

Overview of Alternative Fuels

Fuel	Advantages	Disadvantages
Biodiesel	<ul style="list-style-type: none"> • Domestically produced • Can be blended in most diesel engines • Reduced emissions of some criteria pollutants • Biodegradable, non-toxic 	<ul style="list-style-type: none"> • Lower energy content than diesel • More expensive • B100 not suitable in low temperatures • Potential engine issues if not used properly
Renewable Diesel	<ul style="list-style-type: none"> • Drop-in fuel for <u>all</u> diesel vehicles at <u>all</u> blend levels up to 100% • Can be domestically produced from renewable resources • Reduced emissions 	<ul style="list-style-type: none"> • Availability • Potential land use impacts, although currently most feedstocks are waste products such as cooking oil or beef tallow
Ethanol	<ul style="list-style-type: none"> • Domestically produced from renewable resources • Fuel cost comparable to gasoline • Lower emissions of some air pollutants 	<ul style="list-style-type: none"> • Flex-fuel vehicle required for higher blends above 15% for 2001 model years or later • Lower energy content • Land use impacts, over 90% of ethanol produced from corn
Natural Gas	<ul style="list-style-type: none"> • Domestically produced • Relatively cheap fuel • Fewer emissions of some criteria pollutants 	<ul style="list-style-type: none"> • Non-renewable fuel • Potentially higher greenhouse gas emissions from leaked methane
Propane	<ul style="list-style-type: none"> • Domestically produced • Reduced emissions of some criteria pollutants 	<ul style="list-style-type: none"> • Non-renewable fuel • Few commercially available vehicles
Electricity	<ul style="list-style-type: none"> • Fuel can be produced <u>everywhere</u> • The most energy efficient powertrain option available • Zero tailpipe emissions • Typically lowest fuel cost / mile 	<ul style="list-style-type: none"> • Limited driving range • Battery recharge time
Hydrogen	<ul style="list-style-type: none"> • Can be produced with renewable resources • Zero tailpipe emissions 	<ul style="list-style-type: none"> • Fuel cost • Lack of fuel availability • Vehicle cost