Eco-car revolution "possible within three years"

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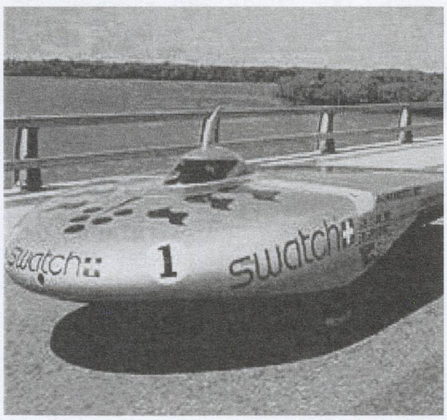
A hydrogen-powered fleet could replace half of the world's gas-guzzling cars in the next three years, according to Swiss entrepreneur Nicolas Hayek.

The Swatch Group chairman has launched a project to speed up research into an ecological energy system, harnessing sunlight to split water into hydrogen and oxygen. This could be used to power car engines.

Some experts say it will take decades before hydrogen-powered cars can go into commercial production, but Hayek believes that automobile giants have made enough progress in recent years to achieve results more quickly.



Spirit of Biel III, Hayek's solar powered vehicle of the 1990s

"It is a question of how many people work energetically on the solution. If all the automobile companies who are now working on fuel cells put 100,000 cars on the road in the next three or four years, we could have a fleet big enough to replace 50 per cent of the cars we currently have in the world in the next ten years. But if we all put a lot of energy into it, encouraged by the consumer, we can put this fleet onto the market in two to three years," he said.

Hayek is more usually associated with the Swiss watch industry, but he created a solar powered car called "Spirit of Biel" 20 years ago. He later designed the compact Smart car, originally intended to run off a hybrid engine.

"We are all sitting in a spaceship and we are not taking care of this ship for our children and future generations. We are shooting holes in it. We need personal and individual mobility. It would be very bad for people if they cannot choose to get in their car and drive somewhere every day."

His latest venture - the Belenos Clean Power company - has adopted a multi-pronged approach to advancing the technology of capturing hydrogen in order to power cars.

The first is to develop a commercially viable way of mass-producing hydrogen by splitting water into its component parts (electrolysis) using solar energy. Utilising the sun's power sidesteps the current problem that greenhouse gases are emitted during hydrogen production.

Hayek plans to "decentralise" the process by producing an electrolysis device no bigger than a washing machine that could fit into houses. Hydrogen would then be produced in people's homes, avoiding the need to build a large factory.

The project's other objectives are to increase the efficiency of fuel cells, batteries and photovoltaic cells so they could be used cheaply to drive cars with a performance similar to that of petrol-powered vehicles.

Rather than produce cars or engines, Belenos would make money from patenting the research and selling the rights to car companies.

"Your organisations can solve the energy problem much better than politicians," Hayek told the TCS and other automobile associations at an international conference in Lucerne.

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Turning children into bookworms

All babies born in Switzerland will soon be receiving a free pack of books under the new Bookstart scheme, aimed at giving children a lifelong appreciation of reading. The programme, based on a British idea, has the support of the Federal Culture Office. The first packs are due to go out at the end of May.

The scheme is being organised by the public libraries association Bibliomedia and the Swiss Institute for Youth and Media. The pack will contain two children's books in German, French or Italian, instructions for parents and a library voucher. The aim is to get mothers and fathers to read to their youngsters.

Bookstart wants to reach the around 73,000 children born in Switzerland each year. The packs will be distributed by children's doctors or in maternity wards, depending on the region. For the Federal Culture Office, it is important to support reading activities by parents. "Schools are doing a lot to teach reading and writing, but if you want to really succeed there you have to start very early in life. The fact that books are in families from the first year is very important", the spokesman of the Federal Culture Office said.

In recent years concerns have been raised about reading levels in children. An estimated 20 per cent of adults also have reading problems.

Bookstart was set up in Britain in 1992 and has spread to many countries including Australia, Japan and Belgium. It came about after research found that two and three year olds in families in which books were shared started school with significant advantages and scored highly in some pre-school tests.

A particular challenge facing the Swiss Bookstart will be how to integrate the 20 per cent foreign population, some of whom do not speak a national language.

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