummins commands more than 50 percent of the market share. Putting these together, matching Cummins and ZF, increased the reliability by 20 percent. This reduction of downtime translates into operation time being increased by one hour every day .







MPIRE GROUP OF COMPANIES

Founded in 2002, the Group today has been focused on the Malaysia automotive industry two decades. Mpire Group Businesses covers Proton 4S Dealerships in Batu Pahat Johor as well as light commercial vehicles, being the exclusive Distributor of the JAC Brand in Malaysia and distribution of FOTON pick-up and vans. Rounding out the offering are heavy duty commercial vehicles as the distributor of Foton EST, car rental and leasing and venturing into assembly plant and credit facilities for motor vehicles. Mpire Commercial Sdn Bhd, distributor of Foton EST /EST-A, was founded in December 2017.

Foton in Focus

Founded in 1996, Foton was ranked number one in the commercial vehicle industry for 16 conservative years. The brand has won the trust if the Chinese market and has been the top exporter for 10 conservative years. Foton is a member of the BAIC Group, which is a Fortune 500 company. With 32 000 employees and USD 14 billion operating revenue, Foton has sold its products to more than 110 countries and regions across the world. It has developed into a state-owned internationalised leading manufacturer of commercial vehicles in China.

Within 25 years, global sales have exceeded 10 million. As a trusted partner, Foton has cooperated with the world's top brands such as Daimler, Cummins and ZF, bringing together the global class-leading resources to create most reliable products.







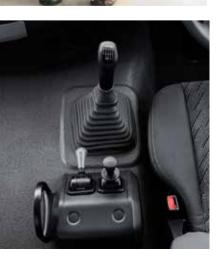












Foton has been able to attract a world class research and development team which is always committed to the development of innovative products. With an eye on overseas markets, Foton is developing products with the notion to make them tailored to meet the needs of customers from different industries.

As for intelligent driving technology, Foton takes the lead in introducing China's autonomous trucks in 2016. Foton is proud to state that they are continuously achieving technological breakthroughs, winning glorious awards with cutting edge technology to ensure the safety and efficiency of logistic and transportation, and to maximise the economic benefits of users.

From global collaborations spring the creative concepts of the super power supply chain, involving Cummins engines + ZF transmissions + Daimler vehicle technology. This is now paired with the established Foton Motor's unique advantages in integrating and matching vehicle and power train.



Supporting its distribution network, Foton has a strong spare parts and services network. Foton maintains three global spare parts distribution centres (CDC) in Beijing, ShanDong & GuangZhou in China, and two RDC's in Panama and Dubai; meanwhile, there are 2 NDC's in Thailand & Russia. The services network covers the major region in Asia, Central & South America, Africa & Europe. Foton assures customers that the only thing one needs to do is to make a call, and a commonly used accessories can be shipped directly from the NDC or RDC.

Foton adheres to the "Customer Centric" service concept, which aims to improve customer's satisfaction and forms diversified service solutions for full life circle service. This includes customised service, on-site service and in-store service. At the same time, the brand is busy to further build the national service brand, truly "Foton Total Care" to provide operators with accessories and services.

Called Foton iBlue Auto, one of Foton's core brands, is covering passenger, freight and special vehicle products series. It has successfully achieved cooperation with Charoen Pokphand Group, Master Motor, Hascol, KE, PTN and other internationally renowned companies.

Foton is committed to promoting the development of green logistic and realising three product lines of pure electric, plug-in hybrid power, and hydrogen fuel cell. Thus far, Foton has ccumulated a decade worth of product and technology development in the field of hydrogen fuel cell commercial vehicles and is continuously carrying out in-depth research on key technologies.





PREMIUM SPONSOR:









Rekaan Pilihan:

This Driver and his Deliveries are Unstoppable

This cheerful driver goes by the name of Mr Mohan a/l P.R Kurup. He will be turning 60 years old on September 30th. Currently, he is staying in Bayu Perdana, Klang, with his sister and family.

AT: How would you describe your job? What is it you do?

Mohan: I have been working with Citylink Express for 16 years as a Driver. My career spans 30 years in total as a driver for different logistics companies. My daily routine is to wake up at 5 am in morning, drive to the Citylink HQ at Glenmarie, Shah Alam. My first task is to start sorting the parcels. I then attend the regular briefing and allocate the members of my delivery team to the areas where they should focus for delivery. It takes about two hours to sort, and arrange the parcels, load them in my 2-ton truck and start delivery. With that, I cover 50 areas all over Subang Hi-Tech. (Daily parcel count is 1 000pcs – from small parcel up to 100kg)

AT: What van / truck do you drive? Any special features?

Mohan: I drive 2-ton truck from Isuzu. The features are standard, it is important that we have a clear view without blind spots. Therefore, no modifications that impact that can be made. What I know is that this applies to all courier companies.

AT: Where do you operate? Which places do you go?

Mohan: I am based in Shah Alam, my delivery the parcel to customers covers the Subang Area.

AT: There must be a lot to do now. How do you manage your time? How do you cope with the stress?

Mohan: (coolly) Stress is a normal thing in this line of business. I just continue to do my job and get it done like I am used to.

AT: How do people treat you when you deliver their packages?

Mohan: It depends. Sometimes I meet good customers, who never forget to say thank you and appreciate my job as a delivery guy. But sometimes, there are also customers who complain about why it takes so much time to arrive and to receive their goods. So, I just listen to them and explain the situation as good as I can. I hope that my explanation will help them to realise that we deliver as fast as we can, but that there are currently obstacles we cannot remove.

AT: How have things changed during the Pandemic?

Mohan: I am glad that there are not many changes, just that I cannot move freely as before and need to be cautious with social distancing with customers

and colleagues during our meet ups. My job is still ongoing, but during the pandemics, there is an increase in packages. I understand during MCO people stay at home, cannot go anywhere, so they prefer to shop online and wait for their package to be delivered to the doorstep.

AT: Where do you usually eat? Any recommendations for takeout food? Mohan: I don't have a specific location to eat. Before the pandemic, I usually stop by any stall nearby my delivery area. So, since the condition set out during MCO do not allow us to dine in, I will buy the food from the vendors and eat in my lorry. Luckily, I have plenty of space in my cab, but I prefer to sit down at the food stall.

AT: What do you like the most about your work?

Mohan: The people, the company. Working as a truck driver you are always on the move, it is not a boring job. When you deliver the packages you can meet lots of people, you can see their character and you also get to see the nice views too. Probably, this will be my last year in service as I want to enjoy my pension. I do hope however that my next medical check-up gives me good results and I am still fit to continue my job. I definitely will stay in this company.

AT: What do you NOT like about your work?

Mohan: During MCO, it's a bit of a hustle for me to do the delivery especially in the Condominium area, the guard not allowed me into the building, so I have to call the customer and ask them to pick up at the lobby or wait for their instruction (some condominium have dedicated area to drop the parcel and let the customer pickup itself). For those that not answering my call or are not available to receive/pick up his/her packages, I will leave a note and ask them to call to arrange for 2nd attempt delivery. Other than that, the challenging situation for me is when I have to deliver the package in the busy town area, no parking have to double park, unload the package alone and have to walk fast and deliver the package to the customer.

AT: What would be your dream holiday destination? **Mohan:** My dream destination holiday is United states.

AT: How do you ensure safety?

Mohan: Always ensure that you park the truck properly, lock it when you leave it. This is especially important as I work alone and there is no partner. As we are dealing with people's purchases, always handle the goods very carefully when loading and unloading. When on the road, you don't want any packages to tumble around in the back as that could be distracting too. The truck

handled by the HQ since we have our own workshop. So the truck is always in a good condition.

AT: What is your most memorable event as a delivery driver?

Mohan: I have experienced a lot, but I cannot really say that there is one single event that stands out. I felt happy when surrounding people treat me well, and great to have customers saying a nice thing about me.





It is Health and Safety First for Daihatsu

Going the extra Mile, Daihatsu Malaysia went above and beyond the call of duty to care for staff and extended a helping hand during the pandemic as on-going effort to ensure everybody's health and safety.

ommercial vehicles form the backbone of the economy. In order to perform their best, they need to be looked after by dedicated people, who in turn need to be cared for. Daihatsu Malaysia lets us know just how much effort they put into ensuring that "Please be safe" is not just an empty phrase, but a mantra that transcends departments and hierarchy. Arman Mahadi, Managing Director of Daihatsu Malaysia Sdn Bhd (DMSB), spoke to Asian Trucker about the extensive efforts made.

Fundamental Belief

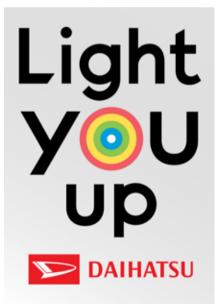
DMSB, being among many companies facing the challenges brought upon us by Covid-19 with compassionate, sincerity and kindness, is taking care of employees during the pandemic. "We believe that the way how businesses respond will have a lasting impact on employee's behaviour. This is far reaching and includes engagement, productivity and loyalty," Arman said. Facing an unpredictable challenge, the level of safety at work and job security are top concerns for employees in these uncertain times. Daihatsu's stance is that it is the duty of the employer to help address these particular fears in certain ways. Daihatsu's Employees Top Priority

The concept of working from home (WFH) to minimise contact between people was introduced along with the initial lockdowns. In anticipation of measures to come, the company enabled up to 50 percent of its workforce to WFH prior to and post restriction order. Arman explained that "When we recognise employees that are self-identified as high-risk (older adult / those having serious underlying medical conditions), we encouraged them to WFH instead of coming to the office. However, according to him, this was only part of what was needed. To provide sufficient support to those WFH, tools, including laptop and other work equipment was provided to minimise presence in the office.

Other Aid

Addressing the additional needs of staff, medical and mental health benefits designed to help employees through pandemic were implemented. For instance, the company offered 100 percent coverage for swab test not only for employees, but also to customers that have been in close contact with DMSB staff that was subsequently diagnosed with Covid-19 through contact tracing. Employees were covered for any other associated visits to medical





facilities required in connection with Covid-19. To spur the efforts of the government, DMSB has been an advocate and encouraged employee's vaccination through application of corporate vaccination via RiVAC.



To ease the burden of those that were diagnosed with Covid-19, paid medical leave for employees and an extension of paid MC if needed was given. The rationale behind this was to lessen employee's financial concerns, in case further treatment would be needed. To keep the workforce mobile and the joints oiled, well-being modules were posted through email on a weekly basis to employees to stay physically and mentally healthy while being confined at home/office.

Waving the Flag

To extend further help, DMSB initiated its own 'white-flag' initiative by providing additional support to those seeking medical care or needing food supplies. Provision of daily necessities to sustain the livelihoods of employees diagnosed with Covid-19 was given. Support was given to employees who may be struggling financially, such as Sales Advisors and contract employees, who would typically depend on commissions.

For those who had to perform their jobs in the office, proper disinfecting supplies and PPE for employees in the essential field (service centres & showrooms) was readied. As most people live with families, DMSB saw it as their duty to safeguard them first. Families were provided immediate home / residential sanitising service in case of an employee getting infected in order to avoid further virus contraction within family members.

During the initial spread of pandemic, DMSB together with MBM Resources Berhad organised a RM300 000 donation channelled through the Sumbangan Perubatan Kementerian Kesihatan Malaysia (KKM) to support the nation's healthcare system in the ongoing battle against the novel coronavirus Covid-19. Special Task Force

"We strongly believe it best to form a task force specifically to tackle Covid-19 issue at workplace," Arman said. This group of internal staff is constantly reviewing Covid-19 related updates to be able to react with strategic countermeasures and planning. The group is constantly monitoring staff conditions so that immediate help can be extended, should any Covid-19 cases arise, and to monitor affected employee's health status.

Return-to-Work Strategy

Arman told us that "There will be no compromise made on our approach of safety first and safeguarding employee's well-being. We know that employees are counting on their company to help them get back to work safely and resume normal operations." However, as we are all in this together, he stressed that everyone has to play the part. From management team to top level executives to company board of directors, everyone must understand and ensure SOP compliance with federal, state orders as restrictions are eased, always putting employee first.

As can be expected, new protocols applicable during a post-pandemic return to the office will be including changes to the layout of workspace. Moving workstations further apart and changing employee schedules by way of shift rotation or flexible work hours are meant to reduce the number of people in buildings at one given time. One task for now is the establishment of strict

guidelines for employees for the use of PPE, random check-in on health progress, personal self-hygiene as well as on-going monitoring of family situations of employees. All these measures are to ensure that every employee is in a healthy state of mind (at work and at home) to create harmonious environment and to safeguard others.

Still Lots to Do

Admittedly, this is no simple task. However DMSB manages to accomplish their goals and improves as they move along. Arman reassures that "We will try in any way we can to support and prioritise the well-being of employees and their families." Dutybound, the management team is urged to lead with empathy and to demonstrate an understanding that while all of their employees have experienced this crisis, they haven't all experienced it the same way.

Based on Daihatsu's Global slogan "Light You Up", Daihatsu promotes health management while lightening the burden of humanity through

- **Light illuminates the darkness:** there will be a glimpse of hope amid the current pandemic if all of us play our part in combating the virus and supporting each other
- Light is also lightness in terms of weight or burden: DMSB is providing aid, relief and other resources, towards its employees.
- Directing light and lightening the load: Delivering a "light" lifestyle (healthy, peaceful and harmonious) to each and every person in the world. That is where the true uniqueness of Daihatsu lies

It can be expected that this is no empty promise. DMSB is to anchor the culture and carry through in what they do. It is learned that it is seen as an important task to provide emotional commitment towards all employees. Only then will employees feel long term assurance followed by better engagement, productivity and loyalty.

"It is important to recognise all levels of our workforce, we're all in this together that no one is left behind regardless of their job post/title," he concluded.



Volvo Trucks Reveals the Technology in its New Heavy-duty Electric Trucks



Volvo Trucks is fully prepared to catalyze a rapid shift to more sustainable transportation, and a major upswing in electrification of heavy road transport, with its recently launched Volvo FH, FM and FMX Electric vehicles. Breakthrough technology based on shared platforms makes them highly suitable for a wide range of hauling assignments, enabling many transport companies to embark on their own electrification journey more easily.

With the sales start of three new all-electric trucks – the FH, FM and FMX – Volvo Trucks can now offer customers a total range of six electrified truck models. The production of the new trucks will initially start with tractors in the second half of 2022, followed by rigids in the beginning of 2023.

The new heavy-duty trucks for the regional haul and construction segments have a gross combination weight (GCW) of up to 44 tons and come in two alternative chassis heights, with wheelbases from 3 800 to 6 700 mm and a variety of two, three or four axle configurations.

"Built on the same highly-successful platform as their diesel or gas-powered counterparts, our new electric trucks provide great flexibility and the ability to meet a very wide variety of transport needs," comments Jonas Odermalm,

Vice President of Electromobility Product Management at Volvo Trucks.

Three Motors Combine with I-Shift Gearbox to give Unique Drive Unit

Three electric motors are coupled with Volvo Trucks' well-proven I-Shift gearbox which has a unique new gear shifting strategy optimized for electric operations. Together, the motors and I-Shift gearbox form a powerful electric drive unit that offers unprecedented, high-efficiency drivability – with a combined electric motor power of 490 kW (666 hp) and a gearbox torque of up to 28 000 Nm.

"Because the truck always starts in the highest possible gear, energy efficiency and savings are achieved, thanks to minimized gear shifting. At the same time lower gears are of course available for steep roads or in starting situations that require additional torque and control," Jonas Odermalm explains.

For power take-off, PTO, capability there are three options to meet the customer's needs: one electric (40 kW), one electro-mechanical (70 kW) and one gearbox mounted (150 kW).

Next Generation Batteries with High Energy Density

The high energy density traction

batteries use the latest generation of lithium-ion cell technology and will be assembled in a Volvo production plant. An electric truck with six battery packs has a nominal capacity of 540 kWh, allowing a range of up to 300 km*.

Flexible and Fast Charging

The trucks offer two ways of charging: AC charging up to 43 kW, which is ideal for overnight charging, or a much faster DC charging of up to 250 kW. This is very useful when driving two shifts or if you need to charge the vehicle during a lunch break, to add additional range. With a 250 kW DC-charger it is possible to charge up to 80 percent of the battery capacity in less than 90 minutes**.

Smooth E-mobility Transition for Hauliers

In addition to the electric trucks, Volvo Trucks also offers a complete ecosystem of service, maintenance and financing solutions that are made specifically for hauliers to support their easier and faster transition to electrified transport.

"For hauliers, it's important that the transition to electric trucks can be done gradually and in a smooth and easy way. They will have a mixed fleet with different drivelines for many years to come and they can continue to use systems like Dynafleet as well as the same service provider for all their Volvo trucks. The driveline may differ, but the rest is very similar, making the move to electric trucks both seamless and logical," concludes Jonas Odermalm.

The New Sound of Safety

Starting on 1st July 2021, all electric vehicles in the EU will be required to emit a certain sound level when travelling at speeds below 20 kph. The sound level required depends on the speed and gets higher as it increases. At the maximum speed of 20 kph it should be at least 56 decibels. The US has similar legislation for vehicles when driving 30 kph or slower. If the vehicle is too quiet, an external acoustic vehicle alerting system (AVAS) must be added.

To meet the new requirements, and at the same time maintain the benefits of lower noise levels that come with electric vehicles, Volvo Trucks has developed a unique set of premium sounds for its electric truck models.

"We truly welcome this new legislation. From when we were children, we have learnt to rely not only on what we see, but also what we hear in traffic – sometimes so much so that we don't even look before crossing a street! With our new alert system, we want to help ensure that pedestrians and cyclists notice when they are close to our electric trucks," explains Anna Wrige Berling, Traffic and Product Safety Director at Volvo Trucks.

Developed by Acoustics Experts

The range of sounds are the result of thorough research and testing by the Volvo Group's own acoustics experts. "We are particularly proud to have developed high quality, premium sounds that are noticeable enough to warn people close to the truck, and yet still pleasant for the driver and other road users," says Anna Wrige Berling.

It is important to note that the trucks will still be much quieter than conventional trucks. "The sounds are designed to not penetrate through walls. Our electric trucks will still allow for quiet nighttime deliveries and contribute to better working conditions for the drivers and a quieter, cleaner environment," says Anna Wrige Berling.

Four different sounds

The Volvo developed acoustic alert system for electric vehicles is actually not just one but four different sounds, informing people close by about what the truck is doing: moving forward, idling, reversing, etc. The sounds will vary in intensity, based on truck speed and will shift in frequency during acceleration and deceleration.

Ramping up electric transports

With the recently announced start of sales of three new heavy duty electric truck models – the Volvo FH, FM and FMX – Volvo Trucks now has an impressive



line-up of six medium and heavy duty electric trucks. This is currently the most complete commercial electric truck range in the industry.

"Electric trucks will be increasingly more common in traffic, and by adding the acoustic alert sound system to our electric vehicles, we are proud to be able to combine our exciting journey towards zero emissions with our longstanding zero accidents ambition," states Anna Wrige Berling.

The Volvo electric trucks are not yet available in Malaysia. Volvo Malaysia will take market readiness for electric trucks, the regulatory environment, customer demand and necessary supporting EV infrastructure into consideration before an electric truck model is introduced to the local market.

* Actual range may vary depending on many factors i.e. driving speed, use of cruise control, vehicle specification, vehicle load, actual topography, the driver's experience, vehicle maintenance, and weather conditions.

**Charging times may vary depending upon outside temperature, the type of charging equipment, truck specifications, current battery temperature, battery condition and battery power levels prior to charging.

LinkHaul adds Functionality that helps Hauliers Reel in Business

Ramping up offerings since early 2020, LinkHaul has seen increasing responses from the industry. The tool continues to connect hauliers with freight forwarders with added and enhanced functions.

obody likes having excess capacity when operating a haulier fleet. And neither do freight forwarders like the idea that the containers of their clients are sitting in the port, waiting for their collection. With the current congestion in the ports, a massive opportunity has arisen and LinkHaul, the market place where hauliers and freight forwarders can meet to tap into the massive potential that there is, has since stepped up its game.

Continuous Enhancements

Launched in July 2019, the online platform addressed specific needs. At the time of writing, there have been 174 registered companies, 286 registered users and several thousand containers moved. See Soon-An, Managing Director, Link Effect Sdn Bhd has an update and additional information for the industry. According to him, the initial offering was just one product, called "Public Offer". It was meant to allow hauliers to share their excess jobs in the open market effectively. "This allowed for hauliers to bid for jobs and optimise capacity that they needed to meet the schedule of their clients." Using a payment gateway, these jobs were to be paid quickly and the main goal was to take ease the traffic and balance trade.

Following the launch, SFFLA became aware of this tool and they got actively involved. In parallel, hauliers and forwarders with existing agreements between them saw the benefits of using LinkHaul. Based on that, LinkHaul developed the second product, called "Direct Settlement", allowing those that have pre-agreed terms and conditions to take advantage of our platform and to boost efficiency for their businesses. Both parties benefit from transparent transactions taking place on the platform. "In addition, we also completed the integration with our service provider," Soon-An explains.

One Tool to Unify them All

As a tool, LinkHaul does more than just connect two parties willing to conduct business. As Soon-An explains, both shippers and consignees may use different IT systems and methods of handling jobs. Or they may not even have a system at all. However, when using the online platform, both parties would be using the same platform. Any one party may work with several other partners and each may have a different system. It is common that a freight forwarder may use half a dozen hauliers and would have to adjust to the style and system of each one of them. Using LinkHaul, forwarders can rely on standardised processes when dealing with multiple providers of haulage services. This allows for faster processing, reduces the potential for mistakes and offers clarity, transparency and an easier user experience.

In addition to being user friendly, LinkHaul is also cutting down on the documentation. Everything is paperless. Within the system, all details are recorded, with an extension of the Customer App that facilitates paperless delivery and allows shippers and consignees to track and trace their container movements. Printed consignment notes are no longer required. Truck drivers are using mobile apps to scan synchronized QR codes, and electronic Proof of Delivery is being auto generated upon delivery. Hence pre-printed consignment notes are no longer required. The use of electronic methods, as opposed to manual documentation, further reduces the potential for errors. "We have identified this as one of the issues with current practices that still required paperwork, although WestPort is generally paperless." As an added



advantage, this allows for bulk movements of containers, whereby any number of containers can be bundled in one job order with easy bulk upload. "And that too, reduces the potential for errors or wrong movement as the system tracks and tallies the containers automatically, in real time."

Protected Business

Using the Haulier Number to verify that a company is legit and has all the required documents and approvals in place. This way, transporters that are not licensed to operate as hauliers cannot utilise the platform. "When companies sign up for our platform, thorough checks will be carried out to ensure that there is nobody abusing our platform," Soon-An says. Proper licensing is required, giving forwarders and the haulage industry peace of mind. At the moment, the focus is on Port Klang, however, Soon-An confirmed that the platform will also work with the other port systems in Malaysia, which is planned for the near future.

One of the issues encountered is the reluctance to try the platform as it is not mandated to be used by the government. LinkHaul's staff has also encountered situations where the hauliers would sign on, but require LinkHaul to speak the haulier's customers to convince them that the platform should be given a try. For

best effect, it is recommended that all hauliers used by a forwarder are using the platform. "We are very sure that using our platform is improving the overall business and specifically efficiency, of not only our partners, but also that of our partners clients and we are happy to educate the market." Soon-An hopes that hauliers and forwarders alike would help in convincing their respective partners to give LinkHaul a try.

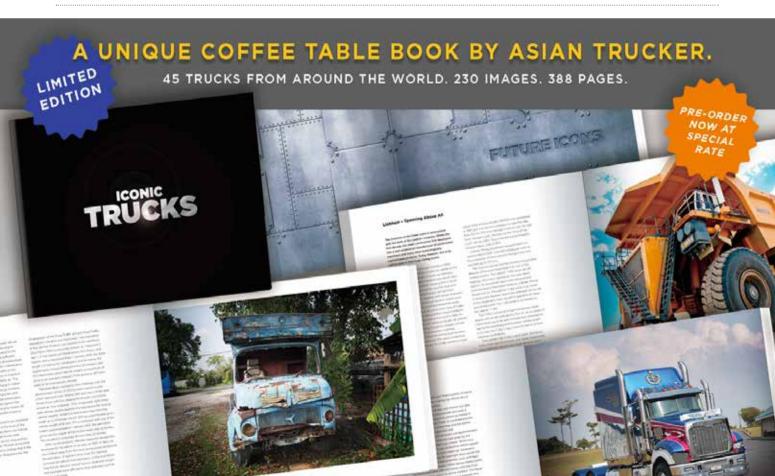
Happy Customers

A number of customers have signed up as development partners. From there, further enhancements and integration is derived. Thus far, the feedback has been positive with several of them already recommending LinkHaul to others. Especially, when subcontracting to other hauliers, LinkHaul has proven its mettle as the universal system makes it easy to hand over and monitor containers if need be.

Depots have recognised that they too, could benefit from this solution. The net effect seen by depot operators is that this solution reduces the number of empty trucks in the depot (minimising imbalanced trips) and improves the turnaround. Sometimes, they have hundreds of containers that need to be moved. Soon-An and his team are currently working on a solution for that too. He explained that it is typically very difficult to find one single haulier that could fulfill the requirements timely and effectively. Instead, LinkHaul will shortly be launching a solution whereby hauliers willing to move any number of containers can tap into the bulk and move quantities as per their capacity. In the LinkHaul system, the job is then reduced by the number of containers moved accordingly. This means that the depot gets these orders cleared faster and without having to deal with multiple hauliers. •









How Sustainability Drives Scania

In this exclusive interview, Heba El Tarifi talks about sustainability as a core vision has shaped the way Scania does business and what the organisation has learned from navigating another crisis.

While nowadays, the term "sustainability" may be associated with being environmentally friendly, there is more to it as it is about the ability to sustain a business.

AT: The management of an organisation is responsible for the business continuity. When staff at the top changes, different leadership styles etc may come into play. How does Scania as an organisation ensure the execution of a brand's vision to be seamless?

HET: Having been with Scania for 16 years, this is something that I have seen happening many times before: country level management changes as part of our elaborate career planning. However, as there is a specific culture, the Scania way, we all share, the core values we all have are the same. I venture to say that you could ask any of staff within the organisation and they will be able to recite the vision. It is a unifying principle that puts sustainability at the centre of everything we do.

When we then look at the rotation of staff, the selection process comprises assessments and tests in order to find the best fit. It is specific skills that we want to transfer and someone will be seconded to a different market because of that skill. While the overarching vision does not change, we can inject our own skills and knowledge into a local market as part of our personal development plans.

AT: Sustainability is about longevity of a brand. How does Scania ensure that the products offered are in line with the current and future needs of the market?

HET: It is noteworthy to point out that Scania has been the first one to talk about sustainability. It has been made a core vision for the business. Scania's purpose is driving the shift towards a sustainable transport system, creating a world of mobility that is better for Business, Society and the Environment. This is derived from the closeness to our customers, who have been asking for solutions to better meet their requirements. Which simply means that they are asking for more fuel efficient engines. With the current technology, Scania responded with the most efficient power train and from there, we have integrated the notion of sustainability into everything we do. For example, we are having strict standards when it comes to our buildings as we are aiming to reduce energy consumption wherever we can.



HEBA EL TARIFI, MANAGING DIRECTOR OF SCANIA SOUTHEAST ASIA

Today, our engines are ready to use B100 biofuels, thus reducing CO2 by up to 85 percent. At the moment, such fuel is not sold at petrol stations, but we would be ready immediately should this direction be chosen. What we believe is that no business will be able to make it in the long run if they don't adapt a sustainable approach. This may be easy to say that one is sustainable, but it is the actions that one needs to take that are the proof.

This year, we celebrate 130 years and 50 years in Malaysia. The current pandemic is not the first crisis the organisation has weathered. We have obviously gone through a great number of global events in those years and we have learned from it. In particular, today we see that having two pillars is crucial: while the bus market is dormant, the trucks are still selling well as they form the backbone of the economy.

AT: With the idea of offices challenged during the lockdown and expenditures cut in many sectors, how did you achieve sustainability over the past 15 months.

HET: I have not experienced the lockdown here, but in Australia. Therefore, the situation I found was not new to me. What I would have liked is to be able to experience Malaysia and to get to meet people around the country, but that has not been possible. With the lockdowns, we all had to make drastic changes from one day to the next. Creative ideas were what was needed to ensure that our clients continued to get the best possible service from us. Being a globally dispersed organisation, we already have a high degree of digitalisation and we could fall back on tools that we had used before the pandemic, expanding their reach.

When analysing the way we operate, it becomes clear that Scania is not transactional, but driven by relationships. This is evident by the fact that many companies have turned to us during the pandemic to seek solutions that would bolster their own operation. Transporters clearly sought the help of strong partners, partners that they trusted will be able to assist them in their efforts to make it through the pandemic. As an example, we have supported customers with extended payment plans and offered health check examination on their vehicles to ensure uptime when ready to be back on the road.

This transition, being a very abrupt one, was not without problems that we needed to solve internally. Simple things like the fact that some of us would work with a desktop and needed to switch to a laptop. People had to change the way they worked. For instance home schooling needed to be aligned with work obligations and we have given our staff the support and discretion to manage their home and work life commitments.

AT: Could you name some specific efforts you have made and how these have helped to sustain the business?

HET: Clearly, one has to acknowledge that the situation demands a different approach. For instance, when people



have to manage home schooling, then we have to take the approach that 9 to 5 is not working and that we have to allow people to manage their own time. Basically, as long as the job gets done, it should not matter at what time this is happening. One of our values is "Respect for the individual" and having an obligation to ensure the wellbeing of our colleagues we also carried out some fun activities so that people could socialise.

AT: What are some of the positive side-effects of the pandemic and how will they help you with the ambition to be sustainable?

HET: We have seen that we have become more efficient. Now we can just schedule a meeting on Teams, which has become our default meeting space, and have a discussion where previously, we might have wanted to travel. Admittedly, in doing so, we will miss some context and the human touch to some extent. Within Scania, the events of the past year have further accelerated digitalisation, which is a positive development as this directly helps our customers. In addition, we have become more flexible and agile as a response to the changed circumstances.

AT: Talking about sustainability in the context of protecting the environment: The overwhelming narrative is about Hydrogen and electrification. We do not see this with Scania. Is this not a priority or is Scania betting on other sources of energy?

HET: We might have not been as vocal about it here in South East Asia, however, Scania has been the first with a fully functioning pilot project for Hydrogen as well. And this is a very interesting debate! For instance, Diesel engines are still going to be very interesting as there is still a lot of potential to make them more efficient. Also, when we look at the cost of energy, we will find that Diesel is likely the most cost efficient option for the time being in Malaysia for instance. If we move to electricity, then we need to consider the cost of producing that energy. We always have to consider the total emissions, well to wheel, and not only tailpipe emissions.

Scania has a number of solutions to offer. We can run on anything from electricity to Biodiesel, from Ethanol to gas. What limits the development is the infrastructure needed to make this more attractive. Similarly, we can offer

THOUGHT LEADERS ASIAN TRUCKER 170



waste to fuel solutions, which again would need support frameworks to become viable options. The technology is there and we can match the needs of our customers with the right fit in terms of the technology they require. In short, the question is if a market is ready for a specific application.

Scania has pledged to be CO2 neutral by 2050 and for that, we need to consider a well to wheel approach and factor in all the stages in the live of a commercial vehicle.

AT: What has been the most remarkable development in the past year, something that you can expand upon in line with the ambition to be ever more sustainable?

HET: Clearly, the ambition by our customers to be labelled "A Good Company" is something that has taken off. Through the Scania Ecolution, these companies demonstrate that they care for the environment and that being sustainable is important for them. In particular, this is crucial for those operating across borders as more and more of their clients ask for them to demonstrate how they can be more environmentally friendly. Being A Good Company has become the sign of a reputable business.



Scania's Drive for Big Data

Data-Driven Services by Scania is a smart solution for customers to achieve better uptime, profitability and sustainability in the new age of logistics. This is achieved through implementing the right technology to get the right data and offer customers a suite of packages, that would help make better and more informed fleet management decisions.

Data moves businesses. Scania is about driving the shift towards a sustainable transport system via data. Every Scania made is full of smart technology, advanced sensors and wireless connectivity. These hundreds of thousands of constantly connected vehicles and engines in use all over the world today provide data that doesn't only improve Scania's engineering, but are created and offered as packages that provide customers with direct business value. Anything from lowering fuel consumption to reducing wear and maintenance needs, all the way to automating tedious administrative work. No matter if the customers operate a mixed or Scania fleet.

All Scania vehicles already come with 10 years free subscription of Monitoring Package. Customers will receive Fleet Management System vehicles report and get Service Planning access. If upgraded to Control Package, customers can get report on Advanced Vehicle Performances, Driver Evaluation, Service Planning and Fleet Positioning updates based on 1-minute intervals.

Data Access Package: Service Planning, customers will receive basic vehicle data, featuring dates and status of scheduled Scania workshop services on system via API. Coupled with Data Access Package: Location, the additional function of Fleet Position detailing longitude, latitude and speed on vehicles via API will be available. Scania Zone: Speed Control is a package that has speed restrictions or compliance pre-sets upon vehicle entering designated geofencing zone.

Drivers and operators can also get Virtual Coaching service and receive Driver Evaluation plus Service Planning via the Scania Fleet mobile app and Fleet Management Portal through Driver Evaluation with Virtual Coaching package. Customers with older fleet will not be left out with Retrofit Communicator package. Scania can retrofit trucks, buses and coaches with Scania Fleet Management System vehicle interface.

"Big data is king. As we celebrate the First 50 Years in Malaysia (F50Y), we are proud to continue to drive the shift towards a sustainable transport system, using it. Scania Data-Driven Services will support our customers in the next 50 years and beyond, towards better uptime, profitability and sustainability," said Heba El Tarifi, Managing Director of Scania Southeast Asia.

Keltruck Scania Vehicle Recycling

Lest Bromwich in the UK is home to Keltruck Limited. The company boasts over 35 years' experience in dealing with recycled Scania parts, delivering to customers throughout the UK and the world handled by a team of eight members of staff with over 125 years of collective experience. Carl Joynes, Business Development Executive, Used Parts Operations said "Our team is committed to sourcing the right Scania part for you and. Most of the trucks we break having been on full contract maintenance packages within the Scania network, with the push of a button we can precisely locate the history of any part to identify exactly what it has been through giving you peace of mind. We pride ourselves on the quality of our recycled and, if needed, reconditioned parts."

All components are inspected in detail before they are sold as recycled parts and main components such as engines, gearboxes and differentials are reconditioned where necessary. Careful measures are taken for shipping these parts which can be palettised, containerised or shrink-wrapped thoroughly to prevent any damage, depending on the size of the order and type of parts in question. Keltruck also provides regular updates on purchased parts, complete with pictures sent via platforms such as WhatsApp, to provide customers with peace of mind before they leave the Keltruck site. "It is this unrivalled, personal customer service that helps us build and retain strong relationships with our customers, Joynes said further.

Keltruck exports to over 50 countries worldwide including Malaysia, Australia, Greece, Tanzania and Hong Kong, along with some more remote areas like Mauritius and New Zealand, demonstrating a desire to meet customers' needs on a global scale. Regardless of how remote they may be. Recent investments



included a container loading bay to make the process of containerisation quicker and eas

more efficient. All this, combined with easy secure payment options and bespoke logistics to customer needs and destination, makes Keltruck a supplier of choice for quality recycled and reconditioned Scania parts.



An Introduction to Weigh-In-Motion: A Future Implementation in Malaysia

ach year the number of road accident fatalities and casualties are increasing and this cause a heavy burden on the health services and national economy. In Malaysia, for instance, the number of road accidents and fatalities are increasing every year and for the year 2008 the total accident increase by 2.7 percent and road fatality increase by 3.9 percent from the year before (according to Royal Malaysian Police). The trend from year 2001 to 2018, number of drivers/riders involved in fatal road accident due to overloading goods shows an ascending trend as shown in Figure 1. An analysis of the accident fatality data further reveals that at least 41 percent of fatal accidents involving heavy vehicles occurred between the heavy vehicle and motorcycle.

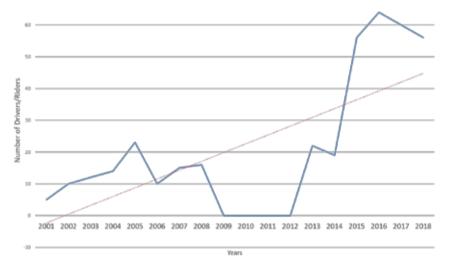


Figure 1: Number of Drivers/Riders involved in Fatal Road Accident due to Overloading Goods

Weigh-in-Motion (WIM) is the process of measuring the dynamic tire forces of a moving vehicle and estimating the corresponding tire loads of the static vehicle. WIM are necessary for safeguarding the freeway infrastructure and improving traffic safety by enforcing heavy vehicle weight limits and can be used as monitoring and surveillance system in road engineering especially on heavy vehicles.

Heavy vehicles have more complicated systems with a variety of possible failure modes and performance characteristics including locked-wheel braking, trailer swing-out, rollover, poor acceleration characteristics and longer braking distance. Therefore, the additional weight will increase the risk of failure. Furthermore, as mentioned by Fancher and Campbell (1995) the heavy vehicle weight shows the strongest association with fatal accident rates among all other vehicle characteristics such as wheelbase, configuration and number of axle. The finding is also consistent with physical principles that the energy to be dissipated in a collision is proportionate to weight. Further details about the energy loss in damage due to vehicles in road accidents can be found in Vangi (2009), Wood and Simms (2002) and Wood (1997). Other than that, overload vehicle gives an impact on pavement damage



where vehicles being overloaded would lead to a more hazardous road environment because of the limitation in vehicle dynamic and braking. Pavement damage also will lead to uncomfortable, and therefore stressful, driving and riding for the road user that will disrupt the driving behaviour. Therefore, the road safety issue will become a major problem due to overloaded heavy vehicles. WIM installation may lead to reduction of the risk pertaining to road safety and finally reducing the number of fatal crashes due to overload vehicle.

WIM system installation

There are several countries that have already implemented the WIM system, especially in Europe and developing countries. Countries using WIM on highways include Belgium, China, France, Germany, Japan, Netherlands and the United Kingdom.

WIM installation can be made at two areas which are on the main road and at toll plazas. The example of of the

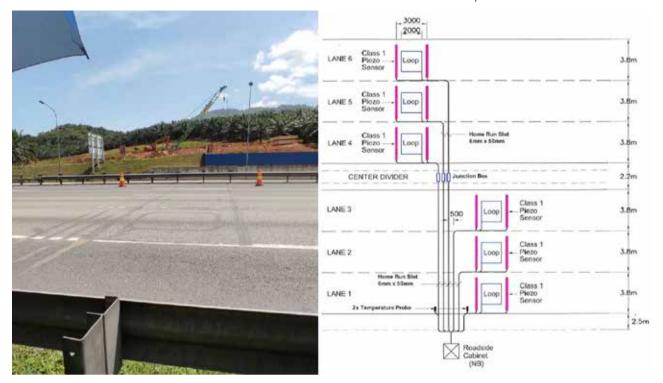


Figure 2: Example of WIM Installation at Main Road

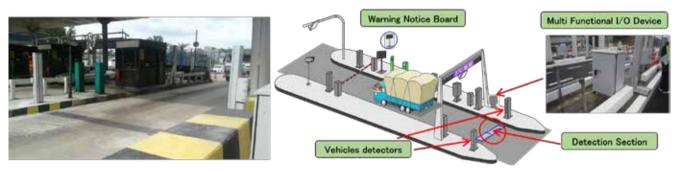


Figure 3: Example of WIM Installation at Toll Plaza

installation on both areas can be seen in Figure 2 and Figure 3 respectively. Both areas are suitable to be used in Malaysia as it can be install at highways and federal roads. Subsequent developments with the embedded weight sensors include different iterations on platform designs using steel plates and strain gage load cells, steel bending plates instrumented with strain gages, and strip sensors. The equipment installed to capture data to be used for enforcement and monitoring can be used by many agencies and parties.

Conclusion

Considering that the crash statistics and the existing condition of the road environment will change over time, WIM will become a very usefull equipment to ensure the road safety especially involving heavy vehicle. MIROS is always ready to assist the relevant parties to implement it on the road and MIROS is confident of providing recommendations in preparation of better road and in turn, can improve the safety level of the road.

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Big Data from Head to Trailer

Increase your trailer uptime by effectively using real-time information and diagnostics data. Cloud-based connectivity with TX-TRAILERPULSE is one solution that can help you achieve this.

esigned to capture a maximum amount of data on trailers with limited electronics, TX-TRAILERPULSE is a robust trailer telematics solution that supplies real-time location and rich EBS data.

A fleet manager in the digitised modern world is only as good as his/her connectivity. Without having access to data and being connected to drivers and trailers, it is a lot more difficult to respond in an agile way to what is happening out on the road. Whether there is an accident, mechanical fault, traffic congestion or freak weather conditions, being aware of these things is essential to run an efficient fleet. Connectivity has never been more important for fleet managers – and WABCO claims that it has also never been simpler.

The TX-TRAILERPULSE from WABCO is one solution that makes the most of improved connectivity. It monitors the state of trailers and transmits crucial information through different multi-functional and dynamic web-based platforms like TX-CONNECT and TX-TRAILERFIT, thereby allowing you to make impactful decisions about your trailers quicker.

In Detail: TX-TRAILERPULSE Telematics Solution

Besides just your trucks and drivers, having a clear picture of where your trailers are is important to fleet managers for so many reasons. TX-TRAILERPULSE is an elegant solution to help give you exactly that.

Designed to capture a maximum amount of data on trailers with limited electronics, such as flatbeds, curtain siders or box trailers, TX-TRAILERPULSE is a robust trailer telematics solution that supplies real-time location and rich electronic braking system (EBS) data to the TX-CONNECT back office software platform. This telematics device is tailor-made to help improve trailer fleet efficiency, as you are able to constantly monitor the location and condition of your trailers.

Building up on the data collected from the trailer EBS system, the TX-TRAILERFIT web-based portal gives you real-time insights on the technical performance and health state of your trailer park. Using the information provided, you can head off any potential issues or problems, while you are

able to efficiently plan and schedule preventive maintenance should there be any faults developing.

With this information on hand, fleet managers can make a real difference to fleet uptime by doing so, planning in repairs during quieter periods to avoid damaging efficiency, for example. Knowing when faults are developing reduces the chance of unexpected breakdowns and delays to deliveries, which can result in unsatisfied customers and reputational damage.

TX-TRAILERPULSE Features

TX-TRAILERPULSE puts your trailer use first. The system is simple to install – it connects to the trailers' EBS – TX-TRAILERPULSE does everything required in terms of remote trailer diagnostics. Not only can it provide information on the technical health of the trailer as it makes its way around the roads, it allows track and trace too. Moreover, real-time access to operational data helps you to make smart decisions to manage and improve the daily utilization of your trailers.

Through ZF WABCO's own Cloud services, TX-TRAILERPULSE offers the flexibility of integration with your



existing fleet management systems. This will minimize disruption of your current back office setup, and the same time, maintain user-familiarization of the existing user interface.

Professional uptime management

- + Reduce the chance for breakdowns
- + Minimize vehicle downtime
- + Optimize maintenance and repair scheduling
- + Improve overall safety
- + Facilitate regulatory compliance

Improve trailer use

- + Reduce penalties
- + Extend tire tread life
- + Improve driving styles
- + Optimize planning based on load

Manage trailer use

- + Real-time visibility
- + Maximum deployment
- + Efficient transport planning

EBS: Enabler of Road Safety

Working in tandem, prime mover and trailer nowadays are connected using one EBS system. The quality of the braking system contributes substantially to the road safety of commercial vehicles. In 1996, WABCO was the first supplier to launch the series production of an Electronic Braking System (EBS) on a larger scale. As a global leader in this sector, WABCO supplies EBS for light to heavy commercial vehicles with trailers or semitrailers.

The driver submits his deceleration command by operating the brake. EBS then electronically transmits this command to all braking system components. Response and build-up times at the brake cylinders are reduced significantly due to electronic actuation. The ECU also facilitates a sensitive dosing of the braking system during this process. The result: A comfortable braking "feeling", independently of the load status, and a much shorter braking distance. The functions integrated in EBS ensure that both the vehicle's driving stability and steerability are maintained during the braking process.

The Differential Slip Control (DSC) system automatically distributes the braking forces between the front and rear axle according to the respective load status. When

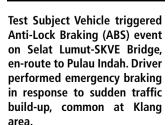




operated with a trailer, DSC also ensures that the tractor-trailer combination is optimally balanced. Towing vehicle and trailer respectively brake their own portion of weight in the tractor-trailer combination. The coupling force of the tractor-trailer combination is thus kept low when braking. The integrated anti slip regulation applies traction control.

EBS from WABCO provides the option to continuously monitor and balance lining wear. This means that service and lining replacement times can be coordinated. All linings on the vehicle are then replaced simultaneously. The integration of endurance brakes, such as retarder and engine brake, also help to protect brake linings for longer operating times. Extensive integrated diagnostic and monitoring functions constantly carry out self-inspections of EBS. Corresponding warnings alert the driver immediately if operational readiness is impaired. A diagnostic device or the on-board diagnostic display in the vehicle can be used to determine the causes quickly and easily. Maintenance and workshop periods can also be significantly reduced by means of the extensive test functions of the diagnostic system





EVENT CONTEXT FOR ABS



Test Subject Vehicle triggered Roll-Over Stability Support Level 2 event on a hair-pin at Gotong Jaya, en-route to Genting Highlands. These real-time information can be used to identify potential accident spots.



Kit Loong to the Rescue!

SC3OCT Mobile launches new 'SOS' tyre breakdown assistance application for Android and iOS.

s part of the growth of Kit Loong's Mobile service division, SC3OCT Mobile, alongside investments in our outdoor network, we have launched the first iteration of a mobile app that will allow customers to alert us to a tyre-related breakdown at the touch of a button.

The SC3OCT Mobile 'SOS app' has been produced for both driver safety but also so our customers get total transparency when it comes to roadside assistance. For too long, commercial tyre rescue has been a murky industry in Malaysia. SC3OCT Mobile aims to professionalise the industry to give our customers clear and relevant data, total transparency and the safest operation possible.

SC3OCT Mobile now has the largest single, wholly-owned, network of highly-trained breakdown response trucks and the largest coverage network, having over 3 000 prime movers under our supervision across all of peninsular Malaysia and the first and only SGS ISO certified network since 2012.

The app allows drivers to request breakdown attention by pressing the 'SOS' button, we then ask them to take photos of the truck and the damaged tyre to make sure there is no dishonesty or misconduct. This information is then sent to both our call centre, which is now fully digital and GPS tracked, as well as to what we call the 'PIC' or Person in Charge app. Any breakdown must be approved by an appropriate senior company member before one of our breakdown trucks is allocated to the breakdown. This feature gives your organisation total control over the breakdown, understanding the location, the fault with the tyre, the brand etc as well as back end services such as invoicing, all connected with one unique ID per job for traceability and studying trends to improve your organisation efficiency. Essentially, we're trying to help our customers cut down the number of breakdowns we attend.

After we have attended the breakdown and fixed any issues, we will also share photos and a digital job sheet from our technician, so you can see the whole process, recorded digitally. At the end of each month we can produce reports on numbers, locations and types of breakdown, giving you the power to make informed decisions about your fleet operations. This data will contribute to your big data and if you are a KLConnect user, this will be fed directly into your system.

The SOS app is the first in a number of Mobile service related apps SC3OCT Mobile is working on. Alongside outdoor rescue/tyre breakdown, in phase two you will be able to request tyre assistance in depot by digital appointment, saving you time having to send trucks to wait in queues at a dealer just to replace a tyre.

Alongside our digital enhancements to SC3OCT Mobile, we are now also offering monthly fixed maintenance contracts through SC3OCT Mobile Assist. Essentially, SC3OCT Mobile will soon be able to take care of all of your tyre service needs, through one application, wherever you are.

One app is all you'll need for any tyre service issue, but for now SOS will give you the clarity you need to stop your business losing money from less than scrupulous operators in this space and provide you with robust and transparent data for all tyre-related breakdowns.

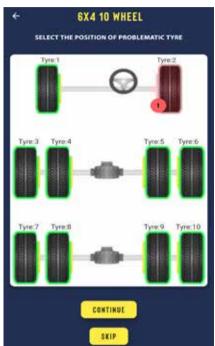
We are not stopping here, there are more features in the pipeline for both SOS and other future apps to enhance our contribution to the KLConnect total tyre management ecosystem and to improve business efficiency through technology.

Driver Benefits

Malaysia's largest outdoor tyre rescue operation is now Connected.With over 3 000 prime movers registered across Peninsula Malaysia, we have developed a network that operates with full transparency. "We have now made it easier to access our network, through our APP and SC3OCT Mobile platform," Hutt said.

The easy-to-use mobile app, developed inhouse, will streamline the process of alerting us to a tyre failure. All your driver needs to do is push the 'SOS'





button and it will put our system into motion. The most convenient way to alert us to a breakdown.

Explaining how it works, Hutt explained "The app uses the phone's GPS, so we know exactly where your driver is. Uploaded photos of damage will give our team prior knowledge of the incident so they can arrive prepared and ready to fix any roadside tyre failure issue while giving you the data you need for transparency." In detail:

- All company data is precompleted, saving you time and effort.
- When the driver presses the SOS button, we know who they are, and which truck they are driving
- GPS means we know the exact location
- 4. Drivers and PIC have a clear ETA for assistance
- Digital records mean total clarity, with photographic evidence of work completed

Drivers no longer need to find a number for local or national rescue, all they do is push one button and Kit Loong's team will be on their way with a clear ETA and details of the attending technician, for added accountability. While en route, they can 'chat' directly with PIC, MSP and Call Centre in the app.

Customer Benefits

The new SC3OCT Mobile APPLICATION puts your company in control of all aspects of roadside tyre assistance.

After a driver uses their app to press the 'SOS' button after a breakdown, the app will alert the company-designated PIC to the SOS call. Depending on our customer's internal policies, POs or work orders may need to be approved. This, again, can be done at the touch of a button, connecting with our customer service and finance teams for seamless acceptance of the job, less paperwork and live chat function.

After the request is approved by the company-designated PIC, it will connect to our HELPDESK where the closest SC3OCT Mobile provider will be dispatched to the vehicle in question.

Once the work is complete, a full record, including photos will be sent to the PIC application where you can review the completed work and be safe in the knowledge that full accountability is visible to all. The PIC app can display all jobs, from completed work to in-progress attendance, giving clear status on all.

With an easy process flow and streamlined approval, we've taken all the hassle out of roadside assistance, as well as the back-end process of approvals, POs and payment. We want to use technology to offer our clients assurance in the process as well as expanding on our commitment to the safest operating standards and the most honourable business dealings.

We are aiming to make more and more of the process digital, in line with our commitment to our TTM, big data system, KLConnect. If a client is using the app and KLConnect, all data will be fed back into their system, giving them much better visibility and control over any ongoing concerns.

Process:

- 1. Driver presses SOS button and sets location, takes photos of damage.
- 2. Driver app alerts PIC to breakdown, where situation can be reviewed.
- 3. PIC approves breakdown request and details are sent to our Call Centre team
- 4. Call centre team alert closest available MSP to breakdown location
- Confirmation of acceptance, including ETA and details of MSP truck and driver sent to driver and PIC
- 6. MSP arrives, documents all stages of fix and replacement
- 7. Once job complete and your truck is back on the road, details of job shared digitally with PIC
- Depending on client process, POs, work orders etc. are automatically created
- PIC can see record of all breakdowns in application for future reference
- 10.If Customer is using KL Connect, all data will be shared to the platform for future analysis *T*

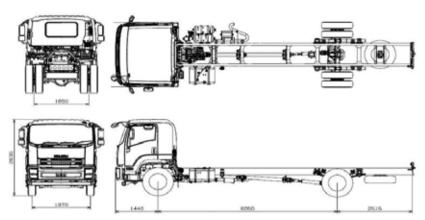


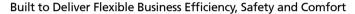


Medium-Duty Isuzu Fvr300

- Built To Deliver Flexible

Business Efficiency, Safety And Comfort





he medium-duty truck segment continues to remain robust. Companies are increasingly looking for medium-duty trucks that are not just built for a variety of applications but also one that is strong in quality, performance, fuel efficiency, safety and comfort for the drivers. The Isuzu FVR300, a model offered within the Japanese truck company's Forward series (F-series) of medium-duty trucks, is built to deliver all the benefits that companies and truck operators need today.

The vehicle is featuring Isuzu's SEE Technology, which is the pursuit of technological excellence in the three critical areas of Safety, Economy and Environment. Isuzu's FVR300 offers the best-in-class power, performance and quality to name a few. This truck model is equipped with a number of technological features for safety and enhanced fuel efficiency as well. These include the Euro 3 and B20 compatibility standards. These align with Isuzu's increasing focus on environmentally-friendly global regulations to curb fuel consumption and minimize carbon emissions, in addition to helping companies reduce cost.

Koji Nakamura, CEO of Isuzu Malaysia Sdn Bhd shares, "The Isuzu FVR300 is a popular model within our F-series product line-up. It has proven its potentials in delivering exceptional business benefits to many of our customers in both globally and in Malaysia, helping them overcome challenges and accelerate growth. We are glad that this product has not only contributed to solidifying our market leading position but also puts us in a good place to take advantage of future opportunities in the medium-duty truck segment."

Superior performance and flexibility

Built to deliver greater productivity through quality performance, the Isuzu FVR300 is fitted with a 6-cylinder engine that has a turbo with intercooler. It is capable of delivering high maximum torque of 986Nm or at 1 450 rpm and maximum gross output of 300ps or at 2 400rpm. This makes it capable of handling bulk and heavy deliveries over long distances without compromising on performance.

The transmission system in this truck model is the Eaton ES11109 with 9-speed transmission, a compact and powerful solution designed to improve reliability and provide longer service life. This rugged transmission enables the truck to



Medium-Duty Isuzu

FVR 300

The superior performance and built chassis structure including rivetless wider chassis for greater ease of bodybuilding installations will meet the needs of various body applications ranging from box, refrigeration, curtain sider, livestock and tanker.

Useful technological features

The Isuzu FVR300 offers useful features such as bigger and durable aluminium alloy fuel tank with lockable cap, quick access panel designed for convenience and safety when inspecting or replacing clutch fluid, wiper fluid and cabin air filter, and small relay to avoid damage during flood.

In addition, this model also features the cabin tilting grip assist which has a latching system designed to secure the cab from tilting forward. This is preventing loss of control over the truck and accidents. The Isuzu FVR300 enables operators to do bulk deliveries more efficiently as well thanks to a bigger rear axle for higher load capacity of maximum 13 tonnage.

The truck's GVW (gross vehicle weight) is 19 000 kg with an available payload of 10 000kg and a fuel tank



of 400-litre. Further supported by the front and back suspensions consisting alloy steel leaf springs and added with hydraulic double-acting shock absorber for the front, the Isuzu FVR300 is a robust and reliable choice for multiple short and long-distance deliveries.

A variety of safety features

Safety features in trucks are becoming increasingly crucial: companies seek to reduce the risk of their trucks being involved in accidents while at the same time improving the safety of drivers and lowering cost.

With the Isuzu FVR300, safety plays a key role and it is derived from the very important Anti-Lock Braking System (ABS). ABS is efficiently reducing the risk of skidding by preventing the wheels from locking up during braking on slippery surfaces. Furthermore, it helps to maintain traction on road surface, giving a more secure directional stability and solid handling for the driver.

Additional safety features that are also available with the Isuzu FVR300 to further prevent or reduce the risks of accidents include the extralarge front and rear drum brakes for improved breaking performance.

The compound curvature of outside mirrors helps to enhance indirect view for the driver and the reinforced door waist minimises distortion to the shape of the cab in the event of an accident, thus potentially protecting the driver and passengers from serious injury. In addition, extremely crucial and necessary is the 3-point seatbelt system in the truck, which effectively restrain and protect the driver and passengers during a collision.

Ergonomic interior delivers comfort

Driver shortage and prolonged feeling of fatigue has become an industry challenge and one of the key factors in many accident cases. With an ergonomically-designed cabin interior, the Isuzu FVR300 increases overall comfort, safety and drivability for the driver.

The Isuzu FVR300 comes with a wide field of vision, enabling drivers to enjoy a clear view of the area surrounding the vehicle, making safety checks easy and reducing driving fatigue. The dashboard features a new digital display with enhanced visibility for the driver on important information.

The continuous dashboard panel also carries ample compartments for tidy storage of personal belongings and to avoid clutter on the seats. On top of



all these, comfort is further enhanced with an air suspended driver's seat. There is also more flat area with easy access to the bed for a good rest.

Owning such a truck, helps transport companies remain competitive by attracting and retaining good drivers, thus ensuring a smooth operation of their business.







A Contract is a Promise

It is no longer just about having the right truck, but matching it with the right service contracts to ensure that the vehicle is getting serviced right for optimum performance. Asian Trucker had a look at the many options MAN Truck and Bus is offering.



alk to any manufacturer of trucks and they will tell you that the service and maintenance of the vehicle is just as important as matching the right vehicle for any application. However, the notion of "needing to have a service agreement in place" can be a bit vague. To shed light on the many options that there are, Mr Thayalan Subramaniam, head of the service team of MAN Truck and Bus Malaysia, talked to us about the options offered by the German marque.

He said, "You have our word. And our service. Security is always a good thing, in every respect, but especially in terms of business, where it minimises risks." In the transportation sector, this can include risks such as unexpected repair costs or vehicle breakdowns. Addressing this issue, MAN ServiceContracts comprise of a range of services integrating all service and inspection work whose scope can be extended individually. These offer protection against these risks and against cost uncertainty. According to him, with MAN ServiceContracts, your vehicles are professionally maintained. At the same time, MAN ServiceContracts help to make your administrative work easier so you can focus even better on your core business. "Maintenance and service costs are charged as a flat rate: you have our word on that."

Guaranteed to Find the Right One

It was learned that MAN ServiceContracts serve a dual purpose: reducing costs and increasing uptime. By combining different modules together, MAN ServiceContracts can be tailored ideally to individual customer requirements. The scope of the MAN ServiceContracts is variable, thus offering maximum at minimal expense. The right solution for every requirement and security that pays off every time. ServiceContracts include MAN ServiceCare, a proactive maintenance management. When signing up for any of these, the MAN service outlet coordinates and bundles the planning of maintenance and repair appointments.

"If you expect MAN to meet demanding requirements beyond Comfort, ComfortPlus and ComfortSuper models, we have the right solution for you in the form of the new ComfortManaged service contract. ComfortManaged is a flexible service contract from the MAN service product range that makes it significantly easier for you to manage your fleet," Subramaniam explained. He further noted that MAN designs the scope of the contract to meet individual needs, and transporters benefit from attractive conditions. ComfortManaged offers comprehensive fleet management for all types of commercial vehicles as well as for trailers, while offering a flexible range of services and conditions agreed individually with each customer. Invoices for repairs undertaken in the entire MAN network are sent to customers and settled as monthly collective invoices. In addition, subscribers receive a detailed report, making for complete cost transparency and simplifying matters enormously, particularly in fleet management.

* Proactive maintenance management

Picking the Right One from a Range of Solutions

- ComfortOil With this service, MAN offers a cost-effective entry-level
 product for ensuring vehicle quality through optimised service and
 perfectly matched oils for engine, axle and gearbox (including valve
 clearance setting). It can be supplemented with an extended warranty
 for the driveline or complete vehicle.
- Comfort All comprises services and inspection work listed in your vehicle's maintenance plan are already included in this package.
- ComfortPlus adds an extended warranty to the services included in the Comfort service contract. It includes the driveline warranty as standard, which can be supplemented with the optional expansion package or alternatively upgraded to a complete vehicle warranty
- ComfortSuper In addition to the services provided by the Comfort service contract, this package covers all wear-and-tear repairs as well as complete vehicle repairs. The contract provides comprehensive cover for all the cost-intensive components of your vehicle.
- ComfortManaged offers comprehensive and simplified fleet management for all brands and types of commercial vehicles and trailers with flexible scopes of services and conditions agreed individually with each customer as well as a collective invoice from the entire MAN service network including report on all workshop activities.

Driveline Warranty

Beyond the general packages, other extended warranties are available optionally. The new expansion package offers even greater added value in order to make the most of your vehicle's economic efficiency. In addition to the scope of the driveline warranty, the expansion package covers the starter motor, alternator, air compressor and exhaust gas aftertreatment components and can be purchased in addition to the driveline warranty. This is the perfect way to round off your customised service package.

Extended Warranties

Subramaniam also said that attractive extended warranties for both the driveline and the complete vehicle provide additional security against unforeseen



Maintenance





Driveline Repair

Entire Vehicle Repairs

Repair of Wear and Tear







Legal Measures



Miscellenious Contractual Option

repair costs. This comprehensive portfolio with many combination modules provides a versatile range of options. Depending on the type of vehicle and warranty, you will benefit from maximum terms up to the sixth year of operation. This applies at all MAN service outlets.

Benefits Summed-up

Planning and costing certainty: protection against financial surprises, since MAN Service Contracts reduce the cost risk of unplanned repairs significantly as your vehicle ages. An additional benefit is that optimally configured vehicle technology means noticeable fuel savings.

Ideal vehicle condition, ensured by professionals for professionals. Proper maintenance and repairs by trained MAN workshop personnel and the exclusive use of MAN Genuine parts and MAN Genuine parts ensure maximum safety and functionality for MAN vehicles.

One-stop shopping – all from a single source. Those sending a vehicle for service enjoy short distances, one contact person, complete service, processing including maintenance work, invoice control and clarification of warranty and goodwill requests.

Minimisation of downtimes Predictive planning and preventive repairs are essential in achieving the goal of significantly higher operational reliability for MAN vehicles. Optimised availability results in cost savings and efficiency, resulting in more time in operation, which in turn means more profit.

The team around Subramaniam hopes you never need it, but if you do, it is good to know you can also count on the mobility service from MAN and NEOPLAN. Customer can contact the MAN Mobile24 emergency call centre from anywhere by calling the hotline number. A skilled agent, will then set the ball rolling so you get help as fast as possible.

"We take care of everything so that you can concentrate on the most important part: your job," Subramaniam assured us.

Considering the Chassis Brand/s Selected by Specialist Body-builders

Picking the right truck for your application is important. In this review, Giovanni Siano of Integrated Fire Technologies talks about what you need to consider when you need a third party to build up your vehicle.



hen I started in this industry, almost 30 years ago, coming from a Complete Built-Up firefighting appliances experience, I didn't have a full understanding about the importance of the collaboration between truck chassis brands and body-builders. It was assumed that the body-builders would get some chassis, then mount the equipment on it. It did seem quite easy and straight forward at that time.

However, I later noticed that in each Asian country the choices for chassis tended to be a bit different. In general, the chassis choice is either local Japanese assembled chassis or imported chassis from Europe and the occasional one from South Korea. With the years, some European manufacturers set up assembly plants for a limited number of models. Volvo in Thailand for instance. In the last 10 years or so, the Chinese trucks manufacturers have joined the Asian and World market as well. Today we can see a number of Chinese made chassis in almost every country.

By talking with clients and looking at how the equipment sold to them had to interface with the chassis, it emerged that the logic and easy choice for a chassis, was in fact not so "easy". The larger and the more power-demanding the equipment was, the bigger the difficulties the builders were facing.

To install relatively common equipment, like a truck crane, a small pump, an hydraulic tail gate, and all that requires low power (not over 45/50 HP) and low torque, almost any kind of chassis will be fine as long as the space for installation is available.

The problems come with the need to install powerful equipment, like a large vacuum pump, piston pumps for high pressure, fire-fighting pump and large hydraulic systems to name a few.

A Power Take Off (PTO) with certain characteristic is needed to transmit the power, taken from the truck's engine, to the equipment. Typically, Japanese truck makers have options on a rather restricted number of PTO. They come with low-medium power available and mostly with the possibility of installing the PTO onto the gearbox only. Such method drastically limits the power transmission. Recently the transmittable power has gotten a bit higher, especially in the higher-spec model range of 6x4 and 8x4 chassis and with engines rated at over 350 Hp. Thanks to PTO manufacturers, which have served the industry for many years, and continuously widening the models range, the use of PTOs is made easier all the time.

However, in many cases, the available PTOs are still not powerful enough. Hence, one option is to opt for a Japanese chassis and installing an independent device that can drive the equipment. For instance, a split-shaft PTO or even an independent engine OR opting for an imported (usually European) chassis optioned with a much more comprehensive choice of PTOs (driven at the engine or engine flywheel) might be able to satisfy the needs.

In the majority of the cases, the workshop will have to opt for the installation of a split-shaft PTO using a Japanese chassis. This kind of PTO requires a major modification (dismantling and cutting) of the driveline shaft and the installation of the PTO box somewhere within the chassis frame. This is costly, time consuming and requires a certain skill and precision to produce a proper assembly. Still, the choice for a lower cost chassis is mostly driven by a large population of the brand. Therefore, easier and cheaper maintenance is a factor while quicker delivery time can be achieved as the chassis is assembled locally.

After almost 30 years seeing this happening, I am asking myself: why Japanese makers are not deciding for a larger array of options? After all, the market is quite large and it's not only Asia. Japanese trucks are popular also in the USA, South America, Africa, the Middle East and Australia / New Zealand as well.

The same applies to other options like automatic gearboxes, all-wheel-drive axle configuration, crew-cab for larger models and vehicles with a short wheelbase (for street sweepers mostly): Why are Japanese makers lagging behind their European competition, which are far from perfect as well? In fact, some of these options are offered for the Japanese market only, but not for the rest of the world, which makes one wonder why.



In Europe there are a few specialised workshops offering customised modifications (some even very major) on standard chassis, something that hardly happens with Japanese chassis, so it's one more way to serve body-builders needs with exactly what they need.

Another issue that doesn't help is the lack (or unwillingness) to disclose technical information. A body-builder needs a CAD drawing to prepare the for their engineering. Often, I have experienced difficulties in getting such information. In recent years, thankfully, this issue has become a bit less severe.

Similar problems are encountered with China made chassis, although in a less severe way since most of the chassis purchased are tractor types, hence no body-work to build on top.

Recently had an enquiry from a customer in Asia requesting Asian assembled specialized trucks assembled on some Japanese chassis. I worked with a long-established customer and we discussed the technicalities while waiting for the chassis offer. After a good couple of weeks, no result was emerging. I then found out that the brand had a rather complex marketing strategy which is common with Japanese companies in general, and refused to give an offer when instead another Japanese brand was perfectly all right in supporting us.

On the other side, European made trucks have the disadvantage of a longer delivery time, they cost more as a result of protectionist attitudes in most Asian countries. Import duties are often quite high. Also, most models, although comfortable and accessorised, tend to be a bit over the top for local usage and requirements which requires a more spartan and simplistic approach.

So, what are truck body-builders in Asia looking for? Let's not forget that bodies are a big part of the trucks we see every day on our roads. A chassis without a body or equipment mounted on can only be valid for container or trailer tractors.

When price alone is not the only decision criteria, a friendly and effective sales process by the truck dealers would be welcomed. Far too many times, I have perceived that truck dealers are a bit annoyed when having to provide so many technical explanations. It is important that a helping attitude is established between the two parties. In my experience, I have to explain how the machines and the equipment I am selling work and so should a truck salesman with his/her client, particularly if they are not familiar with the product.

It would be nice to have more marketoriented models. As a typical example, as mentioned above, are powerful PTO available on Japanese chassis. Crew cabs and various options which could increase their sakes and widen the distribution efforts. Same could apply to Chinese made trucks. European OEMs could study more economic versions and increase the local assembly.

Some truck manufactures are designing their chassis with the top surface free of bolts and protrusions to enable the design and making of the body-work more trouble free. Also, instructions for body-builders are more clear and careful compared to others. Of course, this is a well appreciated move, but should be something common to all.

A world apart seems instead to be the truck chassis made in the USA. Apart from some container/trailer and logging trucks, there is little flexibility and lack of interest in entering the



Asian market. Hence American made trucks with specialised bodies are a rare sight in Asia.

Looking ahead, the future will be interesting. Already a few years back, some companies designed and built hybrid-type special trucks featuring Diesel engines, but linked to a hybrid system. Many of them are the humble garbage compactors. This system works by generating electric energy while driving, making use of it in the form of hydraulic power used while the truck stops and the garbage loading and compacting phase. Such trucks are quiet (and pollute less) since they do not need the engine to be on while stationary or loading/ compacting. However, they were rather expensive and in the very competitive environmental vehicle market, were not a large success.

The market is now opening towards the completely electric type vehicles and Hydrogen fuel cells. So, many changes will slowly happen to the special purpose vehicle industry.

Electric and Hydrogen fuel cell trucks will no longer be able to use mechanically transmitted power from the PTOs through propeller shafts. Instead, they will be equipped with centralized electric distribution. taking power from the batteries for all services and equipment on the truck, or using a single hydraulic power pack driven by the truck's batteries. This will compel all manufacturers of equipment traditionally operated by mechanical power to modify them into hydraulically and/or electrically driven ones. It will be a bit more expensive and complex, but more flexible in assembly since mechanically transmitted power relies on precise parts alignments which hydraulic/ electric does not need. But it will also help us save our battered planet. F

Equipment Focus: Yale UX 4-5 tonne forklifts

The operator-friendly new Yale UX 4-5 tonne forklifts deliver cost-efficient top brand quality and performance.

lobally leading forklift and warehousing solutions provider Yale is introducing to Australasia and the Asia-Pacific its new UX Series GDP lift trucks, which are quality engineered to provide an ideal solution for utility needs without compromising on performance or dealer service backup.

The GDP40-50UX internal combustion counterbalance pneumatic tyre forklifts, in capacities from 4-5 tonnes, respond to extensive demand for cost-effective material handling solutions available from a supplier that customers can trust, with reputable service through its extensive dealer networks.

Each model is available with diesel, LPG or dual-fuel power, a single-speed powershift transmission and a range of front-end equipment options to suit varying applications throughout the widely diverse markets extending from Australasia to Asia, in which Yale has strong, long-established service networks.

Yale's global experience of more than a century of manufacturing quality equipment offering high quality and low downtime is invested in the brand's broad range of materials handling equipment, of which the new models are a part of.

The new lift trucks deliver high driver comfort and serviceability features in a package offering low cost of ownership, without compromising on global quality and backup, says Mr Cornelius Tan, Area Business Director, Asia, Hyster-Yale Group. They provide an attractive option for customers across many industries who require quality materials handling equipment, but don't need functionalities beyond the range required for their tasks.



New Yale UX Counterbalance forklift for outdoor and indoor use

The Yale value proposition – "Yale – People, Products, Productivity" – encapsulates a no-nonsense, uncomplicated approach to materials handling, with high priorities on driver comfort, protection and features engineered to reduce downtime.

Features of the new Yale UX series GDP forklifts include:

- Easy-to-operate ergonomically designed operator compartment with a familiar automotive layout designed to enable drivers to work comfortably.
- Enhanced serviceability due to the simplicity of components and specifications, which enables servicing to be completed quickly and easily with a large access area for service and repairs.
- Low cost of ownership enhanced by the use of high quality, robust components and excellent cooling, contributes to reliability and lowering wear and tear.
- Fast availability of cost-effective replacements parts helps reduce service and maintenance requirements and costs.
- Comfort features include Yale special display with 3.5" LCD; large foot room on floor plate; fatigue reducing hand parking brake lever with button; small diameter steering wheel
- Safety features include wide view mast, high-strength triplex plate overhead guard; muffler and engine protection systems
- Environmental protection provided by noise isolation materials and environmentally aware design and engineering for comfort, allround visibility, low noise levels and outstanding ergonomics. Yale's environmental priorities include lower emissions and lower energy use.



Local Trucking Heroes

would think that every industry has their heroes. Astronauts are easy: Neil Armstrong. In the medical profession we have Dr. Fauci as a recently added one to the hall of fame. There are even some fictional heroes for some sectors, like Gordon Gekko. Closer to home, we have, of course, Eddie Stobart. His fabled trucks are easily recognisable and he has made a name for himself that is recognised beyond borders. One antic that is well known is that is truck drivers have to wear neckties when they work. Like bankers.

There is no shortage of really interesting companies around here. Some have been successful for decades while there are others that have some really cool ideas or concepts. If I am allowed out of the house, I sometimes see trucks with great paintjobs or interesting ornaments, but those are usually one-offs. During the pandemic, we had a few heroic moments where truckers pushed into the limelight and people started to understand why this profession is so important. However, I feel that this glory was only short lived and that now the focus is on others again.

If I were to ask, which trucking company would be THE local hero, what would you answer? If there was an award show for the transporter of the year, who would take the honours with the other contestants agreeing that it would be a worthy candidate. Naturally, everyone is in competition with each other, but I would argue that there is always someone that serves as the benchmark and is admired by their peers. It could be a simple thing, like a uniform. Top Glove staff for instance can be spotted from a mile away when they are sitting in a food court.

Equally, I am also missing some real renegades. Not pirates of the highway, but a company that is a bit more outlandish and crazy in the way they do things. I am not advocating any illicit behaviour, but we can all get a bit wild at times. Somehow, I am missing a bit of harmless non-sense in our daily lives. Like back when I was working in bars and pubs and my colleague would put a piece of aluminium foil between the salad leaves of my sandwich. Give me that kind of working environment over beanbags and a giant slide in the office anytime!

There is no doubt that we need a legal framework to regulate the industry, however, I am sure that within such framework it would be possible to create a brand, a company that truly stands out. An entity that others want to work for. When at a party, nobody will question you further once you state that you work for Great Eastern. Imagine, you could do the same if you were working for a local transport company and at some gala dinner the admiration would be yours as you have secured a job in that company that is widely regarded as the local hero.

Maybe the heroics are now hidden in the need to generate profit and there isn't any space for extravaganza? I don't think so! If anything, being different is one thing that has always been the one determinant as to why people opt for ones service or product. It would be an investment, sure, but at the end of the day, it would be one way to bind customers that value a certain proposition over everyone else being more of the same.

Hopefully, I have inspired someone to embark now on an epic journey to become Malaysia's Awesome Top Trucking Enterprise (MATTE). It would give me great pleasure to be probed about that transport company from Malaysia everyone is talking about when I am travelling overseas. Hopefully, I will see this happen one day as I believe that there is some truly great potential out here that just needs to be elevated to hero status.

Cummins Begins Testing of Hydrogen Fueled Internal Combustion Engine

ummins Inc. has taken another step forward in advancing zero carbon technology as the company began testing a hydrogen-fueled internal combustion engine. The proof-of-concept test is building on Cummins' existing technology leadership in gaseous-fuel applications and powertrain leadership to create new power solutions that help customers meet the energy and environmental needs of the future.

Following the proof-of-concept testing, the company plans to evaluate the engine in a variety of on- and off-highway applications, supporting the company's efforts to accelerate the decarbonization of commercial vehicles. Hydrogen engines offer OEMs and end-users the benefit of adaptability by continuing to use familiar mechanical drivelines with vehicle and equipment integration mirroring that of current powertrains while continuing to provide the power and capability for meeting application needs.

The hydrogen engines can use green hydrogen fuel, produced by Cummins-manufactured electrolyzers,

emitting near zero CO2 emissions through the tailpipe and near zero levels of NOx. The projected investment in renewable hydrogen production globally will provide a growing opportunity for the deployment of hydrogen-powered fleets utilizing either Cummins fuel cell or engine power.

Integrating Hydrogen Technology

Cummins is investing across a range of technologies to support hydrogen-based transportation including hydrogen engines, fuel cells, electrolyzers and storage tanks.

The high energy density of hydrogen enables easily integrated on-board gas storage without compromising either the vehicle payload or operating range. Cummins' joint venture partnership with hydrogen storage specialist NPROXX adds the ability to integrate the fuel cell or hydrogen engine with the high-pressure gas cylinder tanks and supply lines on the vehicle. NPROXX is also a leading supplier of containerized storage vessels, enabling fast hydrogen refueling for end users.

Actros Mileage Millionaire Contest



Since its debut at the IAA Hannover 1996, the Mercedes-Benz Actros has been recognised as a reliable business asset for day-to-day, long distance haulage work. Awarded the "International truck of the Year" for the fifth time in 2020, Mercedes-Benz continues to set standards for safety, efficiency and connectivity.

To mark the 25th anniversary of this truck this year, Hap Seng Trucks

Distribution is inviting their loyal customers to join in the celebration with the Actros Mileage Millionaire Contest, offering prizes up to RM 200 000.

The Actros Mileage Millionaire Contest will run from 14 July until 31 December 2021, rewarding their business partners with their existing Mercedes-Benz Actros (Generation 1, 2 or 3) with a minimum vehicle mileage of 1 million kilometres.

Upon fulfilling the entry requirement of hitting the 1 million minimum vehicle mileage, customers would be immediately rewarded with the Consolation Prize of Mercedes-Benz vouchers and merchandise worth up to RM538. These entries would then be in the running for the top three highest vehicle mileage with a chance to win more attractive prizes of up to RM 9 000.

In return for the business partners' support of the contest at their participating service centres, Hap Seng Trucks Distribution's professional service team will be able to offer other services recommendations; this includes the free vehicle inspection provided by certified technicians to increase vehicle uptime and lifespan.

With the Actros Mileage Millionaire Contest, Hap Seng Trucks Distribution aims to reward their business partners that have been with them throughout their journey and the team is looking forward to even more successful collaborations in the future.

Daimler Truck, the TRATON GROUP and Volvo Group Plan to Pioneer a European High-performance Charging Network for Heavy-duty Trucks IVECO Launches Projects to Promote the Benefits of Natural Gas and its Key Role in Decarbonising Transport



ommercial vehicle manufacturers Daimler Truck, the TRATON GROUP and Volvo Group have signed a non-binding agreement to install and operate a high-performance public charging network for battery electric heavy-duty long-haul trucks and coaches across Europe. The joint aim is to initiate and accelerate the build-up of charging infrastructure to enhance customer confidence and to support EU's transformation to climate-neutral transportation.

The agreement lays the foundation of a future joint venture (JV) - equally owned by the three parties, planning to start operations in 2022. The parties intend to invest together 500 million Euros to install and operate at least 1 700 high-performance green energy charging points close to highways as well as at logistic and destination points, within five years from the establishment of the JV. The number of charging points is with time intended to be increased significantly by seeking additional partners as well

as public funding. The future JV is planned to operate under its own corporate identity and be based in Amsterdam, Netherlands. The future JV will be able to build on the broad experience and knowledge of its founding partners in heavy-duty trucking.

The future JV will act as catalyst and enabler for realizing the European Union's Green Deal for a carbonneutral freight transportation by 2050 - both by providing the necessary infrastructure targeting for green energy at the charging points. The joint action of Volvo Group, Daimler Truck and the TRATON GROUP addresses the urgent need for a high-performance charging network to support truck operators with their transition to CO2-neutral transport solutions. especially in heavy-duty longdistance trucking. High-performance charging infrastructure enabling long-haul trucking is a cost-efficient way towards significant, fast-torealize emission reductions.

IVECO launches projects to promote the benefits of natural gas and its key role in decarbonizing transport

VECO has launched the IVECO Ambassador programme to give a voice to customers, enthusiasts and partners who share the brand's values on different themes, and recognise their actions in these areas. As a pioneer and European market leader in natural gas technology, IVECO has started the programme with the Sustainability theme, aiming to raise the profile of natural gas and highlight the brand's commitment to the environment.

The first IVECO Ambassadors have been selected for being transporters who share the brand's belief in natural gas and contribute to protecting the environment by running IVECO LNG and bio-LNG vehicles in their fleet. Through this project, IVECO aims to give them a voice, as they tell the story of their experience with natural gas and the benefits for their operation. The project is up and running in the markets where natural gas is most widely available, such as Italy, France and the UK.

In parallel, IVECO has launched the Plant the Future project as part of its commitment to carbon reduction. It has partnered with reforestation organisations to plant an IVECO international forest, made up of tree planting projects in different countries. In Germany, IVECO will plant a tree for every NEW IVECO S-WAY natural gas and used IVECO Stralis NP sold via the PLANT-MY-TREE reforestation project created to off-set carbon emissions. It aims to plant



at least 1 000 trees to compensate for over 1 237 tonnes of CO2 over the next 99 years.

Drive the New Generation DAF XG and XG⁺ online

AF Trucks and SCS Software have teamed up to add the New Generation DAF XG and XG⁺ to the immensely popular Euro Truck Simulator 2 computer game. This allows for driving the revolutionary series of trucks already today virtually. Series production of the real New Generation DAF vehicles will start in October 2021.

DAF is the first manufacturer to have created a truck line up that takes advantage of the new European masses and dimensions regulations. The new XF, XG and XG+ offer the highest quality, 10% improved fuel efficiency, a full suite

of passive and active safety features and the next level of luxury in truck design.

The New Generation DAF begins production in October. However, via the computer game Euro Truck Simulator 2, you can already take your position behind the wheel. Register for a demo account in the virtual 'DAF Ride and Drive' located in the recently launched DAF Virtual Experience.

Euro Truck Simulator is a game of SCS Software and available via the steam store. \mathcal{F}

Even Lighter, even more Variable for On- and Offroad: BPW Renews Airlight II Trailer Running Gears



Whether basalt chippings or coronavirus vaccines, cereal or heating oil, no two transported goods are the same. This is why drawbar trailer running gears are precisely designed for their intended use. As a specialist in trailer technologies, BPW enables vehicle manufacturers to build highly specialised and at the same time outstandingly economical drawbar trailers. BPW now promises even more variety and economy with the new generation of the Airlight II running gear kit – one of the best-selling trailer running gears in Europe.

The generation change is being introduced in the Airlight II kit for the 9-ton axle load range with clamped spring seat

arrangements, as they are typically used for tipper, tank and silo vehicles or also for special box bodies. For the first time, all components of Airlight II are also based on the "digitial twin" principle. The digital DNA enables vehicle manufacturers to determine the perfect running gear configuration for highly specialised applications online from countless options – and to order it at the click of a

A new feature is the combination of the clamped spring seat arrangement of the Airlight II air suspension in conjunction with a round axle beam. This is made possible by the patent-pending laser processing of the contact surfaces in the spring seat arrangement. This extremely robust mounting, combined with a round axle beam used in both 9-ton on-road and off-road applications, enables off-road weight savings of up to 60 kilograms compared to previous versions. "BPW sets standards in this combination. We combine unshakeable sturdiness with a new lightness," said Denis Wierwille, Trailer Solutions & Mobility Services Product Manager at BPW."

Shell Launches Pathway for Malaysia to Achieve Carbon-Neutrality by 2065

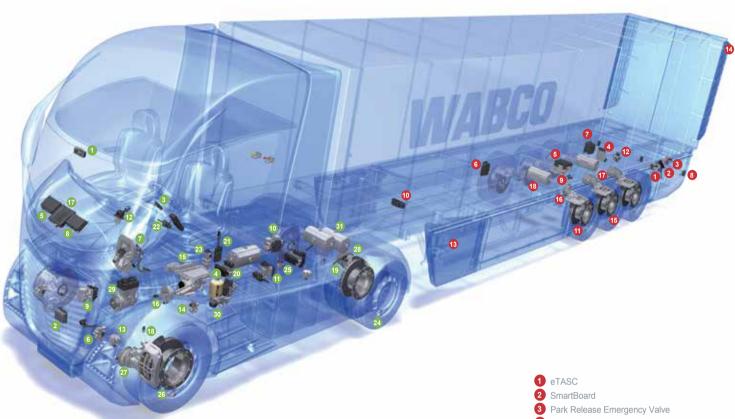
he launch event was graced by Dato' Sri Tuan Ibrahim Tuan Man, Minister of Environment and Water, and H.E. Aart Jacobi, Ambassador of The Netherlands to Malaysia. The event also featured a roundtable discussion held in collaboration with the Malaysian Dutch Business Council (MDBC), CEO Action Network, and Climate Governance Malaysia.

The Tree, The Sky, The Sun tells the story of how Malaysia could reach for the sky – carbon-neutral by 2065 – with its unique advantages of tree and sun. Shell's story illustrates a technically possible yet challenging pathway for Malaysia to meet the goal of the Paris Agreement to keep the rise

in global average temperature to well below 2°C above pre-industrial levels1, with a stretch goal of 1.5°C.

Developed by Shell in consultation with key local stakeholders2, Shell's pathway3 was launched today at a virtual forum gathering more than 1500 participants and stakeholders from the government, private sector, media, academia, non-governmental organisations, and energy consumers. The launch also saw a roundtable discussion by the CEO Action Network, featuring energy leaders and representatives from Shell, The Ministry of Environment and Water, Climate Governance Malaysia, and Boston Consulting Group.

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- 4 ESCsmart™ Module
- 5 Central Vehicle Module
- 6 ABS Solenoid Valve
- 7 Integrated Pedal Unit
- 8 EBS ECU
- 9 EBS Axle Modulator 1Ch
- 10 EBS Axle Modulator 2Ch

- 11 EBS Trailer Control Valve
- 12 Hand Brake Valve
- 13 Relay Valve
- Mater Control Valve
- 15 Automated Manual Transmission
- 16 Concentric Pneumatic Clutch Actuator
- 17 Multiplex System
- 18 OptiRide™ Pressure Sensor
- OptiRide™ Height Sensor
- 20 OptiRide™ Solenoid Valve

- 21 OptiRide™ Remote Control Unit
- 22 Cab Leveling Valve
- 23 Retarder Control Valve
- 24 OptiTire™ Internal Sensor
- Opti i ire ···· Internal S
- 25 OptiTire™ ECU
- MAXX[™] 22 Air Disc Brake with Wheel Speed Sensor
- 27 UNISTOP™ Service Brake Chamber
- 28 TRISTOP™ Piston Type Spring Brake Actuator
- 29 c-comp[™] Clutch Compressor
- 30 FuelGuard™ Electronic Air Processing Unit
- 31 Air Reservoir

- 4 Lift Axle Control Valve Impulse Controlled
- 5 Trailer EBS-E
- 6 TX-TRAILERGUARD™ Telematics
- 7 Electronic Extension Module
- 8 TailGUARD™ Ultrasonic Sensors
- 9 OptiLevel™ Height Sensor
- 10 OptiTire™ ECU
- OptiTire™ Internal Sensor
- 12 EBS Relay Valve
- OptiFlow™ SideWings
- . OptilFlow™ Tail
- MAXX[™] 22T Air Disc Brake with Wheel Speed Sensor
- 16 UNISTOP™ Service Brake Chamber
- 17 TRISTOP™ D Double Diaphragm Spring Brake Actuator
- 18 Air Reservoir



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