

## FIM Alternative Energy Newsletter

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Introductory words by Robert Rasor, FIM AEWG Chairman



The rapid development of electric motorcycles continues to challenge all who are interested in the adoption of alternative energies. It seems that nearly every week brings news of a new and exciting advance in how battery technology is being successfully applied to a two wheeled platform. The AEWG continues to work diligently to stay on top of these developments. In an important step to ensure this process, the FIM has extended its relationship with LOGOS Public Affairs, LLC to continue supplying it with up to date information on developments within the European Union. The EU remains the central point of development for alternative energy solutions and our challenge is to keep the FIM at the forefront of those technologies.

Robert Rasor, FIM Vice-President, FIM AEWG Chairman

### AEWG meeting with the European Commission



On 29<sup>th</sup> July 2009, the AEWG held a meeting with a delegation from the European Commission. The members of this delegation came from the Unit in charge of Sport Policy and from the services dealing with environmental support schemes. Mr Velazquez, the Head of the Sport Unit expressed his pleasure in having the meeting with the FIM since they want to increase the dialogue with major sport organisations.

He went on to explain that if the Lisbon Treaty was adopted, the European Union would have more power in Sport policy. As outlined in the 2007 White Paper on Sport, the European Commission wants the societal role of sport to be recognized; sport can be a frontrunner and an important levy to enforce key policies such as environment, education or health; in parallel, sport organisations have to be proactive and not only defensive organisations like in the past. Mr Velazquez and his staff were thus pleased to learn about the FIM's activities to promote alternative energy for motorsport. The Commission officials briefly presented the EU voluntary schemes and programmes for sustainable sporting events.

It was agreed that the FIM and the European Commission should maintain regular contacts in order to exchange their views on two aspects: on the one hand, the impact of EU legislation on motorcycling sport; on the other, the contribution of motorsport to the EU policy for sustainable development.

*Source: LOGOS Public Affairs*

## AEWG meeting with SAFT

On the same day, the AEWG met Mr Philippe Ulrich, from SAFT, a world leader in battery production. Mr Ulrich, Director of Sales for Europe & Africa, is the expert on electric vehicles development at SAFT. He provided the AEWG with a much-appreciated presentation about the technologies of batteries for electric mobility. He provided examples of SAFT projects to develop electric vehicles and gave some useful advice for the development of electric motorcycling. AEWG members and Mr Ulrich discussed the “chicken-and-egg” situation preventing the market from expanding and the prices from going down.



The FIM is already working on a set of technical rules for electric motorcycling under the chairmanship of Mr Bulto. Mr Ulrich agreed to provide the group with SAFT's expertise in order to develop rules that ensure safe competitions and do not hinder technological developments. This fruitful and promising meeting was concluded with an invitation to visit a SAFT battery production plant.

Source: LOGOS Public Affairs

## NEWS FROM THE FEDERATIONS Electric Motorcycling challenge in France



In line with the current growing interest for electric motorcycling, the Fédération Française de Motocyclisme has decided to register its Quantya electric bike to compete against thermal bikes in the “course sur prairie de Gironville” during the weekend of 18<sup>th</sup> October. For the 1<sup>st</sup> time in France, a specific ranking for electric bikes will be set up. However, the very idea of the race is to demonstrate the sport capabilities of electric bikes by comparing them in-race with the other machines.

This event is part of a series of FFM actions to promote sustainable development through electric motorcycling. Organised in October and November, the OSET BIKES days will offer to young riders the possibility to discover trial on electric mini-bikes. Please contact the FFM for more information.

Source: LOGOS Public Affairs

## DMU International Eco Enduro 2009



The DMU is organising on the occasion of the Copenhagen UN Climate Change Conference the world's first international enduro and MX race for electric motorcycles. According to the organisers, the purpose and idea of the race is to show the world that mechanical sports can be environmentally responsible and is prepared to seek new ways and innovative solutions to reduce the sport's negative impact on the global climate.

They also want the **International Eco Enduro 2009** to be a showcase of good climate behaviour - setting the example for the world to see that reducing our carbon footprint is “business as usual”. Anders Mincken will be present at the event to represent the FIM AEWG.

Source: [www.ecoenduro.com](http://www.ecoenduro.com)

## Electric motorcycle developments around the world

Motorcycling Australia (MA) has acquired the first electric bike imported into that country from Zero and plans an electric motocross event for 2010. MA is also exploring an electric support class for road racing for the near future.

In the USA, Mission Motors established a new AMA National Land Speed Record of 150.059 miles per hour at the Bonneville Salt Flats in Wendover, Utah, USA on 1<sup>st</sup> September 2009. The bike was piloted by Jeremy Cleland, product manager for Mission Motors, and clearly established the performance potential of electric bikes. The land speed record provided a technical and moral victory for Mission Motors after a disappointing 4<sup>th</sup> place finish at the inaugural TTXGP held earlier this year on the Isle of Man. Mission promises more and better performance for 2010.

*Source: Robert Rasor, FIM AEWG Chairman*

## NEWS FROM THE INDUSTRY

### A new release from Zero Motorcycles

After the success of the Zero X in 2008 and the launch of the Zero S Supermoto in spring 2009, Zero Motorcycles introduced this summer the Zero DS, a fully electric dual sport motorcycle to be ridden on all types of terrains, be it city streets or dirt trails. Zero has equipped its latest model with aggressive suspension, rugged wheels and dual sport tires to efficiently move riders over any surface.

"This is designed for motorcyclists who want the freedom to ride wherever they want" said Gene Banman, CEO of Zero Motorcycles.

"The Zero DS is the world's most versatile electric motorcycle. You can cut across a dirt trail on your way into work or ride the tarmac to your favourite trail-head."



The Zero DS is designed from the ground up to be an electric motorcycle. Each component on the motorcycle is engineered to minimize weight and the power pack is designed for maximum energy density. Environmentally conscious consumers will be pleased to know that the Zero DS is not only a zero emissions vehicle, but is completely non-toxic and almost 100% recyclable. For more information on the Zero DS visit: [www.zeromotorcycles.com/zero-ds](http://www.zeromotorcycles.com/zero-ds)

*Source: Zero Motorcycles & LOGOS Public Affairs*

## Piaggio releases the first hybrid scooter



Piaggio presented this summer its Mp3 Hybrid, the world's first hybrid scooter. Using lithium ion batteries, the Piaggio Mp3 Hybrid incorporates a "parallel" hybrid drive in which a thermal engine and an electric motor are mechanically and electronically linked and simultaneously supply power to the wheel. In this integrated thermal/electric powertrain, the thermal engine works like a normal catalysed four stroke unit with an automatic transmission, electric starter and an electronic accelerator system. The thermal engine also recharges the batteries used to power the electric heart of the vehicle.

Moreover, whenever the rider calls for sudden acceleration, the electric motor kicks in, supplementing the thermal unit to provide a boost in performance, offering more immediate and responsive pickup during the first few metres, useful in city traffic.

According to Piaggio, the Mp3 Hybrid can return up to 60 km/l, compared with an average of 26 km/l for thermal scooters with midsized engines - and CO2 emissions, at just 40 g/km compared with 90 g/km for a conventional thermal powered scooter.

When decelerating and braking, the management system recovers energy and accumulates it in the battery. The hybrid modes have been conceived to allow the user to manage and optimise performance, consumption and battery charge capacity. In full electric mode, the Hybrid fully disengages the thermal engine to turn into a silent, electric vehicle with zero exhaust emissions. Once in the garage, the Mp3 can be recharged thanks to plug-in technology.

*Source: Piaggio and LOGOS Public Affairs*

### Ducati interested in silent electric motorcycling

Ducati seems to be joining the list of major manufacturers that are looking into electric or hybrid future two-wheelers. According to Jeremy Korzeniewski, journalist for the well-informed autobloggreen platform, Sgorbati Diego - Ducati's Director of marketing - is of the opinion that electric bikes are the way forward, not only because of the need to reduce CO2 emissions, but mainly because of the prospects for noise reduction. According to him, this would enable tracks to be brought closer to city centres, allowing more fans to enjoy motorcycling.

Noise is the main argument used by authorities to close down tracks everywhere in Europe. Electric motorcycles could help in reversing the trend. On the other side of the Atlantic, in April, the organisers of the successful Zero Electriccross were allowed by the authorities to hold this 24-hour race in the immediate vicinity of a residential area thanks to the low level of noise.

*Source: [Autobloggreen](#) & LOGOS Public Affairs*

### Quantya proves successful in 24-hour race against thermal bikes

The Swiss Manufacturer Quantya successfully took part in the 30<sup>th</sup> edition of the 24 Hours motorbike race of Vall de Tenes, disputed around Barcelona, Spain, where it measured up to motorcycles run on thermal engines. Each team had two riders and two bikes which gave Quantya time for recharging during one rider's stop (around 30-40 minutes) and to be ready, therefore, for the next turn.

Quantya's performance was constant during the 24 hours despite the intensity of the race. The only intervention of the mechanical team consisted of changing the battery and of tightening the chain on one occasion. Finally, after 24 hours of racing, Quantya reached the third final position of the category of 125cc motorcycles, outperforming many thermal powered bikes.

*Source: Silvio Manicardi and LOGOS Public Affairs*

## ALTERNATIVE MOBILITY NEWS AROUND THE WORLD

### New alternative energy technologies being tested in the UK

September saw a major exhibition of low-carbon vehicles hosted by the UK government and industry. As well as electric racing motorcycles, the Cougar Red 125cc winner from this year's UK MotoGP round was on display. It is engineered to run on E85 bio ethanol and was raced to victory by fifteen-year old Adam Blacklock. More information on the team can be found at: [www.cougarred.com](http://www.cougarred.com)

A sign of just how seriously this new technology is being taken was the display of the new all-electric BMW Mini which is to go into limited production for trials by the public in the UK. It also showed how currently the motorcycle is better placed to use battery power since, in the BMW Mini, all the back seat space is taken by batteries.



The scale of investment in the UK in this new technology is huge. A new consortium has been established by the UK government together with industrial partners including EDF (the French electricity giant) Shell and BP oil, Rolls Royce Aerospace and others. Information on the work being done can be found at: [www.energytechnologies.co.uk](http://www.energytechnologies.co.uk).

At the LDF show, John Chatterton-Ross, Director of Public Affairs for the FIM, had the chance to take part in a computer simulation of a day in the life of a future driver. He comments, "It was fascinating and really opens your eyes to the choices we will all soon be making as to which option is best for a particular journey. I am convinced that for many regular trips electric and plug-in hybrids are the future".

*Source: John Chatterton-Ross and LOGOS Public Affairs*

### Congestion Tax Boosts Alt-Fuel Vehicle Use

When Sweden began charging motorists to drive into downtown Stockholm during rush hour, the goal was to reduce traffic congestion, cut greenhouse gas emissions and increase ridership on public transportation. That has happened, and now a new study has found another benefit from so-called congestion pricing: In the 24-square kilometre congestion zone in Sweden's capital, the number of registered alternative-fuel vehicles, which are exempt from congestion tolls, jumped to 14 percent of the total vehicle fleet in 2008 from five percent in 2006.

"The changes in the make-up of the vehicle fleet are not exclusively due to the congestion tax, but surveys show that exemption from the congestion tax is the single most significant incentive for those buying alternative-fuel vehicles in Stockholm," concluded the report, which was released this month by the Stockholm Traffic Administration.

The influx of low-carbon cars helped cut greenhouse gas emissions in the congestion zone by 14 percent to 18 percent, according to the report. Overall traffic in the inner city declined 18 percent compared to 2005, before a trial program started. Other factors, like weather and construction projects, may also have contributed to the decline in traffic, the report's authors wrote.

But the economic downturn apparently has not played a significant role in traffic changes, according to Annette Scheibe, the director of Stockholm's transportation department. In fact, the report found that retail sales in the city's core were up.

I.B.M. managed the design and implementation of the congestion pricing system, which the company says is Europe's largest. When a car equipped with a transponder passes through one of 18 gateways into the zone it breaks a laser beam and a transceiver records the time of day and the appropriate charge – ranging from about \$1.50 to \$3.

Cameras also photograph the car's front and rear licence plates to catch scofflaws. Optical character-recognition software is used to sharpen and identify blurred images and a database matches the licence plate number with a vehicle registry and automatically bills the gateway runner. In 2008, the system managed 82 million trips through the gateways, identifying cars with a 99.997 percent accuracy rate, according to I.B.M.

Still, the days of free rides are numbered — even for drivers of alternative-fuel vehicles. They'll have to start paying the congestion tax, too, beginning in July 2012.

*By Todd Woody, The New York Times*

## AGENDA

- FIM Biennial Session, Geneva, Switzerland, 22-26 October, including AEWG meeting
- FFM Défi Moto Electrique, October & November
- DMU Eco-Enduro event, 11-13 December