

BUSINESS, BUT NOT AS USUAL

Words Franca Davenport

LEADING-EDGE TRANSPORT DEVELOPMENT COMPANY RIVERSIMPLE HAVE TAKEN ANOTHER STEP FORWARD TOWARDS REVOLUTIONISING TRANSPORT – BY GIVING AWAY THEIR IDEAS

This summer Riversimple launched a hydrogen concept car with a difference. First, it has no name; second, its fuel cell is only 6kW – compared to the 100kW cell of the Honda Clarity and third, it comes with a whole new business model.

Riversimple plan to develop their hydrogen urban car using an ‘open source’ method. They will license their designs to the foundation 40 Fires, who will then make them available to companies and individuals for manufacture. The goal is to encourage healthy competition alongside sharing of knowledge, as well as fostering a greater acceptance of alternative cars among the public.

Hugo Spowers, leader of Riversimple, likens the model to that used by Visa in which banks cooperate over software and systems but compete for the same customers. ‘None of this is in conflict with developing brands,’ says Spowers.



‘People constantly ask, “Why on earth would you give away the intellectual property of your organisation?” But if you look at car companies, they don’t make their money out of IP – they make their money out of brand value. To succeed, we need other manufacturers to adopt these standards. This would dramatically reduce commercial risk – as well as accelerating the penetration of really low-carbon cars.’

ANOTHER DIFFERENCE IS THAT THE CAR WILL BE LEASED RATHER than sold. The purpose of this is to align manufacturer’s interests with those of the consumer and the environment. Cars will be built to last longer and be more efficient. The design of the car itself decouples the power for acceleration from the power for cruising, allowing higher efficiency for the two modes. While the fuel cell deals with the cruising, regenerative braking provides the power for acceleration, meaning the fuel cell and the car can be lighter and more efficient.

To get the ball rolling, Riversimple are planning to have 50 prototype vehicles ready to be trialled in a small city in 2012. The reasons for using a small city are fuel-based. In partnership with the multinational gas company BOC, Riversimple are aiming to establish one filling station for the chosen city. Due to the car’s efficiency and its 200-mile range, they are certain this will be sufficient and therefore lower the initial cost of supplying hydrogen. The plan is for the infrastructure to develop city by city and, as Spowers puts it, to ‘lay down a skeleton of hydrogen stations’ across the nation. ‘There really isn’t much development work to be done,’ he says. ‘The technology exists and the barriers are market-based. To overcome them you just need an argument that makes commercial sense, and that’s what we think we’ve got.’

In fact, despite popular concern about hydrogen infrastructure, Spowers believes that it could be the least of Riversimple’s worries. For him a major problem lies in making the computer-aided design data for the car available to the open-source community since the licence alone costs tens of thousands of pounds. However, given Riversimple’s ingenuity in the face of challenge, they’re bound to come up with a solution. ■

riversimple.com

TURNING OVER A NEW LEAF

It’s been a long time coming but Nissan believe it was worth the wait. This August Nissan unveiled the LEAF – the electric car they hope will take the world by storm.

The Nissan LEAF is a medium-sized hatchback that seats five adults, has a range of more than 100 miles and comes at an affordable price – although the figure is yet to be disclosed. It uses lithium-ion batteries and regenerative braking to achieve its range and, according to the specs, its design is efficiency-orientated right down to the headlight, which redirects airflow from the door mirrors to reduce wind drag.

The LEAF plays a large role in the zero-emission mobility programme of the Renault–Nissan alliance. In recent years the alliance has formed nearly 30 partnerships with governments, cities and other organisations around the world to develop the infrastructure for electric cars. This is why the LEAF’s IT system is a very important part of the car. It is designed not only to display the car’s remaining power, but notifies the driver of a selection of nearby charging stations and information, allowing him or her to take advantage of lower off-peak rates. The car is due to be launched in late 2010 in Japan, the US and Europe.

nissan-zeroemission.com



TESLA EXPANDS INTO EUROPE

WITH THEIR FIRST EUROPEAN STORE NOW OPEN IN LONDON, THE ELECTRIC SPORTS CAR MANUFACTURER HAS SET ITS SIGHTS ON MUNICH AND MONACO. THE MUNICH STORE OPENED ON 10 SEPTEMBER AND MONACO ISN’T FAR BEHIND

Tesla aren’t just expanding geographically. Earlier this year they delivered their 500th Roadster sports car, and recently began delivery of the Roadster Sport – an even higher-performance car that does 0 to 60mph in 3.7 seconds, compared to 3.9 seconds for the standard Roadster. The company is currently developing the Model S sedan, which they believe will be the first long-distance electric vehicle. The Model S will have a range of up to 300 miles and be able to carry seven people. The first vehicles will be available in late 2011, and has already received over 500 orders.

In addition to the Model S programme, Tesla will be supplying the lithium-ion batteries to the second-generation smart electric vehicle for a new round of European tests. Smart are a subsidiary of Daimler, who bought a 10% stake in Tesla earlier this year.

teslamotors.com



NEW ELECTRIC MOTORBIKE: THE ZERO DS

Zero Motorcycles have launched their fourth electric motorcycle in 18 months. The Zero DS is a fully electric motorbike that is at home both off-road and on the city streets.

It has a top speed of 55mph and a range of up to 50 miles and, like the rest of the Zero family, its frame is made from aircraft-grade aluminium to ensure it is light, agile and efficient. The suspension has been engineered to take account of the bike’s lightweight frame, and the wheels are designed specifically for the DS, allowing it to cope with tarmac and tracks. The power pack consists of lithium-ion cells that are clean enough to be approved for US landfill disposal.

The DS will join three other electric motorbikes in the Zero stable: the Zero X for off-road trail-riding, the Zero MX for track-riding and jumps and the Zero S for urban commuting. Zero Motorcycles are based in California, but are currently expanding their European market due to an increase in demand. In June they set up a European headquarters in Amsterdam and there are representatives in the UK, Germany, France, Austria, Italy and Spain. Currently the Zero X can be test-driven in the UK, and by October the rest of the range will also be available for testing.

zeromotorcycles.co.uk