

DME

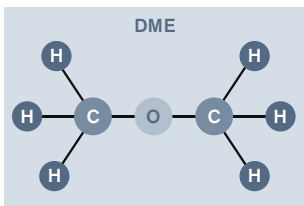
AN ENERGY-EFFICIENT FUEL



From the holistic viewpoint, the Volvo Group regards DME (dimethyl-ether) as one of the most efficient renewable fuels, an alternative with extremely low exhaust emissions. If the fuel is produced from biomass such as black liquor from the pulp industry, DME is carbon dioxide-neutral. With modest changes, a diesel engine can run on DME.

Low emissions

DME is a simple chemical compound with a short carbon chain, which leads to very low particulate emissions during combustion. This fuel also produces low emissions of nitrogen oxides. DME can be produced from fossil sources such as natural gas. It can also be made from various types of biomass, which makes the fuel carbon dioxide-neutral. DME is classified as less dangerous to health and the environment than today's diesel and petrol.

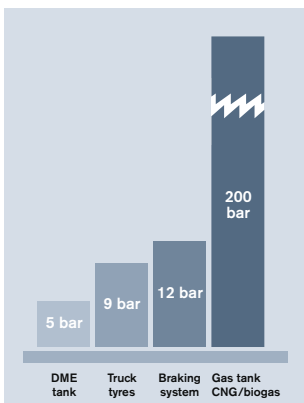


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High energy-efficiency

DME is according to many studies the most energy-efficient renewable fuel, if we take into account the entire chain from production to operation of the vehicle. The production of biomass as a fuel takes place via a gasification technique involving low energy losses. Compared with synthetic diesel, DME is a simpler chemical product and thus cheaper to produce. DME is relatively easy to handle and distribute, the fuel is normally in gas form but turns into a liquid at a pressure of just five bar.

Only modest modifications are required to convert a diesel engine to run on DME. That is why drivelines tailored for DME can be used in virtually all vehicle types that run on current diesel technology.



DME is a fuel that turns into a liquid at relatively low pressure. A vehicle's tyres and braking systems both operate at higher pressure.

The future of DME

DME has good prospects for becoming a widespread fuel since it has other application areas in addition to serving as a vehicle fuel. For instance, it is used as a fuel in households and in industries, and as a propellant in spray-cans.

The crucial factor is the local preconditions for the manufacture and distribution of the fuel itself. DME is closely related to liquefied petroleum gas (LPG) and it is probably this type of market where DME will achieve its quickest breakthrough.

It will therefore be necessary for major players both within and outside the transport industry to interact if DME is to become a major fuel in the future.

The Volvo Group regards DME as one of the main ways ahead when it comes to switching to alternative fuels.

