

Green drivers get a taste for vegetable oil

By Stefanie Marsh

VEGETABLE oil is being touted as the solution to the crisis over the price of fuel.

Britons in search of a cheap alternative to diesel are deserting petrol stations and turning instead to their local kebab stands or fish and chip shops to tank up on used Mazola.

Hundreds are discovering that a trip to any fast-food outlet can furnish them with the raw materials to manufacture cut-price fuel, or "biodiesel", in their own back gardens.

Once a hobby mastered by only a handful of committed environmentalists, the cottage industry in biofuel production has found new enthusiasts among those who want to protect themselves from rising fuel prices and the threat of blockades. While hundreds of "recipes" now litter the internet, such is the demand for courses on home-brew biodiesel that organisers have had to set up waiting lists.

The Low-Impact Living Initiative (Lili), the Buckinghamshire-based environmental group that runs the country's only do-it-yourself biodiesel course, is doubling the number of courses that it offers this year in response to demand and will for the first time be

selling biodiesel reactors, the twin-barrelled tanks necessary to purify 100 litres of oil, to the general public at £600 each. The first biodiesel manual will also be published this year.

The environmental potential of biodiesel, a carbon-neutral fuel produced by filtering vegetable oil and adding small quantities of methanol, has long attracted those worried about pollution or global warming. The Austrian town of Graz is said now to smell faintly of doughnuts since the local bus fleet converted to biodiesel.

But it is the economic threat of higher oil prices which has propelled many British motorists to their local fish and chip shops. Beside the odour of fried food that an engine running on biodiesel will emit, the fuel's only other drawback is a marginally higher freezing point. Britain's estimated 30 million diesel engines could benefit from the oil's superior lubricating qualities, while emitting 50 per cent fewer hydrocarbons and no sulphur.

A spokeswoman for the Centre for Alternative Technology, in Powys, Wales, said that the organisation had received a surge of calls from motorists: "We've certainly had enquiries about it from

people this week who are concerned about the rise in the cost of fuel," she said.

"They want to know what the alternatives are. In a way it's a shame that it is the political situation and economics that has fuelled demand rather than the environment."

While a litre of diesel at Total's Winslow branch in North Buckinghamshire sells for just under 90p, a mile down the road at Lili's headquarters, staff are teaching the public how to make biodiesel for less than half that amount.

David Darby, a course organiser at Lili, said that while selling biofuel to the general public is prohibited without a licence, individuals are free to use home-made biodiesel in their engines as long as they pay the 26p mandatory duty.

HOW BIODIESEL IS MADE

- 1 Filter waste vegetable oil to remove food scraps
- 2 Heat oil to remove water
- 3 Perform "titration", to determine how much of the catalyst, lye, is needed
- 4 Prepare sodium methoxide by mixing 99 per cent methanol with the lye
- 5 Heat oil, mix in the sodium methoxide while stirring
- 6 Settle, remove glycerine
- 7 Wash and dry

Will you be switching to biofuel?

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