abbey fuelcards

on the MOVE

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# FUEL, FUELCARDS AND THE FUTURE

# A VIEW FROM ABBEY FUELCARDS

At present the vast majority of vehicles on the road run on petrol or diesel, both of which are obtained from oil – supply of which is beginning to decrease, and become more expensive to extract, whilst demand is at an all-time high, and continuing to rise. This is just one of the reasons behind the sharp price rises in fuel that we have all experienced over the last couple of years.


In this context fuelcards, and particularly commercial fuelcards such as Abbey's, have provided an effective means for owner-drivers and fleets to make significant savings on the cost of fuel, as well as obtain other benefits such as greater convenience and security, protection against price variations and fraud, and streamlined account administration – which itself can provide further cost benefits.

The high price of oil, together with mounting evidence of damage to the environment caused by the burning of fossil fuels (of which oil is one), has served to concentrate minds on the development of new types of vehicle engine that either use petrol or diesel more efficiently, or run on alternative fuels.


**The 'hybrid' car**

The technology grabbing the headlines at the moment is the 'hybrid' car – possibly because it comes in the fairly shapely lines of a Saab or Toyota Prius. The hybrid is powered by a combination of electric motor and petrol engine. The electric motor's battery is recharged by an electric generator, which is powered by a petrol engine. Because the petrol engine runs at an optimal speed, it consumes fuel in a more efficient way than traditional petrol engines. Additional power to the battery is provided by kinetic energy from the wheels when the car is slowing down. When extra power is required, the petrol engine kicks in and supplements the electric motor.

By combining petrol and electric power the hybrid gets over the problems that developers have so far come up against when constructing purely electric powered engines – that of performance (particularly in terms of speed) and the travel distance before the battery needs to be re-charged.

**LPG and natural gas**

At around £1000 - £2500, conversion of existing cars to run on LPG (liquid petroleum gas) is far cheaper than conversion to hybrid electric, which can cost between £5,000 and £8,000. However the drawback with both LPG and natural gas is that, whilst it is cleaner and cheaper than conventional fuels, it is harder to store in vehicles. Use of gas is therefore mostly limited, at present, to heavy-duty trucks and buses, and re-fuelling options away from base are limited.

**Blends and Bio-fuels**

Another approach to reduce oil consumption and pollution is to engineer or blend petrol or diesel with other fuels.


Sulphur-free petrol and diesel (with less than 10ppm sulphur content) is set to replace the current low sulphur petrol and diesel by 2010 in order to comply with new EU standards on exhaust emissions. BP is already trialling sulphur-free fuel at forecourts in Edinburgh. The advantage of sulphur-free fuel is that no adjustments to vehicles are required; it will not, however, radically reduce either reliance on oil or harmful emissions.

Bio-fuels, such as biodiesel and bioethanol, are (broadly) blends of fuels from alternative sources with petrol or diesel. Biodiesel uses glycerine separated from vegetable oil, whilst bioethanol uses ethanol obtained from a distillation of wheat, sugar and bio mass. Both these alternative fuels are renewable and produce less local air pollutants than straight petrol or diesel, but require engine modification if used in high proportions.

**Hydrogen**

Finally, and arguably most radically, engineers are working on hydrogen-powered cars. This promises to entirely replace the use of scarce and polluting petrol and diesel in vehicles with a clean, reliable and sustainable energy source. However, at present there are a number of different hydrogen systems, all of which are still in the development stage.

**The role of fuelcards**

It can be seen from the above that a lot of engineering resources are being committed to finding and developing an alternative vehicle fuel. The problem at the moment is that it is too early in the game to find a consensus on the best way forward – and this in turn hampers widespread adoption and availability of

any single solution. Perhaps, for some time to come, no clear definitive solution will appear. Indeed, perhaps all the above will turn out to be only a temporary ‘stop-gap’ to a new, much cleaner, more efficient fuel that science is yet to develop.

This leaves developers and suppliers with a ‘chicken and egg’ problem of early stage adoption: how to get filling stations to stock alternative fuels if few people own the vehicles? And how to get consumers to buy alternative fuelled cars if drivers can’t find fuel?

Fuelcards can have a positive role to play in helping to overcome this problem. By creating a network and buying in bulk, fuelcard providers can help drivers find the locations of convenient filling stations, and assist in keeping the price of fuel – whatever fuel it is – as low as possible, thereby encouraging more take-up of new technologies.


By providing a secure alternative to cash payment, fuelcards can continue to assist individuals and companies to manage their fuel purchasing and administration with greater reliability, security and convenience, and help them secure a competitive edge in whatever fuel environment the future may bring.

Start saving on fuel *NOW* by calling Abbey Fuelcards on 01235 775218

or email: sales@abbey-fuelcards.co.uk. Or visit the website: http://www.discountdiesel.co.uk