Commercial Vehicle Market Update
January 2018

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ABOUT US

Knibb, Gormezano and Partners (KGP) provides consultancy services to the automotive and related industries worldwide. Since our foundation in 1988 we have helped over 500 companies worldwide grow and globalise. Our extensive global network is constantly being expanded to meet our customers requirements.

SECTORS

- Light Vehicles (Cars and LCVs)
- Heavy Commercial Vehicles & Trailers
- Off-Highway and Industrial Vehicles
- Tractors and Agricultural Machinery
- Marine
- Components
- Materials
- Aftermarket
- ESP’s

PROJECTS

- Single Client
- Multi-Client
- Special Reports
- North America
- Western Europe
- Central and Eastern Europe
- Asia Pacific
- Latin America
- Rest of World

CLIENTS

- Vehicle Manufacturers
- Component Suppliers
- Material Producers
- Service Providers (OE and Aftermarket)
- Government
- Finance Industry
- Others
KGP’s 7th Briefing Paper examines some of the headlines from KGP’s updated Commercial Vehicle Engine Forecast Summary report.

Looking forward, 2018 is likely to be an interesting year as China, India and Brazil move towards finalising Euro VI equivalent legislation, and the EU is expected to propose CO₂ reduction targets for CVs. We also expect a flurry of activity in alternative fuel development as OEMs seem to have finally shaken off the R&D restrictions from the financial crisis, and legislators at country and local government level take a more stringent view on air quality issues. With oil prices moving upwards again, up 50% in the past six months, fleets and operators are going to be taking another look at fuel consumption.

A relatively quiet 2017 in the Commercial Vehicle segment saw global market growth on the back of China’s rebound. As a result, most global OEMs saw improvements in financial results during 2017. However, the hot topics of Emissions Legislation, Air Quality, CO₂ remain dominant, driving investment in product development and capital expenditure.

Emissions Legislation

- Legislation continues to develop with China, India and Brazil proposing new standards, aligned closely to Euro VI. Adoption of these standards will align global standards at similar emissions levels. However, we see further tightening of NOₓ before CO₂ becomes the priority.
- China is therefore likely to adopt China 6 around 2020, India BS VI in 2020/1 and Brazil Proconve P8 in 2023.

CO₂ and Fuel Economy Legislation

- Legislation driving lower fuel consumption from trucks, and potentially buses, will be adopted globally by 2025, in our forecast assumptions. Whilst the US and China had standards in place there is still no standard in Europe, however, we expect to see this proposed in 2018, and it is already influencing OEMs engine and powertrain developments in advance of its adoption post 2020.

OEM Consolidation and Investment

- Volkswagen truck and bus purchased a 16.6% stake in North American truck manufacturer Navistar in September 2017, after agreeing an alliance in March. The partnership will result in an all-electric medium-duty truck launched by 2019 in North America. The two companies will also collaboratively work on digitisation and connection of trucks and big bore diesel powertrains. The alliance is expected to save the two companies $500 million in the first five years.
- In late 2017 Ashok-Leyland also renewed its technology agreement with Hino. The two have been partners since the 2000s. Ashok Leyland developed its own Neptune engine, but the older Hino engine needs to be upgraded to BS VI standards.
- Weichai has started to grow outside China, notably in Eastern Europe, where it reached agreements with both MAZ of Belarus and KAMAZ of Russia for engine assembly and supply.
- Daimler will start production of the MDEG engine (DD5/DD8) in the US in 2018, following initial supply from its engine plant in Germany. The engine will replace Cummins mid-range engines in Freightliner products primarily.

Alternative Fuels

- Most major commercial vehicle OEMs are investing in alternative fuelled powertrains. Infrastructure for certain fuels, such as natural gas and hybrid-electric are growing quickly to support demand. Global vehicles powered by alternative fuels reached around 200,000 units at the end of 2017.
As a result of the renewed interest in alternative fuels, hybridisation and electrification, there has been an increase in M&A activity. Mahle Powertrain acquired Westport Fuel Systems’ Michigan Tech Centre for $12 million. Engine manufacturers Cummins and Deutz have both acquired companies specialising in electrification with battery company Brammo and marine electrification company Torqeedo, respectively. BorgWarner finished its acquisition of Sevcon, a growing company specialising in CV and industrial electrification technologies with estimated sales of the acquired company to be $60m in 2017. Many joint ventures are occurring with one of interest being the agreement between new start-up Nikola Motor and Bosch, this JV increases Bosch’s activity in the CV market who will help develop hydrogen-electric powertrains. Most recently Federal-Mogul acquired Controlled Power Technologies, a developer of advanced systems for future vehicles. In the lighter commercial vehicle segments, Groupe Renault has acquired Power Vehicle Innovation who focus on converting commercial vehicles to natural gas or electric power.

Other Technologies

Aside from the powertrain, we see development of autonomous vehicle technologies and adoption of digitisation strategies influencing vehicle design and supply chain activity over the next decade. For example Wabco has acquired R.H. Sheppard for $145m, a leading player in steering technologies for the CV market which was completed in September 2017. Leading suppliers will continue consolidation of the supply chain, and integration of other technologies, but these might not always end in success.

Future Trends

There has been a very clear shift in societal pressures on the CV segment over the past 12-24 months. Noxious emissions limits remains a key driver for society, whilst productivity and fuel cost is key for OEMs and their customers, the operators. However we see a convergence of other drivers forcing new product and new technology development, including autonomy and digitalisation that we will be addressing in the light of powertrain technologies in future reports. An overview of the key drivers is given below, all of which are being considered in our market and technology forecasts.

Global Truck Market

During the third quarter truck sales usually falls in comparison to the previous quarter and regains momentum in quarter four. However, this year the truck market has boomed with quarter three sales continuing to grow on the second quarter and full year sales for medium and heavy-duty trucks forecasted to rise 20% on 2016, reaching record levels. This year will mark the first in ten years where there has been a collective growth in truck demand from all regions. China produces just under half of the global volume for commercial vehicles, hence, the global market is primarily driven by this one country. Therefore, the increased demand for trucks can be directly related to the Chinese truck market. Other reasons have also benefitted the truck market with improvements in global economic conditions resulting in increases in industrial production driving truck demand. Oth-

![Figure 1 CV Sales Outlook by Region](image-url)
er regional improvements have also added to the expansion of the truck market with Russia, Turkey and Brazil recovering along with increasing demand for trucks in North America and robust strong sales in Europe. Global truck volumes are expected to fall in 2018 due to the anticipated market correction in China resulting in sharp decline for truck demand. All other regions are forecasted to rise in 2018, but overall global truck sales, on a quarterly comparison to the previous year, will turn negative by the third quarter of 2018.

Global Bus Market

Unlike the global truck market, bus sales fell in the third quarter due to declining bus demand in the UK and India which offset growth in other parts of Western Europe, Argentina, Japan and Korea whilst Brazil and Turkey bus markets are still recovering. Although sales are expected to improve in quarter four, full year sales will be down around 4.5% on 2016’s strong level. Global bus sales are forecast to bounce back in 2018 exceeding 2016’s level to over 385,000 units. Full year bus sales are expected to be 11.8% lower than 2016’s level.

CV Production

Global Commercial Vehicle production is expected to grow 11.4% this year to equal 3.6 million units following on from a strong year in 2016. Production will see a moderate fall by 2019 as the market corrects in China in the second half of 2018 but will continue on a new growth trend from 2020 onwards. China is the largest producer, producing 3 times the amount of India, which is the second largest with just over 400 thousand units. In the engine segment:

- Cummins is the largest engine manufacturer in 2016. They have joint ventures with Tata in India, Kamaz in Russia and DongFeng, Foton and Xian in China, with the latter ending in in 2016. These six companies within the Cummins global network have around 20% of the global market.
- Daimler Group are second largest behind Cummins. Within the Daimler Group are Mercedes, Detroit Diesel and Fuso engine manufacturing companies.
- Chinese OEMs Weichai and Yuchai will lose market share over the forecast horizon due to in-house production increasing. Yuchai specifically are being negatively impacted by the increasing trend for electric buses in China.
- The components sharing between MAN and Scania/International will make them among the top 5 engines manufacturers for commercial vehicles by 2020.

Figure 2 CV Production (000s of Units) by Region 2014-2024
Meet us!

KGP will be attending various industry events in Spring 2018. Contact us to arrange a free consultation on Single Client, Multi-Client and Special Reports at any of the following:

- Future Powertrain Conference - 28th February to 3rd March - West Midlands, UK
- Intermat - 23rd to 28th April - Paris, France
- Integer Europe - 26th to 28th June - Brussels, Belgium

We can also prepare a client specific webinar to introduce our services and provide an industry overview.

2018 Products

KGP’s new Commercial and Non-Road Electric and Hybrid Services launch February 1st. More detail will be posted on our website.

Briefings

KGP’s free briefings are published twice per month covering Commercial Vehicle and Non-Road Mobile Machinery topics. Forthcoming briefings will include:

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References

- Knibb Gormezano and Partners Q4 2017 CV Engine Market Summary Report:- [Click Here](#)
- LMC Global Commercial Vehicle Forecast [Click Here](#)

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