Diesel Myth Buster

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Increasingly stringent environmental standards continue to put the spotlight on diesel's environmental performance. At the same time, alternative fuels and a growing interest in electric vehicles are generating headlines. However, diesel's days as a fuel for commercial vehicles are far from over, although some misconceptions about its performance remain.

It is important to correct these myths to enable an informed debate about fuel options and environmental regulation. Clear-cut data put into a well-defined context benefits everyone involved in the critical dialogue about how to power vehicles in the future. So what are the key misconceptions that need to be addressed?



MYTH: Diesel has lost its appeal and popularity.

Recent conversation around diesel might suggest it has lost its popularity but according to recently published research, 96% of medium and heavy commercial vehicles (over 3.5t) in the European Union run on diesel¹, a figure that will likely come down over time.

The reasons for diesel's continuing popularity in the commercial vehicle sector are clear: compared with other types of fuel it currently has a higher energy content, offers great driving range and fuel efficiency, stronger lowend torque for towing and hauling, is quick to refuel and supports good truck engine durability. Diesel units also remain some of the most efficient combustion engines available. And with the latest technology, they have become cleaner, too.

In fact, the latest Euro VI requirements are the most stringent ever. As well as special filters that significantly reduce particulate matter (PM) emissions, they also feature technology that converts most of the nitrogen oxide (NOx) from the engine into harmless nitrogen and water before it leaves the vehicle. A recent study showed a 93% reduction in NOx emissions for Euro VI diesel hybrid buses compared with Euro V conventional diesel buses².

MYTH: Alternative fuels and engines will replace diesel in the near future.

It is true that biodiesel, natural gas, fuel cells and electricity are all gaining traction. Public transport is a high-profile example. As of March 2019, there were 3,669 hybrid buses, 155 electric buses and 10 hydrogen buses operating in London, out of a total fleet of 9,142³. In addition, the German Federal Ministry of Transport has recently set up a €300 million fund that will see electric buses on the streets of 11 of the country's cities by 2022⁴.

However, in the commercial vehicle sector alternative fuel options have made less headway, especially in the long-haul market; in fact, the number of heavy trucks on Europe's roads is increasing. According to the European Automobile Manufacturers' Association (ACEA) the number of medium and heavy duty commercial vehicles registered across the European Union during the first half of 2019 increased on average by over 16% compared with the same period in 2018, with Belgium, Germany, France and the UK with increases above the average⁵. By law, these vehicles employ the latest engine designs, taking into account the latest Euro VI emission requirements.



MYTH: All diesel fuels are essentially the same. It's really just a matter of finding the cheapest price.



There is a belief that all diesels are the same and price is therefore the most significant criteria for making a purchasing decision. However, all diesel fuels are not equal. For example, many bulk diesel deliveries do not contain detergent additives, and those that do are normally designed to help prevent the formation of deposits on fuel injectors, which otherwise degrade engine power and fuel economy over time. Some diesel fuels are optimised to not only keep injectors clean but also clean up existing deposits. The additional detergency contributes to improved fuel efficiency and may reduce the need for maintenance. Fuel efficiency is important for medium and heavy duty commercial vehicles given the significantly lower miles per gallon consumed compared with light duty vehicles. Given the high cost of long-haul diesel truck engines and the significant investments operators make in their fleets, owners should prioritise quality when choosing fuel, especially if they want to maximise the longevity of their vehicles and reduce costly maintenance.

Diesel continues to play a vital commercial role worldwide.

Diesel engine and fuel technology will continue to evolve, as will alternative options. This will ensure that fleet owners have increasing access to the solutions they need to meet both commercial and regulatory requirements without compromising operations.

ExxonMobil is collaborating with engine manufacturers to develop fuel technologies that help meet the current and future needs of diesel engines. Furthermore, ExxonMobil is supporting the Logistics Emissions Reduction Scheme in the UK, which is working with members to reduce emissions from freight.⁶

However, the bottom line is that diesel remains critical to the commercial vehicle market – now and into the future. Fleet owners should therefore work with suppliers that offer consistently high quality diesel to ensure they get the full benefits of the latest performance-enhancing formulations.

¹Source: https://www.acea.be/statistics/article/report-vehicles-in-use-europe-2018

² Source: Real-World Measurement of Hybrid Buses' Fuel Consumption and Pollutant Emissions in a Metropolitan Urban Road Network, Energies/MDPI, September 2018

³ Source: http://content.tfl.gov.uk/fleet-audit-report-31-march-2019.pdf

⁴ Source: https://www.electrive.com/2019/03/04/germany-releases-extra-e180m-to-fund-electric-buses/

⁵ Source: https://www.acea.be/press-releases/article/commercial-vehicle-registrations-5.8-first-half-of-2019-2.8-in-june

⁶ Source: https://fta.co.uk/media/press-releases/2019/june/bridgestone-and-exxonmobil-recognised-for-support