



Propane Vehicle Conversions

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Propane as a Motor Fuel

- Current markets
 - * Municipal Fleets- code enforcement, town management staff vehicles
 - * Law Enforcement- high miles, in use now
 - * State Fleets- highway repair/support vehicles
 - * Taxi Fleets- high miles per year, high gals/yr.
 - * Transportation Companies- multiple vehicles, high miles
 - * Landscaping- mower fuel, reduce fuel theft

Propane Vehicle Conversions- the product

- PRINS- a “true dual fuel option

Engine starts on gasoline

Switches seamlessly between either fuel

130 degrees engine temperature

“On the fly” transition

Increased refueling range

Can be transferred to multiple vehicles within
the same engine platform



Propane Vehicle Conversions- the cost of fuel

- What is the cost difference?

Gasoline \$2.245/gallon- all taxes included

Propane net delivered \$1.2595/gallon- all taxes and rebates included

Federal Tax incentives remain after numerous retroactive extensions



Propane Vehicle Conversions- the efficiency comparison

- What is the efficiency difference?

90% of gasoline

Example: Ford F150- 15 mpg with
gasoline equates to 13.5 mpg with propane



Propane Vehicle Conversions- where can I get propane?

- Where do get refueled?

Refueling stations placed where needed

Out of area refueling- networks

Competitive market- numerous propane
fuel providers can bid for fuel supply



Propane Vehicle Conversions- what does it cost?

How much does it cost to convert a vehicle to
PRINS?

\$7,200 for an average vehicle including
hardware, propane storage tank, etc



Propane Vehicle Conversions- who does the conversion?

- Where do I get my vehicles converted/worked on?

Train existing fleet mechanics

Expanding independent base





Propane Vehicle Conversions-

what is the return?

- What is the return on investment? (avg. 10.0 miles/gallon)

20,000 miles per year- 2,200 GGE consumed, \$1,719 saved, 48 months return

30,000 miles per year- 3,300 gallons GGE consumed, \$2,578 saved, 32 months return

40,000 miles per year- 4,400 gallons GGE consumed, \$3,438 saved, 24 months return

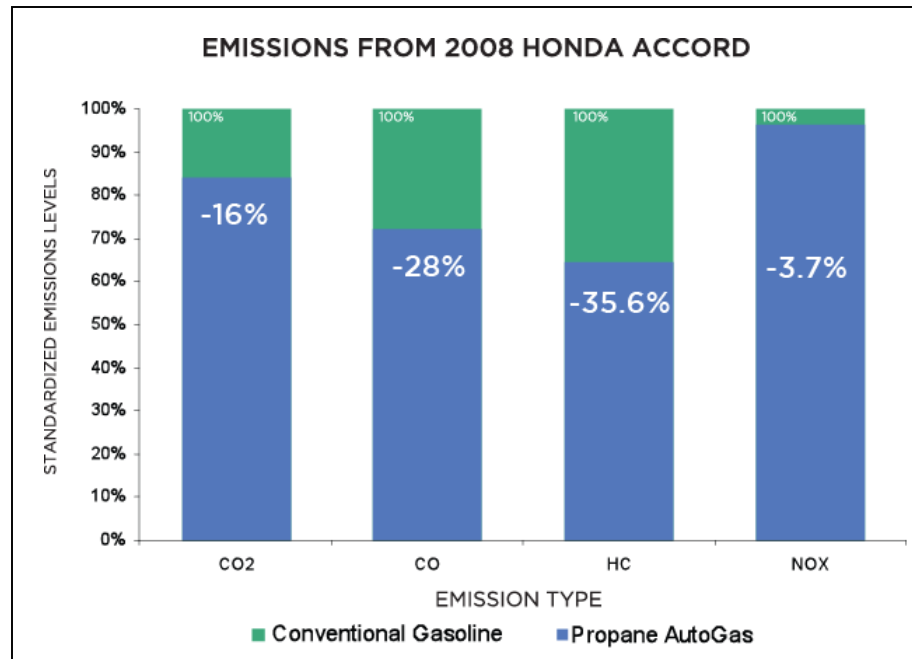
50,000 miles per year- 5,500 gallons GGE consumed, \$4,297 saved, 18 months return

GGE MPG and YTBE

Miles per year	40000	40000	40000
Miles per gallon	10	12.5	15
Gasoline cost per gallon	2.245	2.245	2.245
Propane cost per gallon (includes all rebates/taxes)	1.2595	1.2595	1.2595
Vehicle conversion cost per vehicle	7200	7200	7200
Propane gallons per year	4400	3520	2933.333
Gasoline gallons per year	4000	3200	2666.667
% of propane to gasoline (GGE)	0.9	0.9	0.9
% of propane use to gasoline	1.1	1.1	1.1
cost per year for propane (tax included)	5541.8	4433.44	3694.533
cost per year for gasoline (tax included)	8980	7184	5986.667
annual savings	-3438.2	-2750.56	-2292.13
years to break even	-2.09412	-2.61765	-3.14118

Propane Vehicle Conversions- is it better for the air we breath?

- 16% reduction in Carbon Dioxide
- 28% reduction in Carbon Monoxide
- 35.6% reduction in Hydrocarbons
- 3.7% reduction in NOx





Propane Vehicle Conversions

- The Cleaner and Greener (in many way\$!)

Propane produces less harmful emissions than gasoline

Higher octane = no operating power loss

Propane is less expensive (30-year avg.)

Infrastructure \$/gallon significant savings- \$10,000/1,000 gallon

\$175,000/30,000 gallon