

ISSN 2289-8923



9 772289 892003
KDN PP18692/03/2015 (034159)

ISSUE 21 Q1, 2020
RM8.00

ASIAN BUSES

www.asianbuses.com



The SMART Alternative.

OE quality and service
excellence.





Every job is different. Just like your Sprinter.

Countless options, low cost. Whatever your next project is, the new generation of Sprinters is tailor-made to suit any application – just like our offers. For more information, contact your Mercedes-Benz partner or visit www.mercedes-benz.com.sg/vans/en

Mercedes-Benz

Vans. Born to run.



SPRINTER 316 CDI/3665 HR 4X2 (AUTO, ABS) - Fuel consumption: 8.1l/100 km.



CONTENTS



20

06 - EDITOR'S NOTE

MARKET UPDATE

- 10 - Gyration 2.0: Kinetic Ignition
- 12 - Malaysia Pushes Ahead with B20
- 13 - Politeknik Sandakan Sabah Adds Evolution to Curriculum
- 14 - New Managing Director and Strategies for MAN Truck and Bus Malaysia

EVENTS

- 16 - CAPAS 2020
- 18 - Events Calendar

ENVIRONMENT

- 19 - Mercedes-Benz eCitaro receives "Blue Angel" label

COVER STORY

- 20 - Petron Pumps its Business from the Philippines into Malaysia

SAFE ROADS

- 24 - Volvo Supports Drivers with Safety Features

FEATURE STORY

- 26 - Sarawak Hydrogen Buses: Pioneering Step to Green Mobility in Malaysia

SPECIAL REPORT

- 30 - BYD K9 as the First Electric Bus in Malaysia to Serve Public Transportation System



24



10

Hengst[®]
FILTER



The SMART Alternative.

OE quality and service
excellence.



CONTENTS



COMPANY PROFILE

- 32 - HIGER Bus: China's "Belt and Road" Initiative Helps Developing Green Transportation in Malaysia
- 34 - WY Supreme Auto Parts Sdn Bhd

LAUNCHES

- 36 - Pei Tel Launches Free Online Platform for Tracking and Administration
- 37 - Launched: Conti CoachRegio

IN THE WORKSHOP

- 38 - Sustainable products from MANN-FILTER
- 39 - Digitalisation in Public Transport: Predictive Maintenance of Transport Assets

FACILITIES

- 40 - Wheel Alignment of Buses – Special Considerations

SPARES AND PARTS

- 42 - Sendok Group's RAAPI Spares Offers Top Quality for Customers
- 44 - Fuel Filtration

45 - HEADLIGHTS

46 - NEWS & NOTES

SOUTH EAST ASIA'S LARGEST COMMERCIAL VEHICLE EXHIBITION

17 - 19 June 2021. Apply for a booth now to avoid
disappointment! Contact us via

info@asiantrucker.com

+60 12 207 2344



Organised by

**ASIAN
TRUCKER**

Asian Trucker Exhibition Sdn Bhd

No. 27-1, Block C, Zenith Corporate Park, Jalan SS7/26 Kelana Jaya,
47301 Selangor, Malaysia

Email: info@asiantrucker.com Web: www.mcve.com.my



stefan@asianbuses.com

Shaking that Bus!

There is a lot of movement in the bus industry. And this is not an intended pun, but an observation. We now see the emergence of new players and established companies challenging the ways we manage and operate transport. With the idea of alternative fuels to be used in public transportation, we have also seen an emergence of challengers: new brands and companies that start fresh and may be forces to reckon with.

New Fuels Bring New Products

The launch of the B20 Diesel in Malaysia will have far reaching consequences. There are new products needed to ensure that the Diesel with a higher content of palm oil does not damage the powertrain. Filters, pumps, lubricants and other components may need to be changed to ensure top performance. Electric buses will need charging stations, which is an entirely new market segment. I feel that development of new technology needed for the bus outpaces that of the periphery.

At the Forefront

Some may call it daring, but I personally applaud the local council in Kuching to put Hydrogen-powered buses to the task. While electromobility seems to be getting all the attention, I am watching this quiet challenger with

growing interest. Certainly, there are some issues with this method of propulsion, but I have yet to see a perfect system. Strangely, fuel cells using hydrogen seem to be more popular for use in trucks.

Integrated Concept

When planning a city, one has to think about a number of items concerning infrastructure. If one were to raise the bar and plan a whole country, then it becomes a challenge. However, the Chinese have taken things to a whole new level and the Belt & Road Initiative is encompassing buses to serve the concept of the initiative. I have to admire the fact that the creators behind this initiative are not just considering the movement of freight, but also of people. Perhaps, through the Belt & Road Initiative we will see a more liberal South East Asia when it comes to people moving around countries for work?

Holistic Approach

Several articles in this issue deal with the upkeep of buses. From what I notice, I see that more and more fleet operators look into retaining the value of their assets by using sophisticated systems and parts. Predictive maintenance for instance might sound like a pie-in-the-sky idea, but there is a guaranteed benefit in applying this as every prevented issue means more profitability. Fixing things before a breakdown has another advantage: in many cases the failure of one component brings with it the failure or damage of others.

Keeping the Captain Cosy

One player we should never forget is the bus captain. Being instrumental for the success of the operation, this group of people is now seeing more attention by chassis makers, body builders and suppliers of additional components. Cabin filters, for instance, keep the air around the driver clean, the captain healthy. Contrary to the belief that automation will kill jobs, it actually helps in the daily operation. No wonder they are called driving assistance tools. Volvo has some interesting gear they are talking about now and I have an inside scoop for you.

In times like this is it even more important that you

Drive safe, keep well!

A handwritten signature in blue ink, appearing to read 'Stefan Pertz'.

Stefan Pertz,
Editor, Asian Buses

“So Much More in Every Box”



No compromise on safety ✓

Reliable performance ✓

Competitive price ✓

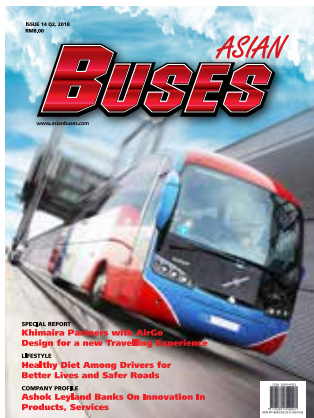


WABCO

ProVia[™]
www.provia-auto.com

The Drivers **ASIAN BUSES**

**YOUR GUIDE TO
ALL THINGS BUS**



**PDF versions
are available for
download at
www.asianbuses.com**

EDITORIAL

EDITOR Stefan Pertz

WRITERS Carol Yeoh
Aila Azizul
Chui Yee Mun

GRAPHIC DESIGNER Tony

PHOTOGRAPHERS Floyd Cowan
Carol Yeoh
Aila Azizul
Stefan Pertz
Chui Yee Mun

CONTRIBUTORS Floyd Cowan

ADVERTISING

Nicole Fong
Nicole@asiantrucker.com

SINGAPORE

Floyd Cowan
Floyd@asiantrucker.com

THAILAND

Songyot Kamontavikun
Songyot@asiantrucker.com

ON THE COVER

Busworld Europe 2019

CIRCULATION, CONTRIBUTIONS and SUBSCRIPTION

info@asiantrucker.com

WEBSITE and E-NEWSLETTER

www.asianbuses.com

PUBLISHED BY

Asian Trucker Media Sdn. Bhd. No. 27-1, Block C, Zenith Corporate Park,
Jalan SS7/26 Kelana Jaya, 47301 Selangor, Malaysia

ARTICLES

Asian Trucker is a registered trademark of Asian Trucker Media Sdn Bhd. All articles submitted for publication become the property of the publisher. The editor reserves the right to adjust any article to confirm with the magazine format.

Asian Buses is a quarterly publication. The publisher will not be responsible for any copyright violation of articles that have been approved by contributing writers. The publisher accepts no responsibility for unsolicited manuscripts, illustrations or photographs.

PRINTED IN MALAYSIA

Times Offset (M) Sdn Bhd Banguan Times Publishing,
Lot 46, Subang Hi-Tech Industrial Park Batu Tiga 40000 Shah Alam,
Selangor Darul Ehsan Malaysia

Boost your business with a listing on our new website.
Find businesses or sell your truck, upload your events or images to the gallery.
Visit our new website www.asianbuses.com to put your company on speed.

EXCITEMENT COMING **SOON.**



The Lion roars in Port Klang.

With the new MAN service centre opening soon in Port Klang, you will never be far from MAN's comprehensive range of After Sales services. The best solutions are often very simple. It is coming closer to where you are.
www.man.com.my





Gyration 2.0: Kinetic Ignition

Giti Tire and Kit Loong return for a successful 'Gyration 2.0: Kinetic Ignition' event in Malaysia.

In the unique setting of an Orang Asli-inspired Tadom Hills Resort, Giti and distribution partner Kit Loong gathered with various fleet and dealer customers to celebrate a year of success on the 6th March 2020. In a follow-up from the 2019 Gyration workshop, this year's event continued the theme of progressing knowledge within the commercial tyre industry.

Together with a full truck display, traditional foods, awards, competitions, and live entertainment featuring a fire show and Orang Asli dance, learning workshops were held on numerous subjects, including the effects of heat on tyres and how to combat it. This focus was the reason for designing the event title - 'Kinetic Ignition'. Using Giti tyres and applying Kit Loong's SC3OCT maintenance service methodology are key ways to combating heat build-up, which is a major cause of critical tyre failures. Managing the three key elements of speed/distance, inflation/load, and tread/compound was discussed in-depth both from a product and service point of view, combining the two key elements of the partnership between Giti and Kit Loong.

Alongside the professional technical talks and fun activities, Giti Tire and Kit Loong collectively launched the "Giti SC3OCT MSP". It is a new mobile service provider program that blends the strength of the two organisations, working together to provide the safest and longest running tyres for fleets in Malaysia.

Mr Matthew Wai, Giti Tire Malaysia Country Manager, explained: "This is the second year we held the Gyration event, and we continue to emphasise the importance of combining quality products, professional services, and useful information in order to maximise tyre life. Malaysia is a market with an influx of innumerable brands. So unlike some trading companies which encourage people to buy more tyres for better business, Giti's mission is to help our clients be able to consume fewer tyres instead."

Mr Kenneth Teh, Managing Director of the Kit Loong Tyre Commercial Group, echoed the sentiment. "We are always looking for better ways to help our clients operate the safest fleets and maximise their investment

in tyres, which is their second largest expenditure after fuel. Managing heat is a crucial factor in prolonging a tyre's life. By utilizing SC3OCT services, we are able to show fleets how best to manage heat build-up for safe operation and long tyre life," said Teh.

A paradigm shift is happening within Kit Loong Commercial Tyre Group as they see tyres as an investment that needs to have planned maintenance in place to ensure that the return on the investment is as high as possible. To demonstrate what is possible, Kit Loong Commercial Tyre Group is giving away their newly developed software for free for the first year.

Not stopping there, they are also including a retread voucher for each new tyre sold. The discount on the retread is based on the grading of the tyre when it comes back for retreading. "Essentially, it pays to look after your tyres as you will save on the retreading. And if you don't look after your tyre, no matter what brand, it will not perform as well as it could, as many are now designed for two or three retreads." ■



CAPAS

CHENGDU

Chengdu international trade fair for
automotive parts and aftermarket services

Book your stand at
+852 2802 7728
auto@hongkong.messefrankfurt.com

21 – 23.5.2020


Chengdu Century City New International Exhibition & Convention Center, China


 Parts & Components

 Accessories & Customising

 Made in Sichuan

 E-mobility & Infrastructure

 Commercial Vehicle

 Repair, Supply Chain & Chain Stores


 Tyres

- A multitude of marketing channels to promote the show
- Extended services bring exhibiting effectiveness
- Fringe programme focuses on the latest regional movements




CCPIT-Auto



 messe frankfurt



sector and the continuation of the B7 Programme in the industrial sector, about 1.3 million tonnes of palm oil will be used annually and contribute to the reduction of greenhouse gas emissions amounting to 3.8 million tonnes of CO2 equivalents annually.

Controversy exists however when it comes to the impact on the fleets. On one hand, Primary Industries Minister, Teresa Kok said her ministry and the Malaysian Palm Oil Board (MPOB) have conducted various tests for the collection of technical data and consulted stakeholders involved. "Trials done by 35 units of MPOB vehicles, three units of heavy duty trucks and 15 vehicles operated by local municipal councils of Selangor have shown that B20 does not reduce the vehicle's maintenance or service interval duration and no problems have been reported as of today."

On the other hand however, bus manufacturers have said that vehicles need to be Fatty Acid Methyl Esters (FAME) prepared in order to use B20. Generally, depending on the type of operations, service interval can change if vehicles are operating on blends above B10 such as B20. Swedish brand Scania states that it is always recommended to seek advice from one of their workshops to get the correct service interval for each Scania vehicle. On the issue of compatibility, all vehicles ordered from Scania Malaysia before 15 December can run on B10. However, they are not FAME prepared so if you want to run a non-FAME prepared vehicle on blends above B10 such as B20 or B100 they need to be FAME prepared. All vehicles ordered from Scania Malaysia on 15 December or later will be FAME prepared. They are able to run on all blends of diesel and biodiesel ranging from B0, B10, B20 to B100." said Tom Kuiphuis, Pre-Sales Director at Scania Southeast Asia.

Malaysia Pushes Ahead with B20

The introduction of B20 in the transportation industry will be held in stages across the country, with Langkawi and Labuan having adapted to B20 in January 2020.

Malaysia launched the B20 Programme (which consists of 20 percent palm biodiesel and 80 percent petroleum diesel) in the transportation industry on 20 February 2020. The launch which was held at the Independence Square in Kuala Lumpur was attended by Dato' Seri Dr Wan Azizah, Deputy Prime Minister of Malaysia and Teresa Kok, Minister of Primary Industries. The B20 programme in the transportation sector, which started in Langkawi and Labuan in January 2020, will be expanded in phases to Sarawak in April 2020, Sabah in August 2020 and to Peninsular Malaysia in June 2021.

Previously, the Government has mandated the B10 Programme (10 percent palm biodiesel and 90 percent petroleum diesel) in the transportation sector on February 1, 2019 and the B7 Programme (7 percent palm diesel and 93 percent petroleum diesel) in the industry sector on July 1, 2019.

"The implementation of the B20 Programme in the transportation sector will support demand for palm oil and stabilise its prices," said the Deputy Prime Minister. Through the implementation of the B20 Programme in the transportation

Politeknik Sandakan Sabah Adds Ecolution to Curriculum

Politeknik Sandakan Sabah takes the lead as the first higher learning institution in Malaysia to sign the Scania Ecolution Agreement.

Sandakan, Sabah, On 14 March, Politeknik Sandakan Sabah (PSS) became the first Educational Institution of Higher Learning in Malaysia to sign the Scania Ecolution Partnership Agreement. In an official signing ceremony held at the Campus in the Education Hub of Sandakan, the partnership was forged when Mr Tajul Ariffin Mohamed Arif, Director of Politeknik Sandakan Sabah signed on the dotted line with Mr Tom Kuiphuis, the Pre-Sales Director of Scania Southeast Asia.

Being the second of only two Polytechnics in Sabah, PSS was established in 2008 but fully facilitated in 2012 with its own campus. It now offers a Diploma in Agro-technology and Diploma in Aquaculture to SPM qualified students from all over Malaysia with 85 percent of them from Sabah.

"We chose to offer these 2 Diplomas due to its close association with nature, especially with PSS Strategic Plan 2019 - 2023 of transforming its building complex into a Green Campus by 2023. We believe being part of the Scania Ecolution programme will to a certain extent help us towards our Green objective; to reduce the impact onto the environment by emitting less carbon dioxide (CO₂) into the atmosphere via our Scania K360IB4x2,"

PSS was very happy to be presented with this opportunity to be part of Scania's programme that is significantly lessening the impact to the environment. It is a programme that will not only lower PSS' coach

operation cost but will also reduce its carbon footprint by lessening the emission of carbon dioxide (CO₂) through the reduction of fuel consumption.

To be able to utilise the full potential of the Scania coach, the drivers have to have the right attitude when handling this technologically-advanced machine. PSS will be enlisting the drivers into the Scania Driver Training and Coaching services that will help change their mindset into believing that every individual driver matters and is part of a very big picture in the preservation of mother earth.

The Scania coach truly helps with the smooth running of all the PSS' programmes be they in Sandakan or throughout Sabah, right up to Brunei due to the excellent uptime that it gives. Now with the Scania Maintenance contract and Scania Fleet Management System Control 10 subscription and the Scania Ecolution agreement that PSS has signed for, its coach operation is virtually hassle-free. Purchasing the Scania K360IB4x2 coach was a worthwhile investment that PSS has made and ensured the smooth transportation of PSS' student state-side.

"With a population of almost one thousand students we need more coaches to transport them to and from scheduled activities away from the campus. The Scania K360IB4x2 that we purchased in 2012 is still running well and still gives us safety, comfort, reliability and fuel economy. We are already looking at



securing another one more Scania coach very soon and anxiously waiting for the budget approval,"

"Scania has been introducing sustainable transport solutions for a long time, especially when it comes to the reduction of carbon dioxide and today's signing ceremony is testament of Scania's on-going drive towards the 2050 commitment in reducing the carbon footprint to net zero, stated Tom. Being the first educational institution in Malaysia has its prestige but also comes with the responsibility of leading others, setting examples and showing positive results for others to emulate.

"Overall, I am very pleased with Scania's after-sales services as I believe the commitment level of Scania towards PSS is satisfactorily executed and with the Scania Ecolution Agreement in force, we are set to realise our objective of achieving the Green Campus status by 2023. I sincerely hope that the little that we do at our campus towards conservation of the environment involving all our students will have a positive spillover effect onto the students' circle of friends and family,"



New Managing Director and Strategies for MAN Truck and Bus Malaysia

MAN Truck and Bus (M) Sdn Bhd (MAN) has appointed Andrew O'Brooks as its new managing director, who will lead the execution of several strategic initiatives for Malaysia, in line with MAN's global direction and motto of 'Simplifying Business' for its customers.

The significance of the event, during which the new Managing Director was introduced was evident by the presence of top management staff of the German brand. Giving O'Brooks a head start were Mr Richard Frenz, Vice President of MAN Truck and Bus SE and Mr Thilo Halter, Head of Area, MAN Asia Pacific

First to take the to the stage was Frenz, who had some updates for the guests assembled at the event. For a good year, Frenz has been the face of the company, but there has never been an official introduction of him as the Managing Director of the local MAN branch. "There has been a reason for this and I apologise for any confusion caused by that." MAN's headquarters in Germany requested a strategic review of the business in Malaysia a year ago and Frenz was to be the agent of change. The purpose of the market review was to align the Malaysian office with the global strategy of being "Simply #1" and to identify opportunities in the country. Following his presentation

of findings, the implementation of the strategies and measures with the appointment of their new Managing Director. To become the number one in the region, these new initiatives are centred around the notions of customer satisfaction, reputation and branding and employee happiness.

According to Halter, business processes are to be simple, covering all aspects of the business from sales to aftersales. One immediate action to be taken as part of a long list of initiatives is setting up a workshop in Port Klang. Said Halter "We need to be close to our customers and a workshop here, where there are a lot of our customers is crucial." In summary, Halter promised that this event marks the beginning of a new era for MAN in Malaysia.

In his speech, O'Brooks also highlighted that MAN will also make the Malaysian office a 100 percent subsidiary by means of acquiring shares from their long standing joint venture partner. This is to signify the commitment that MAN is having to the market. The



takeover of shares has been part of the on-going activities for the past months and will be concluded soon and is a manifestation of the financial commitment of the brand. "The implementation of our strategies starts today, with my appointment as the new Managing Director and the opening of our new workshop here in Port Klang in March." The workshop is to bring long needed support to the clients in the area. Currently, certain customers are serviced by the MAN Mobile Workshop and this service will continue as and when needed to address the needs of the customers. In addition to brick and mortar, clients can also look forward to MAN's own telematics system, which is currently under development to meet the local demands.

MAN's global strategy of "Simply #1" hinges on the notion of finding best practices in each market transferring these to other markets that could benefit from such initiatives (see Asian Trucker Issue 50). "One of the interesting facts we have seen is that the brand is much better established in Malaysia than it is in other markets," said Halter. He further praised the use of the mobile service trucks and how MAN in Malaysia has made use of them to service customers. While the learnings from Malaysia may find their way into other markets, MAN sees synergies in the bus market, where Halter sees a lot of potential to be developed in Malaysia. ■

Meet the New MAN MD

O'Brooks, who is originally from UK, brings with him more than 35 years of experience in the commercial vehicle industry. Prior to joining MAN, O'Brooks has held several leading management positions for the Volvo Group, serving as Country Managing Director in United Kingdom, Latvia, Kazakhstan and Ukraine. In starting his new role at MAN Malaysia, O'Brooks is taking over from Richard Frenz, who will take up a new role in MAN Truck & Bus in Munich. A first among several strategic initiatives announced by O'Brooks is the opening of a new service centre in Port Klang to offer fleet operators and customers with more efficient and timelier vehicle care



CAPAS 2020

The show pinpoints new energy sector to drive continuous growth in Southwest China's automotive market.

Serving as a business gateway into Southwest China's evolving automotive market and supply chain, the Chengdu International Trade Fair for Automotive Parts and Aftermarket Services (CAPAS) has gradually risen, becoming one of the region's most reputable automotive trading platforms. In 2020, CAPAS will turn its spotlight onto the E-mobility & Infrastructure zone. The zone debuted back in 2016, and since then, it has continued to advance alongside the growing market. This year, the fair will strengthen its product categories, scope of onsite services, as well as the number of fringe events that serve the needs of all industry players.

The seventh edition of CAPAS is set to open from 21 to 23 May 2020 at the Chengdu Century City New International Exhibition & Convention Center, China. To further promote the prosperous automotive industry and facilitate sales growth in Southwest China, CAPAS 2020 expects to gather more than 600 domestic and international exhibitors. Their latest products, services and technologies will cover the 48 000 sqm show floor.

In recent years, automotive market sales and production volumes in Southwest China have rapidly

expanded, with Chengdu playing a leading role in these developments. According to reports, the number of passenger vehicles across three provinces of Yunnan¹, Guizhou² and Sichuan³, as well as Chongqing city⁴ have exceeded 28.89 million units becoming one of the fastest growing regions in China. What's more, sales volumes in the Sichuan province topped second in the chart; Chengdu also ranked second in terms of car ownership across all Chinese cities. These positive influences also spread into the automotive aftermarket. Latest statistics from the Sichuan Provincial Department of Transportation revealed that the number of repair and maintenance workshops in the province has reached 31 697 outlets.

At the same time, many development plans and industry-friendly policies support the local auto parts and new energy vehicles sectors. As a result, the region has seen the gradual development of more vehicle production, auto parts manufacturing and aftermarket services within the automotive supply chain. With extensive resources and a local understanding on the dynamic market, CAPAS will continue to explore potential development opportunities, as well as facilitate the market's opening up for those who look to expand their business in the region. Mr James Yu, Deputy General Manager of Messe Frankfurt (Shanghai) Co Ltd, commented: "Throughout the years, CAPAS has continued to utilise its seven themed zones and adjusted the show's offering to address changing market needs. To highlight, this year's featured E-mobility & Infrastructure zone will present the most cutting-edge technology to promote new energy vehicles and its development in the region."

Mr Yu continued: "Moving forward, we will coordinate closely with Southwest government bodies to integrate industry resources and meet major developmental objectives."

CAPAS 2020 promotes provincial new energy trends and policies. With the provincial government investing heavily in the new energy sector, numerous developmental policies support the expansion of production capabilities in Southwest China. Policies such as the "Plan for the Development of New Energy and Connected Mobility Industry 2019" by the Sichuan Provincial Government offers a scheme to optimise the production lifecycle; from innovation and production to end user experiences, which feedback into the industry transformation.

In light of these drastic changes, the E-mobility and Infrastructure zone, once again, will highlight the region's new energy vehicle sector. In the 2019 edition, the zone attracted 28 renowned new energy brands including BYD, Geely, JAC Motors, Porsche, Roewe, Tesla and Volkswagen to name a few. Top-tier



more cooperation and unfolding investment opportunities, which also help to foster industry development as a whole.

Featured fringe events like the China New Energy Vehicle International Cooperation Conference 2020 will return to the fair with more in-depth knowledge sharing. Other events include the Automotive Industry Projects Presentation on Sichuan Province and the Made in Chengdu Supply and Demand Business Matching Conference for New Energy Vehicle Products. In addition, CAPAS will invite representatives from government agencies, industry associations, and speakers from the car manufacturing, new energy and connected vehicle sectors to share insights at its concurrent events. Visitor delegations from along the Belt & Road will also be present at these insightful events.

Alongside upgrades to the E-mobility & Infrastructure zone, six other enhanced zones include Parts & Components, Commercial Vehicle, Accessories & Customising, Repair, Supply Chain & Chain Stores, Tyres and Made in Sichuan.

CAPAS is jointly organised by CCPIT-Auto, Messe Frankfurt (Shanghai) Co Ltd and CCPIT-Sichuan. CAPAS is the only automotive trade fair in Southwest China that Messe Frankfurt (Shanghai) Co Ltd organise, and is the second automotive trade fair in the subsidiary's portfolio. 

players like AIWAYS, Qiantu Motor and WM Motor also displayed their latest new energy car models in various sectors across the show floor. Elsewhere, themed fringe events like the Made in Chengdu Supply and Demand Business Matching Conference for New Energy Vehicle Products provided an effective channel for business networking among participants.

CAPAS 2020 will further expand the zone's offerings, bringing a wider scope of cutting-edge products, equipment and technologies for the new energy and connected vehicle sectors. Visitors will see a line-up of batteries, motor and electric control systems, charging piles and operation systems, as well as connectivity solutions. These products and technologies can help participants reveal unexplored business opportunities, in addition to accelerating the development of the sector in Southwest China.

CAPAS will hold a range of key events to match the needs between suppliers, dealers and end-users. Events include conferences, business matchmaking, project presentations, store visits, skills and technical training sessions, and seminar discussions. Carmakers and auto parts manufacturers will benefit from

Events & Exhibitions

TYREXPO SOUTH AFRICA

Date : 4 Aug – 6 Aug 2020

Venue : Sandton Convention Centre, Johannesburg, South Africa

Details : Key Highlights: Focus Sectors: Tyre, Tyre Equipments, Tools & Materials, Casings, Tubes, Wheels & Accessories, Rims & Tyre Accessories.

- Over 6000 Sqm of Exhibition area
- The event will attract 3000+ Attendees and more than 100+ Exhibitors and Partners
- Business Matching: Find the right business and have all your meetings prescheduled
- Community Engagement/Innovation Area / Experience Zone to showcase and have a real hand experience over products and technologies
- Over 100 International & Regional Exhibiting Companies – manufacturers, distributors and solution providers - are expected to participate
- Over 1,500 industry players from across more than 80 countries in the Africa region and beyond are expected to visit

BUSWORLD INDIA

Date : 27 Aug – 29 Aug 2020

Venue : Bangalore International Exhibition Centre (BIEC)

Details : BUSWORLD is the organizer of the world's largest B2B exhibition for the bus and coach industry, exhibiting buses, coaches and minibuses, as well as parts, components and services. The first Busworld exhibition took place 48 years ago in the city of Kortrijk in Belgium in 1971.

With a strong worldwide presence, Busworld India is all set to organize its 9th edition in Bengaluru bringing together the whos' who of the bus and coach industry on a single platform.

IAA COMMERCIAL VEHICLES 2020

Date : 24 Sept – 30 Sept 2020

Venue : Deutsche Messe, Hannover, Germany

Details : Vans, buses and trucks – commercial vehicles are a major part of our lives. Today we can choose from an extensive range of goods worldwide that are delivered right to our doors. This would not be possible without freight transport and logistics. And it is the commercial vehicles that cover that last mile. They carry over 70 percent of transported goods and therefore form the backbone of transport and the economy. They are also service providers and chauffeurs. They dispose of our waste, help us to move house, assist the rescue services, take our children to school and drive us to work. So commercial vehicles actually keep our everyday lives "on the go."

The IAA Commercial Vehicles in 2020 will address the question of what the future of commercial vehicles will be like. The IAA takes place in Hannover and is the world's leading trade show for transport, logistics and mobility. And in fact the whole commercial vehicle sector is on a path of innovation. As in many other branches of industry, the particularly important topics here are automation and connectivity, safety and security, environmental protection, electric mobility, new logistics and traffic concepts for the towns of the future. It offers a unique cross section of the entire value chain in the industry, from vehicles to transport and logistics, and from manufacturers to the many medium-sized suppliers.

BUS & TRUCK MYANMAR 2020

Date : 25 Sept – 27 Sept 2020

Venue : Myanmar Expo Hall

Details : BUS & TRUCK MYANMAR 2020 – Myanmar's No.1 International Bus and Truck Industry Exhibition is growing with participation! The latest to join the International Exhibition is Fujita Giken Co., Ltd and Kimson Rusco Plus. Held at the Myanmar Expo Hall, in Yangon from 25 to 27 September 2020, over 150 companies

and brands representing 15 countries and regions are expected to participate in the Expo. Drawing in thousands of industry professionals and trade visitors from all over the country, this three-day event is the ultimate business point for Myanmar's commercial vehicle market.

LTA-UITP SINGAPORE INTERNATIONAL TRANSPORT CONGRESS & EXHIBITION (SITCE) 2020

Date : 27 Oct – 30 Oct 2020

Venue : Suntech City Convention Centre, Singapore

Details : In its fourth edition, LTA-UITP Singapore International Transport Congress & Exhibition (SITCE) 2020 has established itself as the key platform for all international urban mobility stakeholders to convene under one roof and to redefine the urban mobility landscape of tomorrow. Over the last three highly successful editions, SITCE has brought together more than 10,000 urban mobility thought leaders from around the world to network, share ideas and collaborate.

SITCE 2020 congress will feature 6 main congress streams with over 30 congress sessions and aims to address challenges and raise solutions for urban mobility planners, operators, service providers, innovators, start-ups and researchers to come together in shaping the future of urban mobility landscape.

The exhibition will cover more than 6,500 sqm of space and will feature more than 150 international companies showcasing the latest technologies and solutions. Other highlights of the event include networking activities and technical visits to exclusive sites, only accessible to delegates of SITCE 2020.

MALAYSIA COMMERCIAL VEHICLE EXPO 2021 (MCVE)

Date : 17 June – 19 June 2021

Venue : Mines Exhibition and Convention Centre

Details : Back for the fifth time, Asian Trucker invites you to be part of the largest dedicated exhibition for commercial vehicles in Southeast Asia. Following the success of the past events, we are returning with the show in June 2021 with plans to expand the space.

Buyers, purchasers and operators have the opportunity to review the latest offers in terms of trucks, busses, services and components. During the show, relevant government agencies, professional societies, and associations will join the organizer to hold seminars and updates on their products, services and the latest in trucking.



Mercedes-Benz eCitaro receives "Blue Angel" label

Efficient and environmentally friendly local public transport in cities: Environmental label "Blue Angel" for the Mercedes-Benz eCitaro.



Cities are becoming more environmentally friendly and enjoying a higher quality of life thanks to the all-electric Mercedes-Benz eCitaro. This is underscored by its latest accolade in the form of the environmental label "Blue Angel". For more than 40 years it has been the German government's environmental label and it is awarded by independent institutions. The coveted eco-label proves the eCitaro's environmental friendliness and the exemplary path it is taking towards locally emission-free local public transport. The eCitaro is the first fully-electric city bus entitled to bear this environmental label.

The first eCitaro vehicles with the "Blue Angel" environmental label are on the road in Jena

Jenaer Nahverkehr GmbH is the first transport operator to receive three eCitaro vehicles with the "Blue Angel". The company operates local public transport in the Thuringian university city, with a fleet including 43 city buses on 13 routes. The three eCitaro models form the foundation for the first electric bus fleet in Thuringia. They are also equipped with current collectors for intermediate charging via plugs. The order also encompasses charging


infrastructure, including a current collector charging station at the depot and at the "Westbahnhof" railway station. The safety equipment of the buses is also impressive and includes Sideguard Assist.

The "Blue Angel" eco-label for the Mercedes-Benz eCitaro is further proof of the successful commitment to sustainable public transport in cities and conurbations. This battery-powered city bus thus stands for environmentally-respectful local public transport, contributing to air purity and therefore to enhancing the quality of life in cities.

Demanding criteria from individual components to guarantees

There are high hurdles to be taken before the environmental label "Blue Angel" can be awarded. For example, all electric buses have to demonstrate a minimum capacity for their high-voltage batteries. Further prerequisites include a guarantee of at least five years or mileage of 200,000 kilometres on the batteries, the opportunity to return them at a later date, non-destructive battery change and the availability of replacement components for up to ten years after production has ended. In addition to this, the proportion of heavy metals in batteries is strictly limited. The requirements also cover the overall vehicle's environmental criteria. In paints and coatings, for instance, no lead, chromium oxide or cadmium compounds are permitted. As of the start of this year, only natural refrigerants are permitted for air conditioning systems. The eCitaro meets this criterion with its CO2 air conditioning system. It goes without saying that the fully-electric eCitaro adheres to tight threshold values for driving noise.

Four renowned and independent institutions bear the environmental label

The "Blue Angel" sets demanding standards for environmentally friendly products and services. It serves as orientation for the sustainable purchase of everyday items, through to vehicles. The environmental label is carried by four renowned and independent institutions. The owner of the mark is the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety. The German Environment Agency develops the technical and award criteria. The decision-making body is the Environmental Label Jury with representatives from numerous public institutions. The non-profit company RAL gGmbH then listens to experts and issues the "Blue Angel" environmental seal. 





Petron Pumps its Business from the Philippines into Malaysia

Petron Malaysia is an emerging and rapidly evolving Asian oil company. It is part of Petron Corporation which is the leading oil company in the Philippines. Our integrated refining, distribution, and retailing of world-class petroleum products help meet the country's growing energy needs and contributes to a more progressive nation. In this exclusive feature, Mr Choong Kum Choy, Head of Retail and Commercial Business Petron Malaysia shares in-depth details about the brand and products.

Part 1: Background on Petron

AT: Petron started in Malaysia in 2011, after absorbing Esso Malaysia Bhd, ExxonMobil Malaysia Sdn Bhd, and ExxonMobil Borneo Sdn Bhd. Currently, how big is Petron in Malaysia? How many service stations are there in Malaysia?

CKC: In 2012, Petron Corporation, the Philippines' largest oil company, acquired ExxonMobil's downstream business in Malaysia including its service stations, terminals, and refinery. Esso Malaysia Berhad (EMB) was officially renamed as Petron Malaysia Refining & Marketing Bhd while ExxonMobil subsidiaries became Petron Fuel International Sdn Bhd (formerly known as ExxonMobil Malaysia Sdn Bhd) and Petron Oil (M) Sdn Bhd (formerly known as ExxonMobil Borneo Sdn Bhd).

Petron Malaysia is currently the third largest downstream company in Malaysia with about 700 service stations in the country.

AT: What's the key driver of Petron Malaysia's business?

CKC: Our core business comprises the marketing and refining of petroleum products. We have an oil refinery in Port Dickson and we distribute our petroleum products through our vast retail and commercial network.

In retail, we have more than 700 Petron stations nationwide wherein we offer our top-quality fuels. These include Blaze 100 Euro 4M, Malaysia's first 100 octane premium-grade gasoline, as well as other



environment-friendly fuels Blaze 97 Euro 4M (RON97), Blaze 95 Euro 4M (RON95) and Turbo Diesel Euro 5 (B7) as well as the regular Diesel Max Euro 2M (B10).

We were the first to offer LPG cooking gas (Petron Gasul) at a service station. Likewise, we offer a full range of lubricants and engine oils through our distributors and retail branches. We also cater to the fuel needs of the industrial and aviation industry. Consumers can also purchase other everyday needs at our Treats convenience store.

AT: Can you share your targets or goals for the next three to five years?

CKC: We are on track with our plans to expand our business to give more customers better access to our products and services. We continue to embark on various strategies to introduce innovative fuels, efficient services, and excellent customer service to a wider market. In all these, we are guided by our vision to be the leading provider of total customer solutions in the oil sector and allied businesses.

Part 2: Petron Products (Lubes & Diesel)

AT: How many Diesel products do you have in Malaysia, including engine lubricants?

CKC: We bring our diesel products to consumers through our service stations and directly to commercial end-users. All our stations carry Petron Diesel Max (Euro 2M B10) while our Petron Turbo Diesel (Euro 5B7) is available at close to 200 Petron stations. These products are also used by small and large commercial or industrial companies such as Fleet Operators, Independent Power Producers (IPPs), factories and industries where commercial diesel is used for boilers, generators, turbines, furnaces, bunkering, and more.

We also have a complete range of diesel engine oils. Our Rev-X line comes in various SAE grades and API quality grades to meet market demand. The API quality grades range from API CF to CJ-4. CJ-4 is the latest and highest diesel quality grade.

AT: Petron Turbo Diesel Euro 5 is formulated with TriAction Advantage Technology. How does this technology help improve engine performance?

CKC: Turbo Diesel Euro 5 is a technologically-advanced and environment-friendly high performance diesel. It comes with a special formulation called the TriAction Advantage, an additive that gives vehicles better power, better mileage and better engine protection. It provides excellent cleaning action and is formulated to perform under extreme operating conditions.

The modern diesel engines parts, particularly fuel injectors, have very little tolerance for deposit. To prevent the formation of deposit, a multi-functional detergent additive package is added to the base fuel. This detergent will keep the engine parts clean. The additive package also contains cetane improver, combustion improver and corrosion inhibitor. All these when combined give the following benefits:

- Power loss control (for new engines)
- Complete power loss restoration (for older engines)
- Improved fuel economy or better fuel savings
- Protect against corrosion
- Improve fuel ignition quality
- Ensure complete combustion resulting in reduced unburned fuel
- Reduce noise and vibration

Being 'a high performance' diesel fuel, Petron Turbo Diesel Euro 5 comes with higher additive dosage than the normal Diesel Max which increases the potency of the fuel.

AT: It is stated that the Petron Turbo Diesel Euro 5 is specially designed to meet the requirements of European fuel quality standard and intended for the latest Euro-5 compliant vehicles, so what happens if



Head of Retail
and Commercial
Business

a non-euro-5 compliant vehicle decided to fuel up a tank of this Petron Turbo Diesel Euro 5? Is it something like Blaze 95 and Blaze 97 and Blaze 100? Where it doesn't do any harm to the engine and it gives a better performance, as well as helps to clean the engine?

CKC: Petron Turbo Diesel can be used by all types of diesel engines, old or new engine, naturally aspirated (non-turbo-charged) or turbo-charged and non-Euro 5 compliant engines. It does no harm to fuel any diesel-engine vehicle. In fact, it will give better performance and help to clean the engine.

In a non-Euro 5 vehicle, Euro 5 fuel can be used without causing damage to the engine. However, it may not provide the benefits of 'cleaner emissions'.

AT: From what I understand is that exhaust emission is mainly due to the engine and exhaust system of a vehicle, so how does Petron Turbo Diesel Euro 5 help to reduced exhaust emissions?

CKC: Turbo Diesel Euro 5 has very low Sulphur content which allows the exhaust after-treatment system to be able to fully function to remove the harmful pollutants such as carbon monoxide, hydrocarbons, nitrous oxide from the exhaust emission by converting them into water vapour, carbon dioxide and Nitrogen and trapping the particulate matters.

AT: What is the difference between Petron Turbo Diesel Euro 5 and Petron Diesel Max?

CKC: Petron Diesel Max Euro 2M diesel has 500ppm sulfur (currently with 10% Palm Methyl Ester, as compared to Petron Turbo Diesel Euro 5 (currently with 7 percent Palm Methyl Ester which has 10ppm sulfur content, meaning it is 50 times cleaner and significantly reduces exhaust emissions. It prolongs the life and effectiveness of the exhaust after-treatment devices such as catalytic converters and diesel particulate filters.

AT: We can see that in Petron Malaysia's website there is also Commercial Diesel, which looks quite similar like the Petron Turbo Diesel Euro 5. To whom this commercial fuel is most suitable for? What about the price? is it the same as retailed fuel price?

CKC: Diesel fuel sold at service stations is typically different from diesel for commercial. The differences are in the percentage of Palm Methyl Ester content, where Commercial Diesel is Petron Diesel Euro 2M with 7 percent Palm Methyl Ester or PME (7 percent PME + 93 percent petroleum diesel).

AT: This commercial fuel is most suitable for who?

CKC: The Petron Commercial Diesel Euro 2M B7 is used for commercial industrial sector applications such as the high-speed diesel engines, off-road diesel engines, industrial boilers, heaters and gas turbines in power generation.

AT: What about the price? is it the same as retailed fuel price?

CKC: Prices are based on commercial terms and agreement.

AT: Let's move on to your lubricants. The Petron REV-X Mono-Grade is for passenger type vehicles' diesel engine and mixed commercial fleet. Can you tell us more about it, and what do you mean by mixed commercial fleet?

CKC: Commercial vehicles are used for transportation of goods and/or passengers. Mixed commercial fleet vehicles range from small one-tonne trucks to 55-tonne heavy-duty trucks. Likewise, for transportation, it can be used for small diesel vans and big buses. The application in the mixed commercial fleets is from mild to heavy-duty operating conditions either for long-distance trips or stop and go conditions.



AT: Would an owner get the best performance out of fuel and engine if they decided to use your engine lubricant along with your fuel?

CKC: Petron fuels are formulated to deliver the best engine performance. Our engine oils provide optimum engine protection under extreme temperatures and driving conditions. Our customers can gain the benefit of a 'best-match' formulation for engine fuels and lubricant products with the unique formulations that continue to give maximum power, smoother engine, and fuel economy.

AT: Moving forward, what can the public expect from Petron? How soon can we expect a newer or upgraded fuel or lubricant? What other technologies can the public expect from their fuel?

CKC: We are committed to providing consumers with the highest quality products that meet the latest technological changes in line with OEM standards while ensuring customer satisfaction. We have plans to launch a more comprehensive lubricant product range tailor-made for the different requirements of our customers. Petron's fuel quality improvements move in tandem with engine technology changes to provide maximum customer satisfaction. **F**

AT: Can you elaborate more on your Petron Rev-X Engine Oils? How is it different from the products of your competitors?

CKC: Petron Engine Oils are engineered with the highest quality base oils and additives to ensure maximum efficiency, minimal downtime and more savings in maintenance.

Rev-X Diesel Engine Oils are formulated with Dynamic Cleaning Technology (DC Tech) to provide powerful cleaning action and protection. Dynamic Cleaning Technology keeps the engine clean and free from soot and deposits.

We have a complete line-up for the Rev-X series, ranging from multi-grade fully synthetic to mineral-based. In general, the fully synthetic engine oil will be more energy-efficient and cost-saving which may extend the oil drain interval than synthetic blend oil. The same with synthetic blend oil against mineral oil.

We recommend that vehicle owners follow the viscosity grade and oil drain interval periods provided by the Original Equipment Manufacturer (OEM) which can be found in the vehicle service manual.

Beyond the marketing of products, we provide lubrication solution services to customers as part of our value-added services such as troubleshooting, problem identification, diagnosis of issues, used oil analysis interpretation and lubrication technical training.





Volvo Supports Drivers with Safety Features

Trusting in added safety, ComfortDelGro Bus puts new Volvo buses onto the road that look ahead and help the driver focus on the job.

ComfortDelGro Bus, Singapore's largest unscheduled bus operator, will be rolling out four new Volvo B8R 49-seater buses, which come with a Driver Support System that has a built-in Collision Warning & Emergency Brake (CWEB) feature. This means that the bus is equipped to brake automatically and come to a stop if it "senses" a collision is about to take place.

Looking Out

This is how it works: A radar-based sensor and a camera are activated once the bus accelerates past 15km/h. When it detects a potential collision with another vehicle, the system alerts the driver through a blinking red light on the dashboard and a beeping sound. If the driver still does not respond, the

system immediately initiates soft braking before applying full braking power to bring the bus to a complete stop before any collision happens.

The system also comes with a lane-keeping assist function that alerts the bus driver when the bus veers into other lanes. Similarly, the braking system kicks in if it senses a frontal collision threat.

Mr Pang Weng Heng, CEO of ComfortDelGro Bus said: "As a private bus operator, safety is key. With its ability to intervene and stop the bus before a frontal collision happens, Volvo's CWEB feature is a welcomed safety enhancement that will help our bus drivers avoid critical situations and accidents."

Driver Support as Package

Volvo's driver support system is beneficial for the operator for many reasons. First and foremost, bring safety to a new level for both the driver and the passengers. Secondly, minimize repair cost and reduce down time by preventing accidents.

The driver support system can be offered for all Volvo coaches. The content may vary depending on model and market.

The configuration of the Volvo Driver Support System consists of the following functions:

- Collision Warning with Emergency Brake (CW-EB)
- Lane Keeping Support (LKS)

Warning Signs

Collision Warning with Emergency Brake activates when the system

detects a risk of collision, audio signals warn the driver. If the driver fails to react, the system initiates soft braking and then applies full braking power. The system reduces speed according to the 2018 legal requirements. It also detects objects in curves. The system uses both camera and radar for improved accuracy and performance. Components included are: Switch, tell-tale in cluster and the driver information display (DID). The switch can both be used to deactivate prewarning (short push) and deactivate the system (long push). Warning indication is given from the tell-tale and Cluster Sound. In the pre-warning phase, the telltale flashes a red light. Starting in the collision warning phase, the tell-tale flashes and there is a warning sound from the cluster.

Fully Aware

Lane Keeping Support recognises the road lane markings and predicts how close the vehicle is to them. If the vehicle drifts across a lane marking while the turn indicator is not active, an audio/visual signal warns the driver.

Warning indication is given using a blinking telltale in the cluster together with Cluster sound.

True to DNA

"Volvo has always been at the forefront of technology – with safety as its prime focus. For Volvo, safety is more than just developing innovative safety solutions in our products. We believe that we have an overall responsibility in society and that we have an important role to play when it comes to making road traffic safer for everyone. Available on all Volvo coaches, we are extremely proud to have partnered with ComfortDelGro Bus to launch our new safety system in Singapore," said Mr Mats Nilsson, Director of Volvo Buses Region Singapore.

Man and Machine

As there are plans to purchase more of such buses over the next two years, six ComfortDelGro bus drivers have undergone training about the in-built CWEB feature. Amongst them is Mr Lim Chye Whatt, ComfortDelGro bus driver of 17 years. Said the 56-year-old: "I think this CWEB feature is helpful as it alerts me when I am not



keeping to my lane. But of course, at the end of the day, as a driver, I need to be aware of my surroundings and not just rely on the machine."

This is not the first time that ComfortDelGro Bus has leveraged on technology to enhance the safety of its buses. A year ago, it implemented GreenRoad – a telematics solution – on 32 buses that provide shuttle services at the National University of Singapore's Kent Ridge Campus to better manage its drivers' driving skills and behaviour. 📌



Sarawak Hydrogen Buses: Pioneering Step to Green Mobility in Malaysia

In this issue of Asian Buses magazine, we peek into the behind-the-scenes of the hydrogen bus service recently launched in Sarawak, as this service is under the pioneering project in Malaysia to provide alternate zero-emission public transportation.

As one of several initiatives by the Sarawak administration to improve its state bus service, the launch of hydrogen-fuelled bus service in Kuching signified a milestone for being the front runner of the hydrogen fuel industry in Malaysia. Sarawak also just celebrated its launch of electric bus services within its state in February last year. The service is a joint effort among many, such as the Sarawak Transport Ministry and Sarawak Economic Development Corporation (SEDC) for more reliable, affordable, safe and eco-friendly public transportation within the state. The launch made Kuching the first city that runs hydrogen-fuelled buses in Malaysia, and even the first in Southeast Asia.

Launch of Hydrogen Bus Service in Kuching

Starting from January 22 this year, three hydrogen buses serve the public, including citizens and tourists daily from 6am to 6pm without any charge until further announcement. The service is free-of-charge due to it being the pilot stage of this state bus service project. With their red and white colour scheme and the words 'Zero Emission' and 'Hydrogen Bus' prominently plastered on the buses, Sarawak's hydrogen buses definitely draw a lot of attention, especially from Sarawakians.

The buses serve two routes with stops near various attractions in the city. The main route, called Downtown Heritage Loop, starts and ends daily at the Kuching Waterfront at Jalan Main Bazaar. The 14 kilometer long Downtown Heritage Loop has stops at Kuching Waterfront, Central Timur Road, Ban Hock Road, Riverside Majestic Hotel, Kubah Ria, and the Malay Kampung Heritage Area-Kampung Bandarshah 2. The other 14 kilometer route, which only operates on Saturday and Sunday, is called Damai Loop. It takes passengers from the Riverside Majestic Hotel to the Sarawak Museum, Satok, Petrajaya and Damai Central.

Costing RM1.2 million each, the three buses in Kuching are manufactured by Foshan Feichi Automobile Manufacturing Co Ltd, one of the leading hydrogen fuel cell vehicle manufacturers in China. Each bus can accommodate up to 30 passengers at one time. The bus can travel over 300 km, up to 15 round trips in the main Kuching route with a full tank of 20 kilogram of hydrogen. Features of these Chinese buses include GPS and live diagnostics on fuel level, speed and vital systems notification. The diagnostics can be monitored remotely even by the manufacturing side in China. Besides, LED monitors on the buses allows video content to be loaded remotely, the first such system of its kind to be implemented in Sarawak.

What is very fascinating about the hydrogen buses is the inclusion the internet of things (IoT) within the bus. Under IoT technology, riders can enjoy high speed LTE WiFi within the bus. Along with the rides, riders may also use the H2 Sarawak App, a

smartphone application specifically developed for the bus riders. Using the app, the riders get access to in-bus entertainment such as online magazines and videos, as well as e-shopping platforms that allow online ticketing to attractions, hotels and local Sarawakian products.

H2 Sarawak App was created and developed by Merlvin Ong, a software developer from Karuna Sarawak, a Kuching-based web design company. The app is currently available in the Google Play store for Android users and soon will be introduced in the IOS App store. There are remarkable features of this app that are first implemented in Malaysia, which include city wide implementation of "Beacons". "Beacons" allows for push notifications about offers, promotions and historical landmarks to hydrogen bus riders.

The app also integrates with Google Transit that gives users real time schedules of bus arrival and connecting points. The app is also considered tourist-friendly as visitors can easily get access to information on historical landmarks and places of interest using the app. Since the app was created, people have started anticipating a fully integrated route and a live schedule of the public transport system within Sarawak.

Looking into the Origin: Foshan Feichi Automobile Manufacturing Co

Established in 1971, Foshan Feichi Automobile Manufacturing Co manufactures buses in Guangdong Province, China. It is one of the subsidiaries of Shanxi Meijin Energy Co, a coke manufacturing and distribution company in China. Shanxi Meijin Energy is also involved in coal mining, coal cleaning, coke, gas, coal, chemicals, combined heat and power, central heating, import and export business, rail and road transport. Specialised in Research and Development (R&D), manufacturing and sales distribution, Foshan Feichi introduced products such as hydrogen fuel-celled bus, sleeper bus, electric city bus, diesel bus and liquified natural gas (LNG) bus.

As part of Guangdong province government initiatives, the company was established to promote the hydrogen fuel industry in Foshan and Yunfu. In October 2016, Feichi moved its manufacturing headquarter from Foshan to Yunfu. The hydrogen fuel cell bus developed by Feichi Bus was put into use in Foshan, Yunfu and other places, becoming the first batch of commercial hydrogen buses in China. In Foshan City alone, there are currently more than 150 hydrogen fuel cell buses operating on the road to serve the public.

Taking up 230 000 m² of space, Feichi headquarters produces 5 000 new energy vehicles every year. The impressive quantity of production is achieved through the collaboration of Feichi with enterprises and research institutions that specialise in hydrogen fuel cell technology including Guangdong Nation Synergy Hydrogen Power Technology Co Ltd, Ballard Power Systems Inc, Shanghai Reinventing Fire Technology Co Ltd and Foshan University. The collaboration among institutions also contributes to the uncompromised quality of Feichi buses as new energy vehicles. The quality is backed up by the fact that Feichi buses are granted CE Marking from the European Union and Vehicle Type Approval (VTA) from Malaysia.

The Feichi hydrogen fuel cell bus is well known for its sustainability, safety, reliability and durability. Based on the data collected during the runs and tests involving the hydrogen fuel cell buses in Kuching, it was shown that Feichi buses manage to display performance that is beyond satisfactory, especially in terms of energy efficiency. The SEDC team was impressed at the thorough reliability tests shown by Feichi HQ during a previous trip to China.

Well known for its outstanding service, Feichi would be providing after-sales support for the buses in Kuching as well— encompassing the training of drivers, operators and mechanics – as well as setting up a temporary maintenance centre located at Sarawak Skills Development Centre (PPKS) Campus in Tabuan Jaya by the end of 2019.

How Hydrogen Fuel Cell Buses Work

The fuel cells of Feichi hydrogen buses are provided by Ballard Power Systems Inc, a Canada-based emission free fuel cell manufacturer. A fuel cell is an electrochemical cell that converts the chemical energy of a fuel and an oxidizing agent into electricity through a pair of redox reactions. Fuel cells are different from most batteries in requiring a continuous source of fuel and oxygen (usually from air) to sustain the chemical reaction, whereas in a battery the chemical energy usually comes from metals and their ions or oxides.

One of the benefits from hydrogen buses as public transportation is the low cost, considering the fact that hydrogen is extracted from water as an abundant source in Sarawak. This is unlike buses that use fossil fuel where the cost is dictated by the global price of fossil fuel. Hydrogen has zero carbon emission with water and heat being its only by products when used in fuel cells for transportation. The efficiency level can be more than 80 per cent when it is used in a combined heat and power system, as demonstrated by UTM Ocean Thermal Energy Centre (OTEC).

Producing minimal noise as well, a hydrogen-powered vehicle has better mileage and lower cost per kilometer compared to internal-combustion vehicles in ideal conditions. Denso, an automotive company from Japan, also mentioned earlier that the hydrogen refuelling only takes approximately three minutes and works similar to refuelling a conventional gasoline engine vehicle. Overall, hydrogen is favourable compared to electricity because the batteries are the main source of electricity and should be disposed of after three to five years.

The Seed of Malaysia Green Mobility

It all started when Foshan Feichi and Sarawak Economic Development Corporation (SEDC) inked a memorandum of understanding (MoU) to supply and deliver hydrogen cell buses on September 10, 2018. Held in Foshan (Yunfu) Industrial Transfer Park, the signing ceremony marked the milestone for Foshan Feichi to lead the export of hydrogen cell vehicles from China.



In the production plant, hydrogen is produced through an electro-chemical process called electrolysis. With the support of investors, the production plants and refuelling stations were successfully launched on May 27, 2019. The launch of hydrogen facilities in Sarawak definitely marks a significant milestone for Sarawak's Green Energy Agenda. Under the Green Energy Agenda, Sarawak is holding on the twin pillars of a hydrogen economy framework and battery electric vehicles based on its vision of emission-free public transportation in the state.

It is remarkable that Malaysia is known as the second largest oil and gas producer in Southeast Asia as well as the third largest global exporter of liquefied natural gas (LNG). Sarawak exhibits its suitability for this hydrogen bus project due to its hydropower resources, which is substantial enough to support the operation of hydrogen buses.

The production plant supports daily hydrogen production up to 130 kilogram at a purity of 99.999 percent. With its maximum capacity, the hydrogen plant can refuel up to five fuel cell buses and ten fuel cell cars per day. The plant follows all relevant regulations and standards as it looks up to the rest of global facilities that are up to par.

Under the memorandum, ten buses were said to be delivered to Sarawak by March 2019 under a state pilot project to improve public transport. Adopting the "3+3+4" purchase model, it came to consensus from all parties that three Feichi buses would first arrive at Sarawak and then later batch accordingly. Sarawak will then step up the construction of hydrogenation stations and upgrade the purchase of hydrogen fuel cell buses. On April 8, the buses were successfully distributed to Sabah from Feichi HQ after the assembly of bus bodies were completed weeks ago.

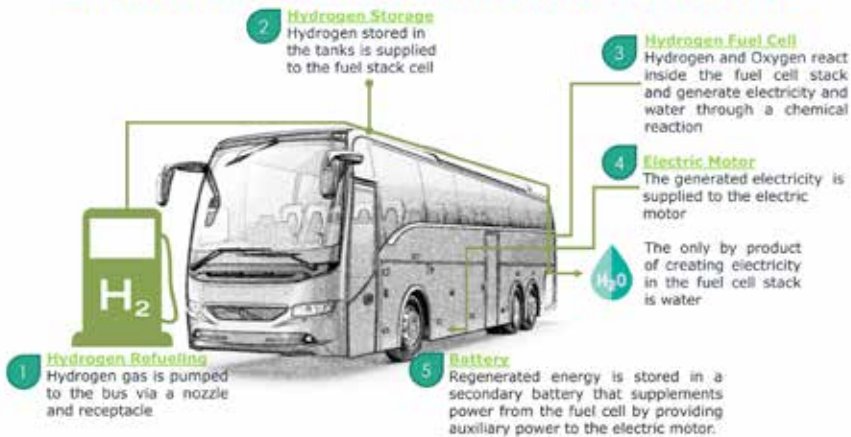
The idea was first raised given Sarawak's competitive advantage in affordable and renewable power and ample water supply, as well as on the understanding that hydrogen would play a significant role in the future for mobility. The hydrogen projects build on initiatives from Sarawak Corridor of Renewable Energy (SCORE) as a growth strategy for powering development through renewable energy, which expected to contribute to the body of local and global knowledge regarding hydrogen technology and its application, especially in a tropical environment.

Integrated Hydrogen Production Plants and Refuelling Stations

The news of hydrogen buses imported to Sarawak started catching attention among local firms in Sarawak to invest in the construction of integrated hydrogen production plants and refuelling stations. The facility was completed and operationalised less than two years since it was announced that studies are carried out on hydrogen fuel in Sarawak from November 2017 onwards. The plants were built by Sarawak Energy Berhad (SEB) in collaboration with Linde EOX Sdn Bhd, a subsidiary of Linde Malaysia. The Linde Group is among the world's leading industrial gases and engineering companies. The collaboration between SEB and Linde provides a platform for knowledge-sharing and transfer of technology on hydrogen fuel.



HOW HYDROGEN FUEL CELL VEHICLE WORK



open up the opportunity for Malaysia as pioneering hydrogen fuel region in Southeast Asia.

Next Step for Sarawak Development as National Transport Policy

What should people be anticipated after such moves by Sarawak on hydrogen facilities? The chief minister stated that there will be more hydrogen buses to be added in near future if the demand arises. It is expected to slow down or postpone the light rail transit (LRT) implementation in Sarawak to enable more funds to be allocated to improve facilities and infrastructure in the rural areas.

As the hydrogen plant broadens the opportunity of Sarawak exporting hydrogen energy through Petros as extra income for the state, the scientific research is being done to make it possible to transport hydrogen almost in the same manner as LNG cylinders. As there are various sources of fuel available in Sarawak, the state policymakers also intend to build three 3-in-1 fuel stations powered by hydrogen, electricity and conventional fossil fuels. All these are definitely part of stepping stones towards realising the National Transport Policy (NTP) 2019-2030. NTP has already targeted its thrust towards the involvement of green transportation, therefore it is expected that in the future hydrogen acts as the primary fuel as one of the alternatives to conventional fossil fuel for maintaining liveability and sustainability in the country. 🚀

The three hydrogen buses underwent trial runs without carrying any passengers from August 1 to 14. The trial runs cover routes such as Jalan Abell, Jalan Padungan, Kuching Waterfront to Damai Beach in Santubong, and Jalan Tun Abdul Rahman Yaakub to Medan Niaga Kubah Ria. The trial was also followed by the announcement from SEDC that the Road Transport Department (JPJ) and Commercial Vehicle Licensing Board (LPKP) had given their approval for the commissioning of the service.

Halfway Obstacle Solved and Sarawak Metro as Sole Agent of Feichi

The buses were supposed to be accessible to the public and tourists starting September 15, 2019. The launch of hydrogen bus service had to be postponed due to a temporary halt at the hydrogen production plant and refuelling station which was discovered in August 2019. Despite issues found on the hydrogen plant, no issues were found in the three hydrogen buses.

SEB explained the production of hydrogen had been temporarily halted to accommodate improvement of matters discovered during the performance test period. During this period, contaminant liquid was observed at the bus receptacle, which may affect the efficiency of the bus in the long term. Under warranty by Linde, Linde solved the contaminant issue by carrying out maintenance works, such as cleaning the fuel tanks. The refuelling station has been recommissioned and the buses came back for refuelling on October 13.

On November 26, Sarawak Metro Sdn Bhd, a subsidiary of SEDC was appointed as the sole agent for Feichi buses in Southeast Asia. The agency agreement signed between Sarawak Metro and Feichi lasts for two years. It is expected to



BYD K9 as the First Electric Bus in Malaysia to Serve Public Transportation System

BYD Auto Co Ltd, a subsidiary of BYD Co Ltd, was established in January 2003 followed by BYD's acquisition of Tsinchuan Automobile Company in 2002. Since BYD's entry into the automotive market, BYD has successfully expanded its footsteps across 6 continents which comprise of more than 50 countries and over 300 cities worldwide. What makes BYD stand out among its automobile competitors is the ambitious mission to attach its brand association with green mobility.

In April 2015, BYD officially released the 7+4 Full Market EV Strategy for new energy vehicles. The "7" here represents seven traditional transportation fields (consumer vehicles, buses, taxis, coaches, logistics vehicles, construction vehicles and sanitation vehicles) and "4" represents four special fields (warehouse, mining, airport and port). Leading new energy vehicles in China, BYD aspires to replace all the conventional fossil fuel vehicles in the nation with electric vehicles. As part of corporate social responsibility, BYD's mission lies in sociological integration and local job creation as well by developing offices, dealerships and manufacturing facilities in the local communities.

The first BYD battery electric bus was manufactured on September 30, 2010 in Changsha, Hunan. Since 2012, BYD has started introducing an "electrifying urban public transport" solution, which leads to the production of K9 buses and E6 electric cars. Up to now, BYD has cumulatively provided 50 000 electric buses to its global partners. The production of

As one of the world largest electric vehicle (EV) manufacturers, BYD from China started getting known by Malaysians since the launch of Bus Rapid Transit (BRT)-Sunway line on June 1, 2015. Costing RM634 million in total, the BRT-Sunway Line project adopts 15 BYD electric buses and sets up seven stations within an elevated bus lane of 5.4km around Bandar Sunway including Sunway-Setia Jaya, Mentari, Sunway Lagoon, SunMed, SunU-Monash, South Quay, and USJ7.

The BRT-Sunway project is part of the Public-Private Partnership (PPP) programme via a joint effort between both Prasarana Malaysia Berhad, the Malaysia's largest public transportation group and Sunway Berhad, a Malaysia-based conglomerate that include construction as its main business. The project is to enhance connectivity, accessibility and mobility around Bandar Sunway. As the first battery electrified BRT system in the world, it is estimated to benefit 500 000 users as the BRT line connects hospitals, universities, commercial shopping and residential areas.

About BYD

Established in 1995, BYD Company Limited is a Chinese manufacturer of automobiles, buses, forklifts, solar panels, rechargeable batteries, trucks and many other commercially-used equipment. Reflected on BYD's four core values (Excellence, Pragmatism, Passion, Innovation), BYD always works out on its mission, which is technological innovation for a better life.

As one of China's largest privately owned enterprises, BYD has its corporate headquarters in Shenzhen led by Wang Chuanfu, the founder of BYD company. Listed on the Hong Kong and Shenzhen Stock Exchanges, BYD was awarded 98th place in the Top 500 China Public Listed Companies 2019. Including Warren Buffets as one of its shareholders, BYD manages to surpass RMB130.1 billion (approximately RM78 billion) in market cap up to Jan 2, 2020.

K9 electric buses employ many advanced technologies developed in-house by BYD's expansive staff of more than 15 000 engineers.

BYD's First Entry into Malaysia

In January 2014, Prasarana bought 15 BYD's K9 electric buses from BYD, which costed RM1.3 million each. Unnoticed by most of the public, one of the BYD buses has been in trial operation in Kuala Lumpur for six months since September 2013.

The BYD buses had gone through trials in Malaysia for nearly two years and received positive receptions from the local bus operators. BYD's efforts paid off when it beat out all the competitors for the electric BRT project bid initiated by Prasarana on Feb 10, 2014, followed by the official launch of Sunway-BRT in 2015. In June 2015, an agreement was signed between Petaling Jaya City Council (MBPJ) and Prasarana so that Prasarana rendered MBPJ an electric bus to run around Petaling Jaya area for Go-green initiatives implemented in the city.

Those BYD K9 buses in Malaysia were assembled by Gemilang International Limited (Gemilang Coachworks; Chinese: 彭顺客车厂), a bus bodybuilder based in Johor. Gemilang Coachworks of Malaysia previously bodied 14 BYD K9 buses for Transport International Holdings in Hong Kong, along with other models of BYD buses including C6 that are to be imported to countries such as Indonesia and Australia. For BYD K9 buses, the chassis and batteries are sent to Gemilang Coachworks for bus assembly after being manufactured in Shenzhen headquarter.

BYD K9 Features

As the world's first long-range electric bus, BYD K9 is an all-electric bus using 4 Lithium Iron Phosphate (LiFePo4) batteries. A single charge of the batteries would allow the vehicle to travel up to 250km. It would take about 5 hours to complete a full charge which carries a maximum power of 80kW. The batteries are rated at 324kW and capable of generating about 70-80KWh per hour, with consumption of less than 100kWh per hour. The batteries could be charged around 6 000 times, which is estimated to last about 16 years, if it is charged once daily. BYD K9 is equipped with Intelligent Battery Management System (iBMS), that assists with balancing and charging safety, helping to address the safety concern of the battery.

The permanent magnet synchronous In-wheel motor rated at 75kWh is integrated with the AC Synchronous Brushless Motor to enhance the driving performance of the bus. The compressor could power up to operate devices such as the door, suspension, aircon and power steering, with 12V Alternating Current (AC). With Cooltech air-conditioner that is also operated with AC, the temperature inside the bus is much lower compared to other buses even at the rear as there is no heat generated.

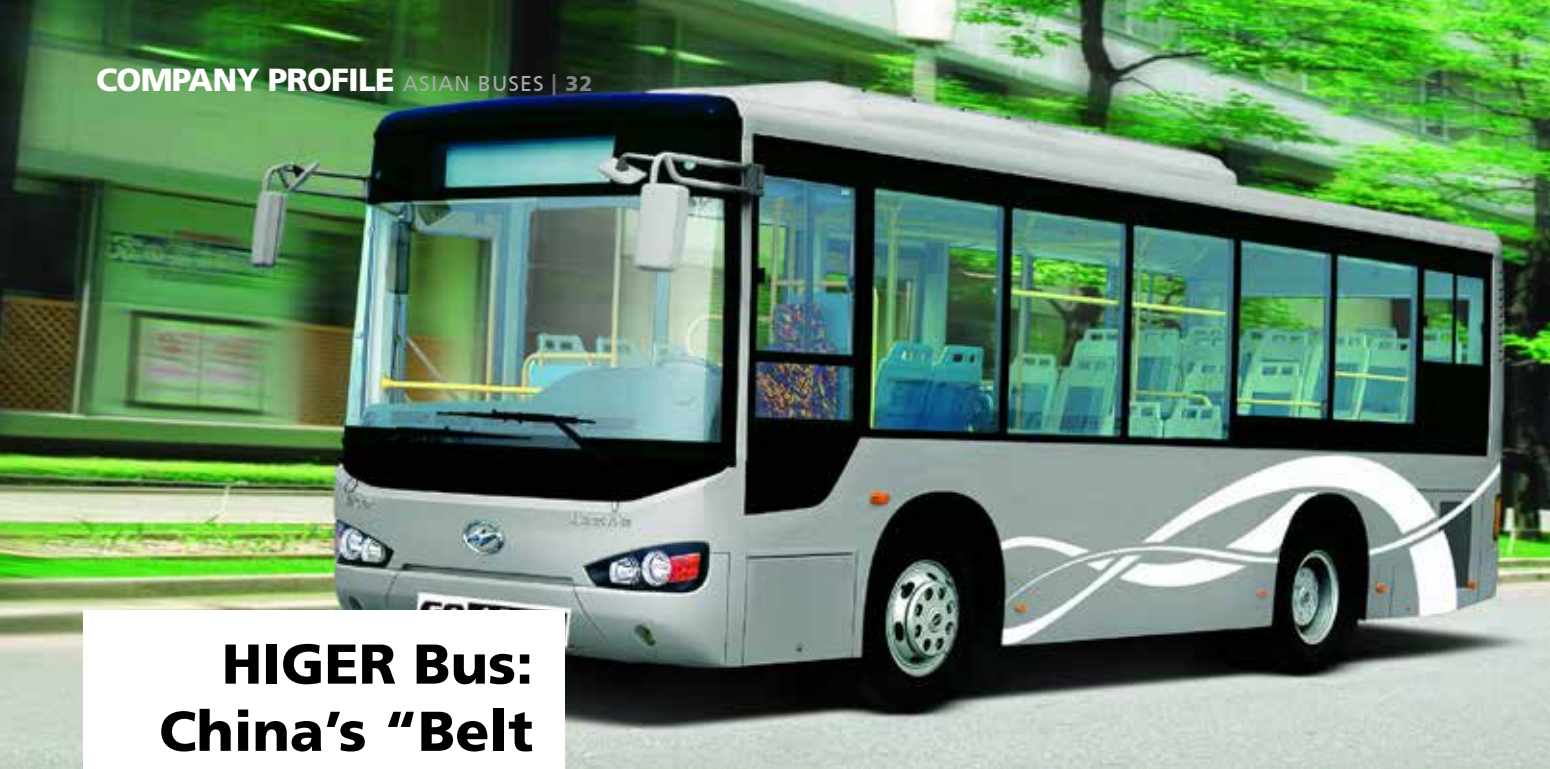
The Future of Malaysia in Green Mobility

As land transport constitutes 95 percent of the country's total traffic volume in Malaysia, air pollution could be



Length / Width / Height	12000mm / 2500mm / 3200mm
Curb Weight	12700 kg
Wheelbase	5880 mm
Ground Clearance	≥140 mm
Max Gradeability	≥15 %
Top speed	80 km/h
Range	270/350 km
Seats	23—44
Passengers	86/84
Motor Type	AC Synchronous Motor
Max Torque	280×2/430×2 N·m
Max Power	75×2/100×2 kW
Battery type	BYD Iron-Phosphate Battery

one of the main issues that need to be solved in the country. The launch of electric buses is important to address the issue. According to a report from MIT-UTM Malaysia Sustainable Cities Program, BRT project is estimated to reduce 102.20 Mt CO₂ emissions daily by using electric buses only, assuming that 20 percent of riders shift from private cars and 10 percent of riders shift from motor bikes. Moreover, for all 12 BRT corridors in the greater Kuala Lumpur-Klang region, 7016.80 Mt CO₂ emission would be reduced daily by 2030 if electric buses were used on the trunk route. ■



HIGER Bus: China's "Belt and Road" Initiative Helps Developing Green Transportation in Malaysia

Contributing to China's 'Belt and Road' notional policy, HIGER Bus, a Chinese bus manufacturer, is well known for its effort to export the buses to foreign markets including Southeast Asia region such as Malaysia.

Established in December 1998, Higer Bus Company Limited (HIGER Bus) is a subsidiary company of Xiamen King Long United Automotive Industry Co Ltd, a Chinese bus manufacturer that is well known for King Long buses. HIGER Bus has expanded the headquarter from a Suzhou-based small garage into a modern bus manufacturing factory of 950 000m2. The expansive base enables HIGER Bus to manufacture 22 000 units in total of large/medium-sized buses and chassis every year.



Holding on the slogan of "Higer Takes You Higher", HIGER Bus has achieved annual sales of over 10 billion yuan (approximately RM6 billion). The export of HIGER buses has expanded to more than 120 regions including Singapore, Vietnam, Cambodia, Kazakhstan, Qatar and many more. Notably, HIGER Bus is ranked among "China's 500 Most Valuable Brands" for many years with market cap value exceeding 44.681 billion yuan (approximately RM28 billion). With its manpower of 3 000 staff, HIGER Bus manages to reach net worth up to 2.5 billion RMB (approximately RM1.5 billion).

For more than ten years, HIGER Bus has already paved its way into the Malaysia market. In 2010, National Service Training Centre in Wangsa Maju bought 156 Higer KLO6119 buses from HIGER Bus China. As a conventional diesel-fuelled bus, the batch of Higer KLO6119 buses was reconditioned to fit themselves into Malaysia's climate and local drivers' habit.

On April 19 2017, HIGER Bus established a strategic electric vehicle (EV) partnership with Go Automobile Manufacturing Sdn Bhd and Mara Liner (MLSB) for an electric bus project to be first implemented in universities. The partnership involves developing, manufacturing and engineering of the production of electric buses for the local market. Placing electric buses in universities is part of efforts to build low carbon campuses, which favours the Green Mobility core policy in the Green Technology Master Plan 2017-2030.



consumption recorder, maintenance management, remote breakdown analysis and stitches matching. G-BOS provides bus operators with an innovative bus monitoring operation management system which integrates advanced features and tools for massive data collection, 3G wireless internet and remote intelligence control.

Timeline

December 2018

Establishment of Higer Bus Co Ltd in Suzhou, China

2001

Granted access to develop own brand chassis

2005

Reached 10000 unit of annual sales in large and medium-sized buses

2007-2009

Awarded "Top Bus Manufacturers" in Busworld China for three consecutive years

2008

Reached 5 billion RMB of annual sales in HIGER's 10th anniversary

2010

Officially launched G-BOS Intelligent Operation System, exported 156 Higer KLQ6119 to Malaysia National Service Training Center

2013

Launch of Higer new energy bus manufacturing base of 286 668 m², expected to annually produce 10 000 units of new energy buses Manufactured 200 000th unit Higer bus

2014

Reached 10 billion RMB of sales with 25615 units of Higer Bus products

2015

Reached 11 billion RMB of sales


2016

Establishment of Low Carbon Bus Industry Union led by Higer Bus

2017

Exported 50 new energy buses to Go Auto for Malaysia EV project

2019

Reached brand value up to 44.68 billion RMB 

The project is expected to cost more than RM30 million. There were 50 new energy buses (10m-12m) from HIGER bought by Go Auto, which one of the buses was transferred to Mara Liner for training and research purposes. The HIGER electric buses carried out trials for two months in UTM.

These HIGER new energy electric buses will be powered by new-generation lithium titanate fast-charging batteries, which feature 10-minute fast charge, 20 000 life cycles and higher safety compared to traditional lithium batteries. Designed and manufactured in accordance with EU standards, this model has been certified by Malaysia's Ministry of Transport and obtained VTA.

Additionally, the use of the electric bus helps to save up to 60 percent of the diesel cost. The electric bus uses rechargeable batteries that only take 20 minutes to charge and can go for as long as 88 kilometres per drive.

Retaining high satisfaction in Malaysia, HIGER buses also have received positive reception from various countries for the few advantages possessed by HIGER:

1. Fiber laser cutting technology

HIGER applies the most advanced fiber laser cutting machines with high precision, efficiency and positional accuracy within +/-0.03

2. Robotic welding

Robotic welding equipment promises to deliver a more precise welding solution compared to manual welding with heightening quality and productivity.

3. Cathode electro-coating

HIGER invested 200 million RMB to develop a cathode electro-coating line which enhances the electro-coating quality and thus fully extends the service life and improves the vehicle resistance to corrosion and dust. The line was put into operation in May 2011, bringing HIGER's annual production capacity up to 35 000 units. HIGER cathode electro-coating line features the most cutting-edge technologies and complete procedures in the industry. The whole process includes 5 major steps: precleaning, pretreatment, electrocoating, drying and cooling, and 16 strict procedures.

4. G-BOS Intelligent Operation System

HIGER G-BOS platform (G represents 3G: GPS, GIS, GPRS and BOS stands for "bus operation system") integrates the functions of GPS, driving recorder, fuel



WY Supreme Auto Parts Sdn Bhd



Asian Trucker visited this spare parts distributor in Kuala Lumpur to know more about their operations, products on offer and services provided.

Spare parts availability is an integral part of operating a commercial vehicle. When the vehicle breaks down, you want it to be repaired and back on the road as soon as possible. Meanwhile, you also need parts for the regular services. This is where spare parts distributors like WY Supreme Auto Parts Sdn Bhd (WY Supreme) play a big role in ensuring these workhorses are back on track in the shortest time possible.

Having operated for more than 20 years, WY Supreme has built a name for itself as a wholesaler of commercial vehicle spare parts. They carry a range of parts from various brands such as Hino, Scania, UD, Fuso, Isuzu as well as trailer parts. They are constantly updating their inventory and product catalogue to cater to their customer's demands.

"As a spare parts wholesaler, it is inevitable that we have a huge amount of parts that we constantly keep in stock to ensure our customers are able to get their items in the shortest time possible. Commercial vehicles are different from passenger vehicles in the sense that every minute a commercial vehicle sits in a workshop is money lost. That is why on any day, we have an average of 15 000 units of parts in our warehouse," said Victor Ling, Director of WY Supreme Auto Parts Sdn Bhd.

To ensure they remain competitive in the market, WY Supreme prides itself in providing good service, quality and pricing. Ling shared that within Klang Valley, the company promises to deliver the parts within a 12-hour time frame. "To ensure quality in the parts that we sell, we work with vendors from China, India and Turkey that have passed our quality control tests and are well-established. We encourage customer feedbacks so that we can relay them to the factories to be improved. Having worked with them for such a long time, we are confident that these products will not be of subpar quality," he added.

On the topic of pricing, Ling said that "with the recent virus outbreak and the political situation in Malaysia, business inevitably has been effected. What with China having stopped production earlier, we have had difficulties procuring stocks for our customers. However, as WY works with various suppliers from around the world such as China, India, Turkey, Germany and Italy, we are still able to provide our customers with their spare parts, faster than anyone else in the market. We are not greatly effected and our business is operating as usual."

As many businesses around the world are affected by the outbreak, Ling concluded that "it was an unavoidable situation. We have explained the current situation to our customers and most of them understand our situation. I hope that this pandemic calms down soon and businesses will resume as usual." ■

ASIAN **BUSES**



SUBSCRIPTION FORM

Personal/Company details

Mr/Mrs/Mdm/Ms :

New I/C No :

Company :

Address :

Tel no (O) : (HP) :

Email :

I hereby enclose RM Cheque.....

being made payable to Asian Trucker Media Sdn Bhd

4 issues RM40

6 issues RM60

Mail/fax this form to:

Asian Trucker Media Sdn Bhd (902834-K)

8th Floor, West Wing,

Menara Rohas Perkasa,

50450 Kuala Lumpur.

Fax no : 03- 2719 5588

Pei Tel Launches Free Online Platform for Tracking and Administration



An opportunity to test the features of tomorrow and contribute your own needs today: pei tel Communications GmbH, based in the city of Teltow, near Berlin, is now offering PTCarPhone 5 and 6 users a way to actively participate in the further development and evolution of the Bridge online platform. The administration interface can be used to manage all of the devices installed within a fleet remotely. The interface features a clean, user-friendly design. It can be used to do things like import a new phone book or contacts into one or more models, use various tracking functions, and change device settings. Potential participants who are interested in helping to further develop the online platform can now register for the early access program at <https://bridge.peitel.de> to be among the first to try out new functions and provide feedback to help shape the further design process.

"We want to make our online platform even better. Our primary interest, of course, is in the needs and experiences of users – after all, they are the ones who are best able to judge which features we can use to support them in

their day-to-day work," says Stefan Hübner, a product manager at pei tel. The Bridge online platform offers a convenient way to manage all of the car phones installed in a fleet centrally. All that is needed to access the platform is an Internet-capable device such as a computer, smartphone, or tablet. "Those who choose a contemporary car phone from pei tel today can use our online platform in full and without additional costs at the same time. In this way, Bridge already constitutes real added value for our customers," Hübner says. He is also careful to point out that the online platform will be subject to ongoing further development and evolution in the future as well, with new features being added and adjustments to accommodate user requirements being made on an ongoing basis.

The professional car phones in the PTCarPhone series have numerous telematics performance features alongside excellent reception and voice quality. An external antenna ensures outstanding signal recognition while reducing the likelihood of disruptions. Voice quality in hands-free mode is also typically much better than that of Bluetooth solutions. Like the previous model, the PTCarPhone 6 features six programmable digital in/out (I/O) ports, each of which can be configured separately – including remotely, using the Bridge online platform. The platform can be used to manage and control various external devices remotely, for example. The new PTCarPhone 6 Series now also marks the first time pei tel has offered all models as 4G versions. The new car phones can be used for Voice over LTE (VoLTE) calls or as wireless Internet access points (hotspots) for other devices. Beyond that, all devices in the PTCarPhone 6 series now feature a GPS position location function for the first time, which can be used for various telematics functions, such as tracking. The Bridge online platform makes it possible to display all systems that are installed in a handy map format. ■



Launched: Conti CoachRegio


Continental launches new tire line Conti CoachRegio for intercity buses

Continental, the technology company and manufacturer of premium tires, has launched a new tire line for intercity buses, named Conti CoachRegio. The new tire line offers reliable and safe touring between cities and villages under variable speed conditions, excellent handling and high mileage on hilly and winding regional roads. The Conti CoachRegio line includes an all axle fitment tire as well as a dedicated drive axle tire. The new design fulfils the needs of fleet customers who operate in short distance travel and intercity transportation in general as well as those who operate tourism buses, tour buses, school buses or workers shuttles. The new tire is available as Conti CoachRegio HA3 295/80 R 22.5 for all axles and as Conti CoachRegio HD3 for the drive axle. The latter will also be available from Q4 2020 as ContiRe CoachRegio HD3, manufactured using Continental's hot retreading solution, which provides multiple service lives thanks to durable and robust casing.

Due to its "Three-Peak Mountain Snowflake" marking (3PMSF), the Conti CoachRegio drives smoothly under all weather conditions in all seasons, whereas its durable and robust casing delivers a load capability of LI 154/149, currently the highest available for the drive axle in the coach and intercity segment. Regarding EU Label values, both tires are rated "C" for fuel efficiency and "B" for wet grip, with a rolling noise of 71 dB for the HA3 and 73 dB for HD3 (both with one soundwave).

"With this new tire line, we overcame the technological challenge of developing a tire using a balanced compound to increase safety and mileage that also features low rolling resistance performance for regional bus applications. With the Conti CoachRegio, we introduce efficient tires that save fuel, last longer and offer better handling as well as comfort without compromising on the most important requirement—safety" said Lutz Stübner, Head of Product Management for Continental truck and bus tires in Europe, the Middle East, and Africa.

The balanced compound for traction and mileage provides an innovative combination of rubber polymer and strengthening filler materials. A special, functionalized rubber and a new type of carbon black ensure high mileage with an excellent rolling resistance while at the same time offering superior wet handling and good dry grip.

When it comes to pattern design, the Conti CoachRegio HA3 has full-depth siping technology for good wet and winter performance, with straight grooves in the outer ribs for structural stability as well as zig-zag inner grooves for optimal performance against stone retention. These characteristics result in better cornering stability and quiet rolling, ensuring high comfort for the passengers. The Conti CoachRegio HD3 also features a new tie-bar shoulder design that increases robustness and minimizes damage from kerb impact, while the full-depth 3D sipes. 





In addition to spun-bonded fabric plant, a recycling plant has also been built where edge trim and rolls of defective material resulting from production are reprocessed into granulate and reused in the process. As a result, the facility is nearly waste-free and highly sustainable.

MANN-FILTER air filters made from recycled plastics

MANN-FILTER air filters made from recycled plastics make another significant contribution towards the conservation of resources. One square metre of C 24 005 filter medium contains recycled plastic from about two 1.5-litre PET bottles. Moreover, thanks to its high dirt-holding capacity the air filter only requires 30 percent of the filter media surface area of traditional air filters with cellulose media. Further air filters using the innovative medium are currently in development and will be available soon.

MANN-FILTER packaging made from recycled fibres

The global filtration expert also places an emphasis on sustainability with its MANN-FILTER packaging: Each green-yellow box consists of about 80 percent to 95 percent recycled fibres. For the European market, more than 4 800 filter elements are available for over 48 000 vehicles and machines, including more than 12 000 cars and transporters, more than 9 100 lorries and buses, nearly 1 000 motorcycles and 25 500 applications in off-highway vehicles and industry.

FSC-certified production site for sustainable forestry

By using environmentally friendly filter media in its air filters, MANN+HUMMEL has already been committed to sustainable forestry for many years. In addition to complying with technical specifications, the company strives to operate in a sustainable and environmentally friendly manner. For this reason, MANN+HUMMEL has therefore had its production site in Zaragoza certified pursuant to the guidelines of the Forest Stewardship Council (FSC) so that it can manufacture products that contain wood from certified sources.

CO2 savings

By using modern lighting (LED) and intelligent lighting control, switching compressors and other measures, MANN+HUMMEL was able to reduce its CO2 emissions by around 3 300 tonnes in 2018. All these measures aim to continually reduce the CO2 footprint of MANN+HUMMEL and all aspects of the value chain and to ensure that natural resources are used responsibly. ■



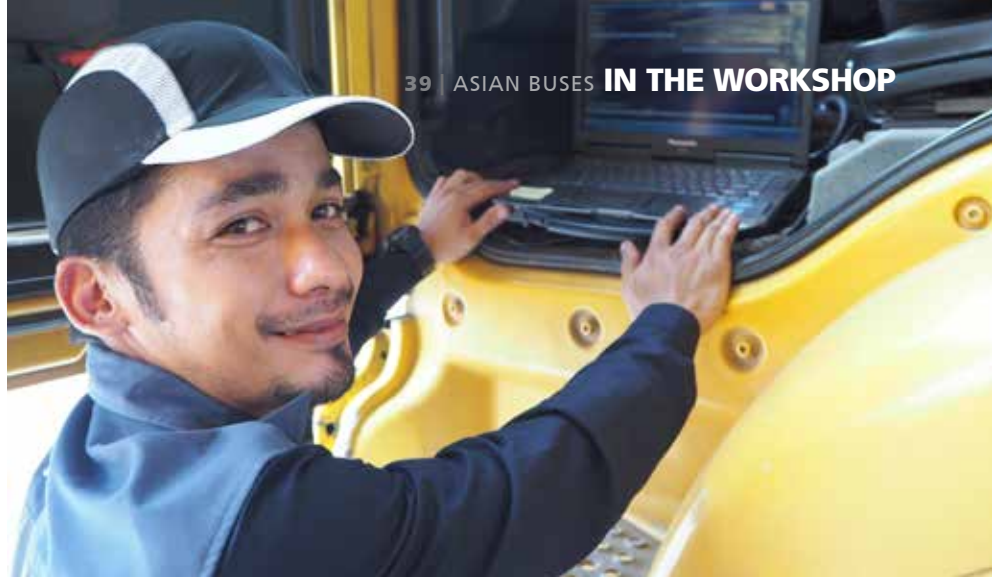
Sustainable products from MANN-FILTER

With its MANN-FILTER premium brand aimed at the independent automotive spare parts market, the filtration expert MANN+HUMMEL not only offers innovative solutions for clean mobility, but also provides sustainable filters and packaging manufactured with resource-saving methods.

Spun-bonded fabric plant increases material and process energy efficiency

The world's only spun-bonded fabric plant is being used to produce synthetic filter media for MANN-FILTER at its site in Marklkofen, Bavaria. The combination of spun-bonded fabric production processes and integrated furnaces for thermally bonding the non-woven material is new compared to previously applied processes such as melt blowing. The new production method enables annual process energy savings of up to 70 percent compared with current production techniques. This amounts to a CO2 reduction of more than 4 000 tonnes per year.

Digitalisation in Public Transport: Predictive Maintenance of Transport Assets



Digitalisation is influencing the way in which public transport operators maintain their assets. Smart systems, which often use artificial intelligence (AI), can predict when transport resources will break down or need renewing. This means that we are moving towards zero failure public transport systems.

Maintenance of Public Transport

Traditionally, the maintenance of public transport resources has been achieved by inspection and protection of transport devices and equipment. The time between maintenance has been defined based on observations and best practices however in many cases resources would be replaced too early, in order to avoid failure which could lead to higher costs. Assets here can mean any tool or public transport system such as a ticket machine, bus, tram, rail tracks etc.

Digitalisation in Maintenance of Public Transport

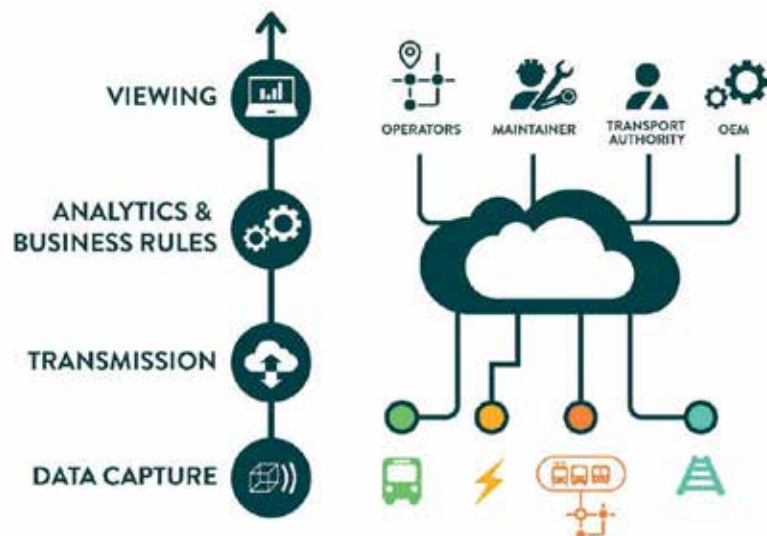
Nowadays, new technologies are increasingly impacting the transport business. AI and other data processing tools allow for intelligent and rapid data interpretation into meaningful information therefore leading to a transformation in business planning and maintenance activities. Smart asset management is possible with systems which can predict when a transport resource might break down, making it possible to plan and execute maintenance activities for each specific asset when they are actually needed.

Zero Failure System

Such predictive maintenance of assets can be the first step to a zero failure transport system. Imagine no 'out of order' buses on the streets and perfectly working ticket machines

when you're in a hurry on your daily commute! The main benefits of such systems are much lower down-time and costs thanks to the constant checking of equipment state and 'health' by the intelligent systems.

Through four steps: data measurement, data transmission, data analysis and based on that, prognosis with the use of algorithms and statistical data, maintenance predictions will become easier and easier to make. This process utilises data from different sub-systems, which is captured and transmitted to the cloud where it can be analysed and presented to different stakeholders for decision-making purposes.




Four-step asset maintenance prediction

Implementation of Predictive Maintenance

Public transport companies should take a strategic decision to move towards predictive maintenance model. The digitalisation can only be achieved if businesses clearly define their goals for predictive maintenance systems: what they would want to achieve, for example cut maintenance costs and extend the life-span of transport assets. Furthermore, the communication of these benefits needs to be clear in order for investment in these systems to be made.

Of course, technical, economic, and commercial challenges can also be faced during predictive maintenance implementation, however in the end, the benefits of such systems outweigh the costs.

This article is a short summary of the Digitalisation in public transport: Implementing Predictive Asset Maintenance Knowledge Brief by UITP. 

Wheel Alignment of Buses – Special Considerations

Bus alignment should be done on a fully assembled bus and not on the bare bus chassis prior to the bus body being built up on it. This is because the weight of the bus body will affect the wheel alignment parameters. Also because the bus body should be used as the wheel alignment reference as the following explanation will show.

All alignment systems have their working principle but one thing they have in common is that they have a reference line in reference to which the axles and wheels are aligned. For trucks with a chassis frame, it is logical that the appropriate reference is the chassis frame centerline. However, different alignment systems use different approaches to derive this chassis frame centerline. Some systems use the geometric centerline derived from axles center-points as the reference. If the axles are installed without any offset, the geometric centerline coincides with the chassis frame centerline.

A bus is built up from a bus chassis frame on which the bus body is assembled. In some bus design, the chassis frame may need to be cut and re-joined and then the bus body built over it. Typically, when a customer orders a bus, the OEM manufacturer delivers the bus chassis to the bus body assembler to build the bus body onto it according to OEM and the customers' requirement.

For a bus then, in addition to a chassis frame centerline and a geometric centerline, there is also a bus body centerline as shown in Figure (1) below.

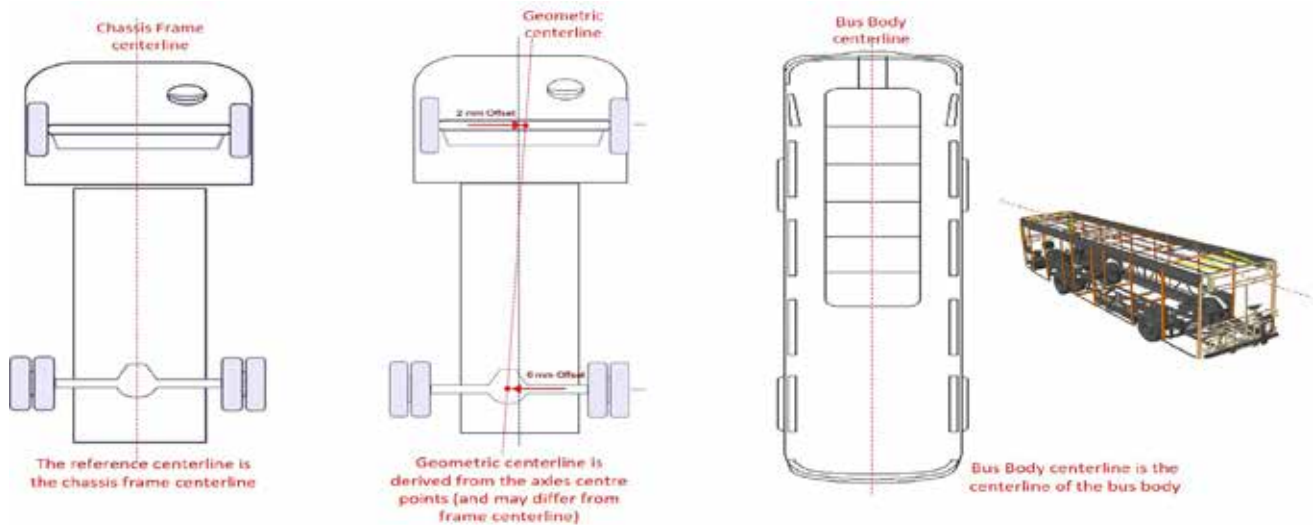


Figure (1)

Note that if the bus body is built exactly symmetrical and square to the chassis frame centerline, then the bus body centerline is the same as the chassis frame centerline.

But, if the bus body is built somewhat skewed on the chassis, then the bus body centerline and the chassis centerline will differ. In this case, if the bus chassis frame centerline is used as the reference line and the wheels are aligned to it,

the bus will appear to dog-track on the road, as shown in Figure (2). With its length, a dog-tracking bus poses a danger to other road users especially in town operations with its narrow roads and heavy traffic.

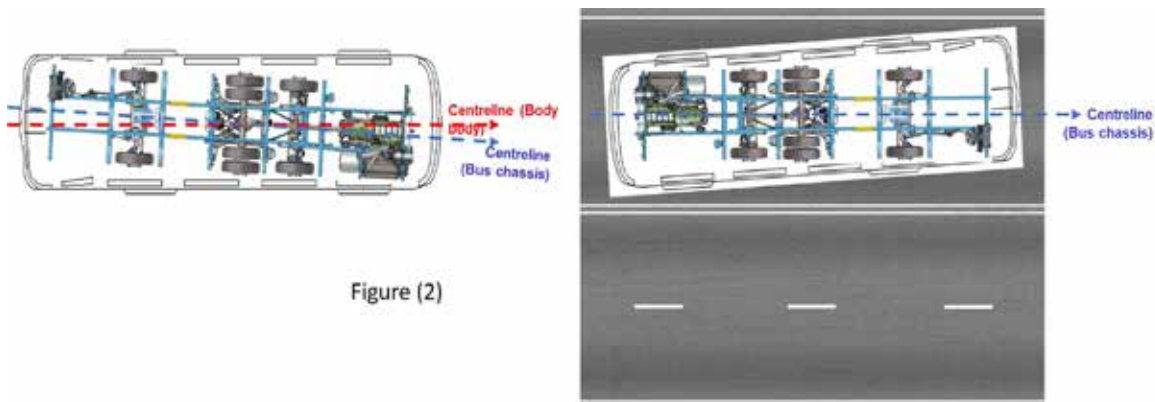



Figure (2)

Now if the bus body centerline is used instead and the wheels are aligned to this reference line, the bus will drive straight on the road, as shown in Figure (3). The bus chassis frame will be at an angle to the direction of travel but being overlaid by the bus body, this will not be a problem. However, in aligning with the bus body centerline, more work needs to be done as not only the front wheels but also the drive and tag axles must be aligned square to this reference. The steering box too must be centered to this reference line to match the straight-ahead position of the front wheels.

So, for buses the choice of alignment reference can be summarized as follows:

- If Bus Body is NOT Symmetrical about Bus Chassis - use Bus Body centerline
- If Bus Body is Symmetrical about Bus Chassis - use Bus Body centerline or Frame Chassis centerline
- Either way, the Bus Body Centerline can be and should be used in both cases.

Note that geometric centerline is not suitable for aligning buses. As for a articulated bus, it must be aligned as a whole unit to ensure that the front and rear carriages are aligned to one another symmetrically. 

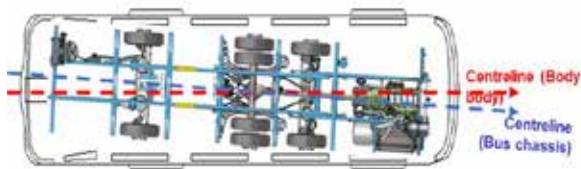
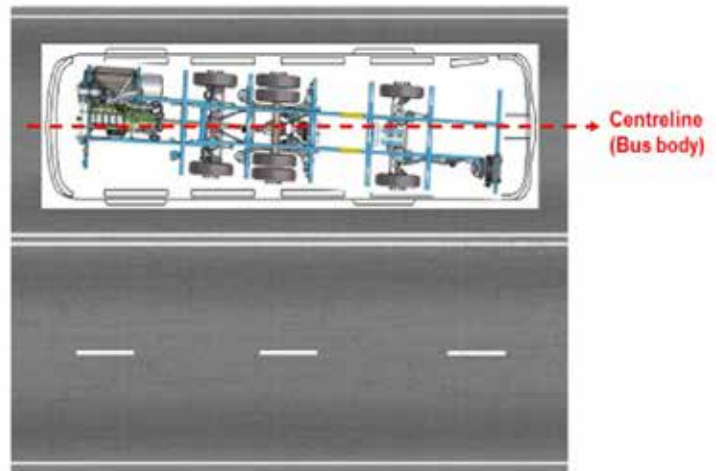


Figure (3)



SPECIAL OFFER FROM ASIAN TRUCKER!

Books dedicated to wheel alignment, more so on wheel alignment for commercial vehicles, are very rare indeed. You will not find them in bookstores. Wong Thiam Boon has poured decades' worth of experience into this book and you can now buy it from Asian Trucker for a special price.

If you want to learn more about how to reduce the cost of operating your fleet through correct wheel alignment, then wait no longer and grab a copy of this practical guide book.

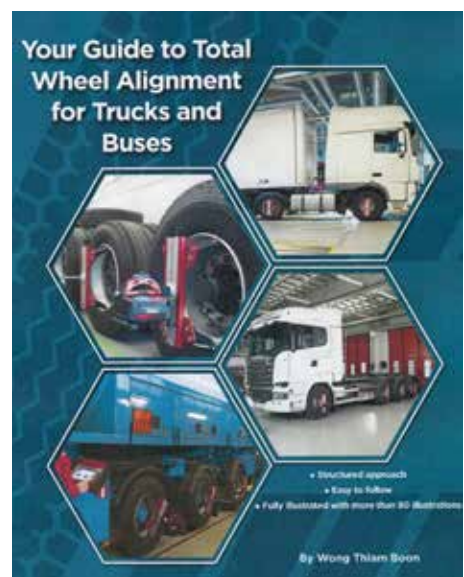
RM 120.00 or SGD 40.00 + Postage
Discounts are applicable for bulk orders of five copies or more.

"This practical and resourceful book will be an asset to any fleet operator or workshop that wants to improve the performance of commercial vehicles. It is TB Wong's experience of decades working with wheel alignment systems that shines through and makes this a must-have item for anyone that is serious about their transportation business. The industry had to wait far too long for a resource like this and I am excited to see TB Wong's knowledge now being available to the market."

Stefan Pertz,
Editor, Asian Trucker Malaysia
Editor, Asian Buses

Available from Asian Trucker. Order via info@asiantrucker.com

**ASIAN
TRUCKER**





Warehouse of Brands

With three warehouses in the group of companies, the goods held at RAAPI is worth approximately RM10 million in total value. The main spare parts warehouse sits across 17 360 square feet of land along Jalan Kapar in Klang. To support the range of vehicles that is carried by Sendok Group, mainly CAM (for light duty commercial vehicles) and Sinotruk (for heavy duty commercial vehicles), this warehouse stocks and stores medium-to-fast-moving items that have a high inventory turnover. These products that are in high demand include, but are not limited to: filters, lubricants, brake pads, and clutch brakes.

The second warehouse under RAAPI is reserved for slow-moving items that are usually larger in size, such as vehicle cabins and panels. These items have a lower inventory turnover as they do not break down as easily. The third warehouse has been reworked for the preservation of items that require optimum storage conditions, such as vehicle tyres that require protection from the sun.

At Your Service, Near and Far

To cater to dealers outside of Klang Valley, RAAPI has established their presence via their service network that spans Peninsular and East Malaysia. With over 65 authorized dealers across the country, RAAPI has made it easier for their out-of-state clientele by placing stockists in customer-concentrated regions such as Johor, Kuantan, Penang, Terengganu, Sabah, and Sarawak. The company also has plans to increase their stockists in all regions in order to better serve their dealers as well as their respective customers. By having their service accessible across the country, dealers and customers alike can be confident that they will be well taken care of.

The aftersales service that is provided by RAAPI also includes a 24/7 hotline that is accessible via both WhatsApp and call, and an e-commerce business platform on Lazada and Shopee. These two initiatives were recently launched by Sendok Group in 2018, and feedback on these services has been nothing short of positive.

Wesley Gwee, Senior Executive, Business Development at RAAPI, tells Asian Trucker that the company runs

Sendok Group's RAAPI Spares Offers Top Quality for Customers

With over 30 years of experience in the spare parts industry, Sendok Group once again finds a way to satisfy customers' needs.

As the newest subsidiary to be incorporated under Sendok Group, R&A Auto Part Industry (M) Sdn Bhd (hereinafter referred to as RAAPI) operates in the wholesale distribution of commercial vehicle supplies. Before it was established in April 2019, RAAPI served as the sole spare parts department for Sendok Group for more than 10 years. Along with the other divisions and companies that are involved in the remanufactured and used spare parts trade under Sendok Group, RAAPI was set up for the purpose of supporting the aftersales service in the commercial vehicle spare parts sector.



a biannual check on its dealers and fleet customers to receive feedback on the products that they provide. "Aftersales service is important, and whatever we do, the customers are always on our mind. We need to keep on improving ourselves to make sure we provide them with products and services of the best quality."

For the People by the People

The workplace culture at RAAPI is greatly fostered by the good rapport that is shared amongst every individual in the organization. Gwee says that the team members and employees are Sendok Group's biggest and most important asset, with many of them having already been with the Group for more than 20 years. The daily morning routine at the main warehouse starts at 8:30 a.m. whereby everyone in the organization is gathered in the courtyard and participates in a group exercise for five minutes to kick off the day at work. This is also the time where they are encouraged to bring up announcements or concerns in the workplace or even in their personal lives that they wish to share about.

Digital-Ready Traditions

Even after ten years of experience operating as a spare parts department, RAAPI is continuously making efforts to improve the systems of the warehouse where there is a need to. To maintain a positive work environment, RAAPI has adapted the Japanese 5S System, a workplace organization method that adopts five Japanese words—Seiri (Sort), Seiton (Straighten), Seiso (Sweep), Seiketsu (Standardize), and Shitsuke (Sustain). According to Gwee, the visual management system has shown to have a powerful impact on the organization's workflow and efficiency, cultivating an atmosphere that is well rounded.

In keeping up with the times, RAAPI is also in the process of translating that very same level of efficiency and organization onto the digital platform. With the organization having started out the "traditional way," according to Gwee, the workplace productivity levels can be further improved on through the

digitalization of the existing analog systems. To put this transition into effect, RAAPI has started making use of an IT management system that serves as a digital catalogue of the inventory at the warehouse that is accessible not only from the desktop, but from the mobile phone as well. Venturing into the digital avenue, RAAPI is confident that the newly implemented IT solution will prove to ease business transitions between dealers and between customers.

A Growing Ecosystem

With a mission to provide quality products and services to dealers and customers while offering competitive prices that are at the same time reasonable, RAAPI is constantly on the lookout for both local parts manufacturers and international suppliers in order to provide cost-effective alternatives of equal quality. "We try to localize some of the products that can better adapt to our Malaysian environment." For instance, RAAPI has partnered up with German belt manufacturer Optibelt to develop a belt that is well suited for Malaysian conditions.

Adding to the array of spare parts that the warehouse currently carries, RAAPI will also start distributing batteries by April 2020. With that, Gwee is looking to keep the ball rolling with the distribution of other types of products. In collaboration with Michelin, a French tyre manufacturer, RAAPI has also developed a tyre that is used on CAM Vans by the manufacturer. But the expansion does not stop there, as business plans to delve into the distribution of light duty vehicle accessories will also kick in by the end of 2020. These light duty accessories would be useful for companies that wish to modify their vans for road-based commercial tours. RAAPI also carries lubricants under the CAM brand. The specially blended lubricant is distributed under the company's house brand and is used across the Group's authorized server network to ensure consistent and optimum vehicle performance. "Because we are a system ourselves, we want our dealers to know that they can get anything and everything vehicle-related from us." 



Fuel Filtration

In order to maintain an engine's performance over a long duration of time, the fuel system must be protected against contaminants such as dust, abrasion or water. Fuel filters prevent the ingress of contaminants into the injection system and the combustion chamber.

Today, high-performance multigrade filter media are used. These can be designed to be fitted in the tank unit or as spin-on filters, filter units or "classic" in-line filters. Fuel filters are generally installed between the mixture preparation unit and the fuel tank. In order to meet the high requirements of modern engines with regards to fuel cleanliness,

modern filters must be capable of filtering out 95 – 99.5 % of particles 4 µm in size.

In Germany, for example, a diesel fuel cleanliness of 10 mg/kg must be achieved. In countries outside of Europe, this limit is often significantly exceeded.



◀ Spin-on fuel filters are available in the standard design, as well as in a wide range of special designs. Image: Hengst



◀ Fuel filter inserts, such as the Energetic® insert from Hengst, are located in a housing integrated in the engine. When the filter is changed, the housing remains attached to the engine.



◀ Spin-on filters for vehicles manufactured by the South Korean brands Hyundai and Kia (Hyundai Motor Group). The filter medium features a two-stage filtration system. The first barrier for contaminants and water is made from a cellulose-based medium, while the second barrier is made from a water-repellent mesh to remove residual water particles. According to the manufacturer, the guaranteed filtration efficiency is 99.6 for particles in the 4-µm size class.. The water separation is greater than 90 percent. Image: UFI Filters

▲ In-line filters come in the form of mesh or paper filters and are installed directly in the fuel line. They are available in a wide range of designs. The filter housing is made of aluminum, sheet steel or synthetic material, depending on the application. When the filter is changed, the workshop professional replaces the entire line filter. Image: Hengst



▲ Replaceable fuel filters for diesel engines, such as the one shown here for the Honda Civic and CR-V, are engineered as individual replaceable elements. Other designs can also feature additional functions, such as a water drain screw, connections for the fuel heating system and a water level indicator. Image: Mahle

In modern diesel engines, protection of the high-pressure fuel injection systems is crucial. High-pressure pumps, control valves and injection nozzles are subjected to heavy loads. The fuel is injected at pressures of up to 2 500 bar, meaning that even very small particles of dirt or drops of water can cause, and in the worst case scenario, can even result in a system failure.

These components are lubricated using the fuel exclusively, which is why they react in such a sensitive manner to such small contaminants. The high-pressure pumps and the injection nozzles have very tight fittings. The higher the pressure, the cleaner the fuel must be. Particles in the fuel can have an effect similar to bullets when under high pressure. This can result in internal leakages with a loss in the injection quantity, through to a total failure of the injection system.

In accordance with Euro 6 provisions, modern diesel filter modules must guarantee a filtration efficiency of at least 96 percent for particles up to 4 µm in size. Biodiesel fuels can be even more problematic, since these are often heavily loaded with particles. Therefore, the requirements placed on the filter media used in diesel fuel filters are particularly high. They are made from special paper or nonwoven material.



Are we Training Bus Captains in the Right Skills?

There is no argument with the need to have a skilled workforce in general and that obviously includes bus captains. The better trained drivers are, the more profitable a fleet. There is a proven connection between driving skills and fuel savings, for instance. Many set aside budget and time to train their workforce.

Is That All?

Bus captains need to be, first and foremost, good drivers. To obtain a driving licence, one has to prove the ability to safely manage the vehicle in a number of situations. From there, bus captains will build up their skills. However, in most cases, it would be about driving skills. If we talked about truck drivers, I would almost stop here as efficient and safe driving are about the most important skills for truckers. When we board a bus though, there is personal interaction and the communication and behaviour of the driver determines how satisfied we are with the ride.

Beyond the Drive

Several bus captains have told us that they sometimes need to be tour guides or assist people when they have special needs. Friendliness and the ability to handle unruly passengers are other needed skills of a bus driver. However, I have yet to hear that a bus captain has been sent to an etiquette course or is trained in several languages to be able to assist tourists who may not be able to get to grips with the ticketing system or are lost on the way to their next destination.

Training Schedule

I would imagine that bus drivers would also appreciate that they are being upskilled in departments other than driving. Who doesn't like a challenge or some new input? Communication skills training may also be a reminder to

drivers that it is the passengers who are ultimately paying for their wages and if these people are happy, then they may use the bus service more often. Obviously, this all goes both ways as the passengers may end up with a different perception of their driver, giving him the thumbs up instead of just passing by an anonymous face as they go about their day. Perhaps not everything can be done, but just starting would be a good first step.

The Next Move

Some bus captains make the move to a management position, running workshops, managing the schedules of the buses or running other departments related to the movement of people. Here, driving skills may not be as important. When such transition takes place, management skills and interpersonal communication are key. If bus drivers already had a whiff of these skills, they will most likely be better in managing their new tasks and coping with the change of environment.

Improved Flexibility

I heard that one of the taxi companies in Singapore that also operates buses - there is a driver's shortage right now because they can't bring in foreign drivers - are considering having their taxi drivers drive buses. It could also go the other way. Wouldn't it be nice then to have bus drivers that are trained in the art of making just one passenger feel comfortable? In view of the development in the autonomous vehicles, one may want to think about the training needs of bus captains some 10 years ahead: What are these people going to do if the bus doesn't need a driver anymore? ■

Cummins' approach to sustainability and its efforts to build a more inclusive work environment for women were recognized recently by four different organizations

The company was named to Barron's magazine's list of the 100 Most Sustainable Companies in the United States and to Forbes' and Just Capital's Just 100 – Companies Doing Right by America.

Cummins also was named to the 20th annual list of America's Top Corporations for Women's Business Enterprises, honouring corporations for their supplier diversity programs. In addition, the company was named to the

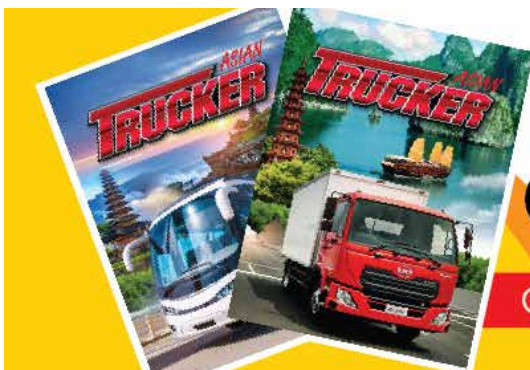
National Association for Female Executives' Top 70 Companies for Executive Women, which will be featured in the April/May issue of Working Mother magazine.

"If sustainability once seemed like a hobby for a group of eccentric businesses, it's now viewed by many corporations as mission-critical," Barron's said in releasing its list.

Meanwhile, Subha V. Barry, president of Working Mother Media, said companies on the list of

best places for female executives "continue to pave the way for the advancement of women."

Cummins has long taken a broad approach to sustainability, including not only the environment but also community engagement, safety, diversity and inclusion, innovation, and financial success. Increasing opportunities for women in and out of the company is one of the key goals of Cummins' diversity and inclusion efforts. 



Interested in our Country Specials?


Contact Carol at carol@asiantrucker.com

Daimler Divides Divisions

The Daimler Group has separated the car and van and the truck and bus businesses in to two new subsidiaries, taking effect at the end of October 2019. Three legally independent stock corporations now operate under the parent company Daimler AG: Mercedes-Benz AG is responsible for Mercedes-Benz Cars & Vans. All Daimler Trucks & Buses activities are conducted at Daimler Truck AG. Daimler Financial Services, which has been legally independent for many years, was renamed Daimler Mobility AG in July, and it is also responsible for mobility services. With these three subsidiaries, Daimler is strengthening its customer focus and increasing the Group's agility. Daimler AG continues to be the only listed company. As the parent company with approximately 6 000 employees, it will be responsible for governance, strategy and control functions, and will provide Group-wide services.

Mercedes-Benz AG and Daimler Truck AG are German stock corporations subject to codetermination and are

based in Stuttgart. As required by law, the supervisory boards of the two companies will each comprise 20 members, ten representing the shareholders and ten representing the employees. Daimler Truck AG is responsible for the global truck and bus business. Approximately 100 000 employees worldwide develop, produce and market products and services from Daimler Trucks & Buses. With its subsidiaries, Daimler Truck AG is one the world's largest manufacturer of commercial vehicles.

"Our customers are at the focus of everything we do: We work for all who keep the world moving. We can only be successful if we make our customers successful – and we do this with products that combine two things: local market requirements and our globally leading technologies," stated Martin Daum Chairman of the Board of Management of Daimler Truck AG. 

Put your
business on
free speed.

Advertise in Asian Buses.

ASIAN BUSES

An ad in Asian Buses reaches the best, the brightest and the most successful decision-makers in the road transport business in Asia today.

Contact us today on +60 16 521 9540 or stefan@asiantrucker.com to speed up your business.


www.asianbuses.com



Bendix, Part of Knorr-Bremse Group, to Acquire R.H. Sheppard from WABCO

WABCO Holdings Inc. ("WABCO") (NYSE: WBC), a leading global supplier of technologies and services that improve the safety, efficiency and connectivity of commercial vehicles, today announced it has entered into a definitive agreement to sell R.H. Sheppard Co., Inc. ("Sheppard") to Bendix Commercial Vehicle Systems LLC ("Bendix") for \$149.5 million. Sheppard is an industry-leading supplier of steering technologies for commercial vehicles. Bendix is an indirect subsidiary of Knorr-Bremse AG, a leading global supplier of braking systems and other safety-critical rail and commercial vehicle systems.

WABCO is divesting Sheppard in connection with the Antitrust Division of the U.S. Department of Justice's review of the proposed merger between WABCO and ZF Friedrichshafen AG ("ZF"), and pursuant to the settlement order approved by the U.S. District Court for the District of Columbia.

The Sheppard transaction is subject to closing conditions and regulatory approvals, and is contingent upon the closing of the ZF acquisition of WABCO, which is expected in early 2020 following receipt of remaining regulatory approvals. 



Bridgestone Notice of Office Relocation

(Singapore) Bridgestone Tyre Sales Singapore Ptd Ltd has been relocated to the following address, sharing the same office space with the company's regional headquarters – Bridgestone Asia Pacific Pte. Ltd.


The new office address is as follows:

Bridgestone Tyre Sales Singapore Pte Ltd 83
Clemenceau Avenue #08-01/ 08, UE Square
Singapore 239920

Tel: 65-6540 4008

Email: enquiry.singapore@bridgestone.com

Website: www.bridgestone.com.sg

This new integrated office allows the company and its regional headquarters to allocate resources in a more efficient manner and focus on providing the best products and services for consumers and customers in Singapore. 

Need to Sell Your Bus?

*Let Us
Help
You!*

Call:
012 496 2203
aila@asiantrucker.com.my

*list on our
website for only
Rm50*



MEET YOUR MONEYMAKER

Introducing the Volvo B8R



We are proud to present the Volvo B8R, the successor to the legendary best-selling Volvo B7R. It was developed with your business in mind, and with the focus on long-term profitability and total cost of ownership. It features our most fuel-efficient

engine ever and uptime comes as standard. The quality is built-in from the start, and with our worldwide service network you can rest assured your vehicles and business are always in good hands. Intercity or coach operations? The Volvo B8R is ready for every application. Making the new B8R a true moneymaker, and the safer choice. Explore more at volvobuses.com.my

For sales enquiry, please contact **Vikneswaran Subramaniam** Mobile: +6012 606 6586

VOLVO B8R

Made to just keep running

Volvo Buses. Driving quality of life





SCANIA ECOLUTION MAKES THE BEST BETTER

Konsortium E-Mutiara Berhad, a good company that has reduced 165,745 kg of CO₂ so far with Scania Ecolution. They were the first to sign the Scania Ecolution Agreement in Asia for their two brands – E-Mutiara Premier and Musafir Economy.

Scania Ecolution is a partnership between Scania and customers like Konsortium E-Mutiara Berhad that aims to reduce fuel consumption and CO₂ emissions.

For more information about Scania Ecolution, call **+603 7945 1000**, email **smyenquiries@scania.com.my** or visit **www.scania.com.my**

[fb.com/scania.malaysia.sdn.bhd](https://www.facebook.com/scania.malaysia.sdn.bhd)

[linkedin.com/company/scaniamalaysia](https://www.linkedin.com/company/scaniamalaysia)

[instagram.com/scaniamalaysia](https://www.instagram.com/scaniamalaysia)

SCANIA

Scania (Malaysia) Sdn Bhd 20000101599 (518505-D), No.1 Jalan Tiang U8/93, Bukit Jelutong Industrial Park, 40150 Shah Alam, Selangor D.E, Malaysia

Scania pursues an active policy of product development and improvement. For this reason the company reserves the right to change specifications without prior notice. Furthermore, due to national and legal requirements, some accessories may not be available in local markets. For further information in these respects, please contact your local dealer or visit www.scania.com.my