Bosch engineers focus on brightening the future of diesel

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Credit: Robert Bosch GmbH

Robert Bosch GmbH said its engineers have developed a new diesel-exhaust system that cuts emissions significantly below legal limits taking effect in 2020. Bosch is positioning the diesel technology as a solution to

the NO_x problem.

In turn, anyone who says there is no future in diesel will find no solace in the words of Bosch Chief Executive Volkmar Denner: "There's a future for diesel. Soon, emissions will no longer be an issue."

Diesel critics have had their reasons for concern over diesel. While it emits less CO2 than gasoline-fueled engines, critics point to the technology generating nitrogen oxides, which contribute to harmful smog.

But what about the need to cope with a Plan A if Plan B is not quite ready?

Jonathan Gitlin, *Ars Technica* automotive editor, wrote that "New engine management software is optimized for low fuel consumption at a lower NO_x level. High- and low-pressure exhaust gas recirculation means the engine's air flow management is more finely controlled, coupled with revised fuel injection to reduce transient NOx peaks."

So, can the Bosch technology breakthrough save diesel? *The Insider Car News* made the observation that the "levels of NOx are dramatically cut whether the auto is being driven in urban areas or on motorways, and whether you poodle along or drive like a loon. From 2020, this limit will be cut to 120 milligrams. Equipped with the latest Bosch technology, diesel vehicles will be classed as low-emission vehicles and yet remain affordable."

One thing is clear; diesel as a climate-friendly option has its supporters. "Despite the behavior of the 2015 scandal and its continued fallout, diesel remains an effective tool in reducing total petroleum consumption, and remains a viable part of a larger strategy to reduce oil dependence," said Matt Piotrowski in *The Fuse*.

He said diesel engines have led to environmentally friendly vehicles sold at competitive prices. "Diesel fuel remains a top environmentally-friendly alternative to gasoline because it's one of the most energy dense fuels available with 30 percent more efficiency than gasoline."

One viewer comment in *Jalopnik* also reflected reasons why diesel had its circle of supporters.

"Diesel engines have always had a higher thermal efficiency than gas engines. It's always been the NOx and particle emissions that's been the killer. Newer gas engine designs are narrowing the gap in thermal efficiency, and particle emissions are no longer an issue because of the use of low sulfur fuel. If they can fix the NOx issue, diesel means less carbon emissions for the same amount of work output. For that reason, I hate to see diesel go away."

Bosch said this involved exhaust emissions treatment technology, and "it cuts pollution from health-threatening nitrogen oxides (NOx) to 13 milligrams per kilometre, well below the current legal limit of 120 milligrams," said Reuters.

Editor-in-Chief at *Jalopnik*, Patrick George, had another take on the announcement. "We can all agree efficiency and innovation are good. But I wonder if it's too little, too late for diesel." George acknowledged how "diesel's had a great run." Nonetheless, he said, it might be "time for automakers and suppliers to look to the electric future instead."

In *Automotive News*, Richard Truett, technology and engineering reporter, weighed in. He said, "I will be checking with experts in diesel emissions and engine manufacturers asking them to vet Bosch's latest claims."

More information: www.bosch-presse.de/pressporta …

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