



BAE Systems continue developing hybrid drivetrains

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As CO2 emission regulations for heavy-duty trucks get increasingly stringent, the market struggles to offer economically viable zero-emission vehicles, that are meant to replace current diesel trucks. Transitional technologies could very well now prove to be indispensable in lowering vehicle fleet emissions.

Hybrid powertrains in heavy-duty vehicles can significantly reduce the emissions of conventional diesel trucks, while still offering most of their benefits, like long range and manageable weight. However, widespread adoption has been limited in the past, as the fuel savings alone did not always justify the moderately higher vehicle costs.

But as emissions are becoming increasingly important parameters for new vehicles, hybrid drivetrains could be part of the solution to the issues zero-emission heavy-duty vehicles face right now. An electric motor connected to an internal combustion engine can recuperate energy when braking, additionally reducing brake particle emissions, as well as support the engine when accelerating to let the engine run in

more efficient conditions. The electric motor can even take over for some time and meet pollution-related requirements in lower speed zones, like a more expensive ZEV could.

Recently, BAE Systems, with more than 15 years of experience with hybrid drivetrains, have reaffirmed the advantages in an article, showing that hybrid trucks do have a place in the transition to an emission free future, improving on current diesel trucks, while maintaining most of their advantages and staying on course with electrification.

Read more:

<https://truckandbusbuilder.com/article/2025/01/14/we-consider-the-question-should-hybrid-diesel-electric-drivetrains-be-a-part-of-the-solution-to-reduce-carbon-emissions-by-45-in-new-trucks-by-2030>

picture: BAE Systems