

# Alternative Fuel Comparison Factsheet

Fuel Type	Applications	Manufacturers	Vehicle Costs	Approximate Fuel Cost*	Emission Reductions	Refueling Infrastructure
<b>Biodiesel</b>	Light duty (LD) and Heavy duty (HD) diesel vehicles	All diesel engine manufactures	No incremental cost	<b>B20</b> +.03 -.40 <b>B100</b> +.50-1.00  Compared to pre-tax wholesale diesel costs	<b>B20</b> 12.6% <b>B100</b> 3.2% <b>CO</b> 11% <b>HC</b> 6.3% <b>NOx</b> +/-2% +/-10% <b>PM</b> 15% 70%	Easily blended in existing diesel pumps and tanks
<b>Compressed/ Liquefied Natural Gas (CNG/LNG)</b>	LD fleet vehicles, buses, mid-HD trucks, LNG appropriate for HD long distance vehicles	All major OEMs of LD & HD vehicles offer bi-fuel & dedicated CNG models, engine retrofits common also	from +\$3,600 for Honda Civic to +\$60,000 for 40 ft CNG/LNG transit bus	10-25% < than pre-tax wholesale gasoline  Fed tax .11< per GGE	<b>CO</b> 90-97% <b>HC</b> 50-75% <b>NOx</b> 35-60% <b>PM</b> 90%-97%	For home and small-med fleets: \$1,000-\$90,000  Large fleet refueling: \$250,000+
<b>Electric- (EV) &amp; Hybrid Electric (HEV)</b>	Neighborhood Evs (NEVs) for campus & planned communities, alternative fuel HEV & Electric transit & shuttle	General Motors "GEM" Ebus Advanced Vehicle Systems Orion TransTeq	Range from \$6,500 for GEM to \$450,000 for Transteq 116 passenger CNG/hybrid electric bus	33% less  no Fed & State tax	Potential zero emissions for EVs if solar charged, HEVs offer significant emission reductions over conventional	NEVs are charged in 110 outlets.  For transit application fast charge 220 volt available.
<b>Ethanol (E-85)</b>	Many LD vehicles available as flex -fuel (FFV) capable of running on either E-85 or gasoline	Diamler Chrysler mini vans, Ford Explorer, Taurus, Ranger, GM Suburban, Tahoe, Yukon, Chevy S10, GMC Sonoma	No incremental cost	10-20% > than pre-tax 93 octane gas  E10/E-85 have .053 excise tax reduction	<b>CO</b> 40% <b>VOCs</b> 15% <b>NOx</b> 10% <b>PM</b> 20%	Use existing infrastructure w/ modifications- e.g rubber hoses and nozzles to prevent corrosion
<b>Propane (LPG)</b>	LD passenger-medium duty delivery trucks	Ford F150 pickup, Chevy Express & GMC Savanna vans	+\$3000-\$5000	Often less than gasoline  Fed tax .05 < than gasoline	<b>CO</b> 30-35% <b>HC</b> 20-40% <b>NOx</b> 15-99% <b>PM</b> 80-95%	\$10-12,000 costs often paid for by fuel provider

\*Fuel prices subject to fluctuation. These numbers are estimations.