

From The Times
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Green fuel myths

Sir, The overall price for ostensibly cleaner fuels in one part of the world may be a significant environmental burden elsewhere, and possible energy options for the future should be subject to full lifecycle analysis. There are a number of myths relating to gas-to-liquid (GTL) fuels (report, May 12) and when thousands of tonnes a year of GTL-diesel reach our shores shortly, these imports will counter directly the UK's stated obligations to address global warming.

The recent GTL developments are based on the availability of very low-priced natural gas (usually associated with oil production) that has no other commercially attractive outlet. This gas is usually burnt off, yielding carbon dioxide. The carbon footprint could be reduced significantly by reinjecting the gas into the hydrocarbon reservoir underground, but this costs money. The motivation for GTL production in the Middle East has nothing to do with an imminent decline in oil resources but has everything to do with maintaining the dominance of hydrocarbons in energy provision.

The manufacture of GTL is extremely energy-intensive. In, say, a tonne of natural gas, almost 40 per cent is used for heating and electricity to convert the remaining 60 per cent to a liquid fuel.

Although use of GTL fuels is almost sulphur-free, the sulphur originally in the natural gas feed is disposed of in the producing country, along with traces of heavy elements in the catalyst used for sulphur removal.

The real advances are in the efficient conversion of wood and other natural waste to syngas (hydrogen and carbon monoxide) for manufacture of biodiesel through the Fischer-Tropsch reaction already developed for GTL. This really would be "green" energy, capable of competing with other biofuel routes, such as ethanol from sugar and starch, and alternative biodiesel from vegetable oils, as well as newer developments from cellulose.

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<http://www.timesonline.co.uk/tol/comment/debate/letters/article1795571.ece>