Case study from BCR member Nicola Percival

LPG powered car
Good gas reduces bad gas, and saves money too!

Introduction
Most unleaded petrol engined vehicles can be converted to run on LPG (Liquefied Petroleum Gas) and the cost can usually be recouped in two years. I have a 1.4 litre Astra which I bought and converted in January 2006, meaning my car now emits 1.28g of carbon dioxide per km when running on LPG, compared with 151g carbon dioxide per km when running on unleaded petrol. This case study explains the process, how much I saved and answers other questions.

Cost of conversion and pay back
My Company paid for the conversion which today would cost around £1500 +VAT and will take 4-5 days. I drive 12,000 miles per year and would pay £1325 in petrol, but only pay £727 in LPG fuel, making a saving of £598. Savings after 4 years will be £2394 with a return on investment of 32%.

LPG fuel costs range from 40p-50p per litre. I can fill my car full of LPG for £20 - £23 and this will last for 360 miles. In comparison, it will cost me £45 to fill my tank with unleaded petrol and I can travel for 450 miles on a full tank.

Or, another way of looking at it, assuming LPG at 45p/litre and unleaded at 90p/litre, and 35mpg (typical of a 1.4 medium sized vehicle), I would need to 30,000 LPG miles to get the investment back.

If I ever run out of LPG fuel I can convert back to my unleaded petrol at a flick of a switch located by the steering wheel, which I can operate whilst driving.

Where do I refuel locally?
Ashton-under-Lyne: Maynestone Connect Service Station, Ashton-under-Lyne
Congleton: Congleton Autogas, Unit 20, Havannah Street, Congleton
Levenshulme: Shell Levenshulme, Stockport Road, Levenshulme, Manchester
Oldham: Morrisons Failsworth, Oldham
Sale: Shell Sale, Chester Road, Sale
Sandbach: Arclid Garage, Sandbach
Stockport: John Delaney motors, Wood Street, Stockport
Stoke-on-Trent: Porthill Service Station, Stoke-on-Trent
Whaley Bridge: Whaley Bridge Service Station, Buxton Road, Whaley Bridge
Wilmslow: Shell Wilmslow, Hawthorne Street, Wilmslow
Source: Petroprices and LPG Vehicles

Which local garages could convert my car?
Macclesfield: P & T Autogas Conversions, The Old School House, 89 Brook Street, Macclesfield Tel: 01625 429463
Stockport: John Delaney Motors Ltd, Wood Street, Stockport, 0161 477 6266
Manchester: Panache Autogas Systems, 14 Hyde Road, Ardwick, Manchester M12 6BW, Tel: 0161 273 3103
Ashton-under-Lyne: Timperley Motors, Langham Street, Ashton-Under-Lyne, OL7 9AX, Tel: 0161 330 2172
Oldham: Auto LPG Solutions, Unit 6, Victoria Trading Estate, Oldham Road, Hollinwood, Oldham,OL9 7PJ, Tel: 0161 6825515
Source: Autogas Northwest and LPG Vehicles

It is imperative that the LPG conversion is undertaken by an LPGA Approved Conversion Specialist.

What did they do to convert my car to LPG?
They fitted an LPG tank in the book of my car in the space where the spare wheel went. The spare wheel now sits on top of the tank. They also installed a switch next to my dashboard which enables me to flick between my LPG tank and my petrol tank.

What's the catch?
I have lost some boot space, and my maintenance costs may be higher if the tank system fails. I also have to go to specific garages to refuel which takes some forward planning, and filling up takes a bit of getting used to. There is also a tax freeze on LPG fuel which will end in April 2009, although further tax breaks are expected. There is the potential, however small, that tax will be increased in future.

How can you find out how much you will save?
Go to the Green Fuel web site. You can input your car details and annual mileage and the web site will calculate how much it will cost to convert your car, and savings you will make in fuel over a 4 year period.

What are the environmental benefits?
Environmentally, it is kinder than conventional fuel. LPG carbon monoxide emissions are half those of petrol and, according to Calor, carbon dioxide emissions from vehicles previously powered by petrol are 15% less. By this calculation, based on an annual mileage of 12,000 miles, my car would emit 2.92 tonnes of carbon dioxide over a 12 month period if using unleaded fuel, and this is reduced to 2.482 tonnes through switching to LPG.

LPG also emits less benzene than unleaded fuel and 30,000 times fewer particulates than diesel, as well as less oxides of nitrogen (Nox).