

Electric vehicles take to the road

Organisations could achieve significant savings by replacing traditional diesel/petrol vehicles with the new breed of electric vehicles. Switching need not cost the earth either - the Energy Saving Trust's Powershift Programme will see to that. SED reports

The UK's first pavement electric car has been plugged-in. Owned by South London resident, Simon Roberts, it was unveiled by his local MP and Home Office minister, Kate Hoey (both pictured below).

London Electricity was responsible for developing the pavement charging point ensuring it is easy to use, while unobtrusive and having minimal impact on a conservation area. "When we began this project we knew that we were doing something that had never been done before," said a delighted LE engineer Ian Barker. "The whole team is proud that we have demonstrated that cars can be charged at the roadside safely and practically."

He stressed: "This is an essential development in making electric cars a more viable option in urban areas."

Roberts bought his electric Peugeot 106 with the help of the Energy Saving Trust's Powershift programme, which provides a grant towards around half the additional cost of an Electric derivative over the normal vehicle cost. (It is applicable to fleet purchasers only). Commenting on the successful completion of the charging point, he said: "It may have taken a while to overcome the hurdles, but in the long run it's been worth it."

The charging point stands just over 1.6m high and is 0.23m wide. It is essentially a standard 15 Amp power outlet with an electricity meter in a locked box with a patented protection device to cut the current if the charging cable is tampered with. One hurdle which had to be overcome was a 0.45m gap between the fixture on the pavement and the kerbline, which is a statutory requirement to allow for vehicle overhangs.

The charging point was manufactured by Superpitch - a small Midlands-based company which specialises in electrical connections for boats/caravans and which provided the



charging facilities for the Coventry Electrical Vehicle project.

For further information contact, Andrew Wincott, technical services, London Electricity, Tel. 0171 487 7211

A succession of fiscal changes over the past few years, affecting the rates of excise duty on vehicle fuels in particular, not least the March '99 Budget, has improved the financial attractiveness of alternative fuels, as highlighted on this page.

For further information on how you can benefit from the financial assistance afforded by the EST's Powershift programme call the Energy Efficiency hotline on Tel. 0345 277 200



Van saves HE thousands

Scottish Hydro-Electric (now merged with Southern Electric to form Southern and Scottish) is now using an electric van as part of its fleet of vehicles. The Citroen Berlingo Electrique van has been leased through Lex Vehicle Leasing for a four year period and is expected to do around 40,000



miles of clean and silent driving in that time. Taking over the mail run in and around Perth (covering 40 miles per day), the van is one of an initial 20 to be released in the UK and, in this case replaces a diesel vehicle.

"This is the latest in the new generation of electric vehicles and it is significant that a well-known volume manufacturer is developing a product like this for the next century," commented Alister Walker, Hydro-Electric's facilities manager. "This is light years ahead of the previous electric vehicles."

With the debate on alternative fuels for vehicles powering up Hydro-Electric and Lex, took advantage of the EST's Powershift Programme to purchase the van. A second van will be operated by Lex in and around its Manchester office. A spokesman for Lex

said the company is committed to improving the environment and pioneering new concepts in the industry.

"Electric vehicles are a good alternative to petrol or diesel powered vehicles, and they help city centre environments," he said.

Scottish Hydro-Electric energy analyst, Maurice Millar, added: "The van will use 26kWh of electricity to charge up overnight, equivalent to a cost of about 90p. When you compare that to a gallon of diesel it is a massive saving."



Fuel cells get US boost



Fuel cell cars, such as DaimlerChrysler's NECAR III, are to be trialled in California. Picture courtesy of Ballard Power Systems Inc.

The use of fuel cell technology, which (as SED reported in our April issue) has the potential to meet much of our future energy needs, has received some major boosts across the Atlantic.

There will be a major trial of fuel cells in California, the state's governor Gray Davis confirmed. The trial will be conducted by a collaborative partnership involving DaimlerChrysler, Ford Motor Company, ARCO, Shell, Texaco, Ballard Power Systems and the State of California.

The California Fuel Cell Partnership, as it will be known, hopes to put 50 fuel cell vehicles on California's roads by 2003. Initially, Ford and DaimlerChrysler will each provide five fuel cell cars by 2001, while the partnership will work with California's transit agencies to get 20 fuel cell buses on the road.

Ballard will provide the fuel cells for all the vehicles - which will be fuelled by gasoline, converted into hydrogen by a unit built into the vehicles.

"This fuel cell partnership again signals California's leadership achieving economic and environmental progress," said Governor Gray Davis. "We will meet clean air goals while providing new jobs and more consumer transportation choices."

If the trial succeeds, it would produce emission savings exceeding that which would be achieved if all the gas-fired power stations in Southern California were closed down, the group stressed.

"For the first time ever, fuel companies are joining with automobile companies to demonstrate fuel cell vehicles under real day-to-day driving conditions," commented

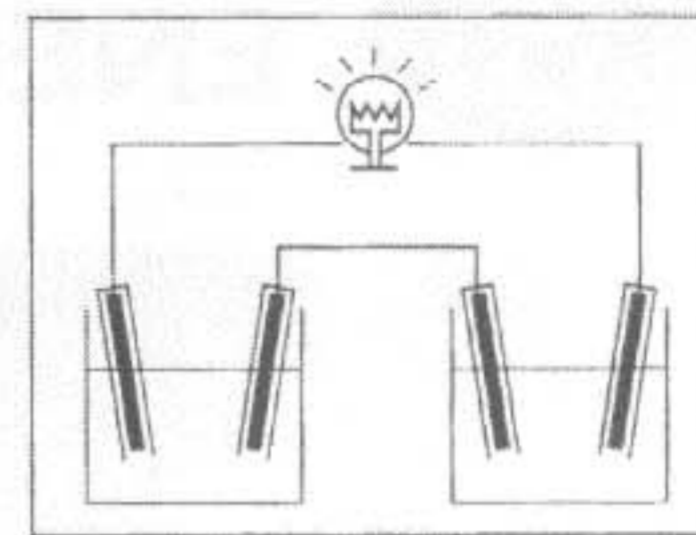
DaimlerChrysler chairman Robert Eaton. "When we unveiled our fifth fuel cell car, NECAR 4, in Washington last month, we said cost and development of a fuel infrastructure were key challenges. Today, three major fuel companies are exploring the possibility of providing the fueling infrastructure needed for the introduction of consumer fuel cell vehicles."

Shell said it can make a major contribution through the use of its proprietary Catalytic Partial Oxidation (CPO) technology, which has already been shown to be able to convert liquid fuels into a hydrogen to power the vehicles.

In addition to the above partnership, SoCal Gas, a unit of Sempra Energy Corp of San Diego has announced that it plans to put Southern California Gas Company's Plug Power fuel cell residential system on the market in 2001 in the US and abroad. GE Fuel cell Systems will conduct the overseas marketing.

Plug Power has been operating the world's first fuel cell-powered homes since last June. The system (the size of a dishwasher) converts natural gas into electricity, producing enough to power a home. Heat produced as a by-product is used to provide hot water and heating for the house.

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For further information, including preliminary programme details, see the conference website or contact **Phillipa Orme**

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