

Different Fuel Types

Fuel Type	About	Pros	Cons	Applicability	Other comments
Diesel	<ul style="list-style-type: none"> The standard fuel and engine type 	<ul style="list-style-type: none"> Cheap and reliable trucks Widely available Standard for all trucks 	<ul style="list-style-type: none"> High fuel costs. High exposure to rising fuel costs. High emissions of greenhouse gases and particulates. 	<ul style="list-style-type: none"> Effective for the vast majority of operations 	
Biofuels	<ul style="list-style-type: none"> Ethanol based - alcohol derived from sugar cane or other plant material Biodiesel - made from vegetable oil or animal fat 	<ul style="list-style-type: none"> Lower greenhouse gas and particulate emissions compared to diesel Can be often used by a standard truck. 	<ul style="list-style-type: none"> Use can sometimes void vehicle warranties Certain types of biofuels may generate greater greenhouse gas emissions than diesel when production is taken into account 	<ul style="list-style-type: none"> Can be used in most standard diesel engines in limited proportions without the need for additional equipment 	Consult manufacturer before use as upper limits for blends are often specified
LPG (Liquefied Petroleum Gas) CNG (Compressed Natural Gas)	<ul style="list-style-type: none"> Limited application in trucks to date but some OEM models becoming available. 	<ul style="list-style-type: none"> Cheaper than diesel Can offer improved operating costs in the long term. Very low particulate and visible pollution - good for city air quality. 	<ul style="list-style-type: none"> Hardware costs are generally higher. Fuel efficiency not as good as diesel Require frequent refuelling. May not always offer a big improvement in greenhouse gas emissions. 	<ul style="list-style-type: none"> May be useful for transport operations involving short distance driving (e.g. urban deliveries), or in conventional transport operations if used as a diesel hybrid 	LPG and CNG are generally not available as standard options from manufacturers and need to be fitted as an aftermarket feature
Electric	<ul style="list-style-type: none"> Run from energy stored in rechargeable battery packs 	<ul style="list-style-type: none"> Potentially zero emissions if from a renewable source 	<ul style="list-style-type: none"> Expensive Require frequent recharging (range is approx 200km) Debatable environmental benefits if charged using coal-sourced electricity 	<ul style="list-style-type: none"> Currently being trialled in several cities 	
Hybrid Electric	<ul style="list-style-type: none"> Combine conventional propulsion system with on-board rechargeable battery Is essentially an economy measure as it can be used with any fuel types. OEM available hybrids use diesel. 	<ul style="list-style-type: none"> Better fuel economy than conventional engine (use 10 - 14% less fuel) 	<ul style="list-style-type: none"> Expensive Negligible benefit for open-road driving 	<ul style="list-style-type: none"> Local pickup and delivery environment (i.e. stop-start driving) 	<p>Becoming more cost effective</p> <p>Important to maintain at an accredited dealer/service centre</p> <p>Driver training also require</p>