Ecologist Web Queen **on 27/06/2006**

Contaminated chocolate should be burned as biofuel, not buried as landfill!

This is a press release that captured my imagination when it popped into my inbox this morning...

The million bars of chocolate recalled by Cadbury could power Woking for a week if burned as a biofuel rather than consigned to landfill, according to a researcher at the University of East London.

Gavin Harper, an MSc student who has already published several books including Solar Energy Projects for the Evil Genius, said: “It is unfortunate that rather than being viewed as a potentially valuable source of energy, this consignment of chocolate is being earmarked for disposal by landfill."

He calculates that the estimated 250 tonnes of chocolate, a mass equivalent to 33 double-decker buses, contain some 5,500 Giga-joules of energy, which is equivalent to 1,530,000 Kilowatt Hours, enough to run 1.5 million electric fires for an hour, or to provide domestic power to a town the size of Woking for over a week.

Harper, a student on the MSc Architecture: Advanced Environmental and Energy Studies programme at the University of East London (UEL), has made the calculations in a paper prepared for publication, and claims that as well as generating energy, the process will save money for the company and help reduce the impact on the environment.

The paper briefly examines the alternatives to landfill – and the possibility that energy could be extracted from the waste chocolate by co-firing in Energy from Municipal Solid Waste Power Stations.

“Despite the high embodied energy content of the chocolate as a result of the processing that went into its production – if it could be classed as a Biofuel then it could be eligible for Renewables Obligation Certificates when burnt, which could be offset against potential losses suffered by Cadbury as a result of the recall.”

Darryl Newport, Director of the Sustainability Research Institute at the University of East London, said: *“Much of the waste that currently goes to landfill could profitably be reprocessed. If we are to achieve our targets on carbon emissions, we need to come up with sustainable alternatives and this means thinking about all kinds of reusable resource, however unlikely the source.”*