

Climate Change

Bio-diesel

All diesel engines will run on a mixture of 5% bio-diesel and 95% diesel, and most will run well on a 20% bio-diesel 80% diesel mix, called E85. This type of fuel is becoming more widely available in the UK.



Courtesy of <http://commons.wikimedia.org/>

Vegetable Oil

All diesel engines can run on pure vegetable oil. However, many of the fuel pumps used in these engines are not able to cope with the stickiness of vegetable oil so most cars need some sort of conversion.

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Where can I find out more?

See our series of leaflets on:

- Running a car on biodiesel
- Running a car on bio-Ethanol
- Running a car on LPG
- Running a car on vegetable oil

The following websites are useful:

- www.cat.org.uk/information
- www.greencarsite.co.uk

If you need more help, get in touch with the team at Science Shops Wales. You can do this by phoning us on 0845 841 3545, or by emailing us at scishopw@glam.ac.uk

Our web site address is:

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THE PROBLEM WITH CARS...

Towards A Sustainable Future

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What's the problem with running a car?

Cars give out a lot of pollution and carbon dioxide, a gas that is partly responsible for global warming. If we do nothing to change our driving habits, the world's climate is going to change and put the lives of all of us at risk.



Courtesy of <http://commons.wikimedia.org/>

I really do need to run a car. How can I reduce the damage I do?

First, think before getting into your car: do you really need to use the car for that journey? Could you take the train or bus? Could you car share? Maybe you could walk or cycle: this could help you to get fitter as well as helping the planet!

Also, you could run your car on an alternative fuel that causes less damage to the environment than normal petrol or diesel.



Courtesy of <http://fuelfactory.blogspot.com>

A Sustainable Future Climate Change

Why run my car on an alternative fuel?

None of the alternative fuels are more expensive than normal fuels, and LPG and vegetable oil can be cheaper. They all produce less carbon dioxide than petrol or diesel made from conventional oil. They also produce less of the gases responsible for smog and other dangerous types of pollution which are bad for health.

What types of alternative fuel are there?

There are fuels which are suitable for petrol cars as well as diesel cars. You will need to convert your car for some but not all of the alternative fuels. The four main choices are:

- Bio-ethanol
- Liquid petroleum gas, known as LPG or Autogas
- Biodiesel
- Vegetable oil



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Bio-ethanol

You can run all petrol engines on a mixture of 10% bio-ethanol and 90% petrol. Some petrol companies are already putting bio-ethanol in their petrol. However, if you want to run your car on mixes that have more than 25% bio-ethanol, you will need to get it converted or buy a new car.



Courtesy of <http://commons.wikimedia.org/>

Liquid Petroleum Gas (LPG)

A garage will need to modify a petrol engine in order to run on LPG. The fuel tank needs to be changed as well as the pipes that carry the fuel to the engine. Many petrol stations sell LPG but it's not available everywhere.

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