

## NEWS IN BRIEF

**Compressed-air hybrid could emit just 69g/km of CO<sub>2</sub>**

Peugeot Citroën PSA has created a new hybrid drivetrain that uses compressed air instead of electricity for its second source of power. Called Hybrid Air, the new technology could allow a car the size of a Citroën C3 or a Peugeot 208 to emit as little as 69g/km of CO<sub>2</sub>, according to the manufacturers.

**Used cooking oil makes up 28 per cent of UK biodiesel**

A report looking at the Renewable Transport Fuel Obligation (RTFO) from April to October 2012 reveals that the most widely reported source for creating biodiesel was used cooking oil (37 million litres, 28 per cent of biodiesel). The report concludes that an aggregate greenhouse gas saving of 65 per cent compared to fossil fuels was achieved.

**BIODIESEL FROM WASTE OIL: GOING DOWN THE DRAIN?**  
Read more on page 30

**Nissan slashes UK Leaf price by £2500**

The price of Nissan's Leaf is being dropped by £2500 for UK buyers. The change comes as part of a global effort to make the Leaf more affordable. With the plug-in grant, customers can now drive away in a Leaf for £23,490. The price change will remain when an updated version, expected shortly, is released.

**Alternatively-fuelled cars up 7.9 per cent in January**

The Society of Motor Manufacturers and Traders (SMMT) has revealed that alternatively-fuelled cars have seen a 7.9 per cent rise in volumes in January 2013. UK new car registrations rose 11.5 per cent to 143,643 units and growth was boosted by 15.9 per cent rise in private registrations during the month. In other news, prices of de-fleeted cars at auction rose in January, coinciding with a drop in the average age of vehicles, according to Manheim's latest monthly barometer of activity.

## ELECTRIC VEHICLES

**Scotland plans for EV charge points at every 50 miles of major roads**

Proposals in Scotland to intensify the adoption of electric vehicles will see free installation of home charging points, public charging outlets within at least every 50 miles on trunk roads, and an integrated network joining up electric vehicles (EV) with public transport.

The £2.6million scheme, which includes £750,000 from Transport Scotland, also includes charging points at leisure facilities and local authority public carparks and funding for charge points at workplaces. The scheme will also connect EV drivers with the islands through charging points at ferry terminals. There will also be a network of chargers in place in time to be used by officials and visitors to the Commonwealth Games in Glasgow. The Scottish Government's new ChargePlace Scotland web pages will

carry the locations of all the charging points, details of financial help to get an EV on the road and all the benefits of owning an electric vehicle.

Transport Minister Keith Brown said: "This funding looks to the future – a low carbon future with, to an electric revolution on our roads where people can charge their carbon-neutral cars at home, drive them to their local station and jump on an electric train to their workplace, which will also have charging points for the days they need to take the car to work.

"Or tourists can decide to take an EV driving tour around Scotland, safe in the knowledge they are never too far from a charger. And can hop on a ferry knowing they can charge up at the other end if needed."

## ALTERNATIVE FUELS

**Study predicts 1.5 million hydrogen cars will be on the road by 2030**

A joint Government-industry study predicts that over 1.5 million hydrogen powered vehicles could be on UK roads by 2030.

The forecast is made in an interim report commissioned to evaluate the benefits of hydrogen fuel cell electric vehicles (FCEVs) and ensure the UK is well positioned for their commercial roll-out.

The study, produced by the UKH2Mobility project, suggests initial uptake of FCEVs will progress as models make their way on to the market and the fuelling network matures. The roadmap shows that once mass FCEV production is established, bringing costs down, there is the potential for 1.6 million vehicles on UK roads by 2030, with annual sales of more than 300,000. A co-ordinated network of hydrogen refuelling stations will need to be established, focusing at first on national trunk routes and heavily populated areas.

An initial roll-out of 65 stations would provide sufficient coverage in line with early vehicle sales, with the network growing in line with the number of FCEVs on the road to provide 1,150 sites by 2030.

The roadmap shows that, based on the uptake figures above, FCEVs could reduce UK annual total vehicle CO<sub>2</sub> emissions by three million tonnes in 2030. Replacing diesel vehicles with FCEVs could also save between £100 million and £200 million a year in the cost of damage to air quality caused by vehicle emissions by 2050.

Using a range of manufacturing methods can deliver hydrogen at a cost that is competitive with diesel, with 60 per cent lower CO<sub>2</sub> emissions in 2020, improving to 75 per cent less in 2030. Hydrogen production will be on course for zero emissions by 2050, at which time FCEVs could have a market share of between 30 to 50 per cent.



## Andy Eastlake It's time to go 'beyond the tailpipe'

**Well we made it – 10 years and still going strong! As I write, the LowCVP team are emerging from the celebrations of our first decade. We took the opportunity to send a clear message about how we think industry and policy makers need to approach the future – and that's to go "beyond tailpipe".**

One of the most impressive things about the last ten years is the way the automotive industry has responded to the multitude of pressures and incentives to drive down CO<sub>2</sub> emissions. Ten years ago, few of us could have imagined a Ford Focus with CO<sub>2</sub> of just 88g/km or a Toyota at 49g/km or, indeed, a Vauxhall at just 27g/km! Figures like these from volume manufacturers were just not on our radar. And for the fleet buyer, the low carbon choice has never been better. But it has also never been more complicated.

Each of the vehicles above uses a conventional engine for at least some of the time, but does so in a different way. Making the right choice needs a careful understanding of how the technology works and how the vehicle is used. And, crucially, the emissions numbers above are measured only at the tailpipe. As plug-in electric vehicles and those running on biofuels become more widespread, this is clearly a growing issue.

The CO<sub>2</sub> figures used to compare fleet vehicles, company car tax bands, VED rates and of course congestion charge fees, also take no account of the carbon intensity of the fuel used (a range of innovations not necessarily reflected in these headline CO<sub>2</sub> numbers, can also materially affect the real world fuel consumption.)

Working with the car makers, the fuel industry is also searching for ways to cut the carbon impact of fuels used. Improved production and refining efficiency combined with judicious use of a range of biofuels, is delivering the same high quality products but with lower climate impact. Just as European regulations have focused the minds of the car industry on cutting carbon, European Directives (the FQD and RED) are setting challenging 2020 targets for the fuels industry.

So as you study the technical spec sheets for your next vehicle purchases, spare a thought for all those working to cut the carbon impact "Beyond the Tailpipe".

By the way, congratulations to all the LowCVP Champions Awards recipients announced recently, including Coca Cola Enterprises, winners of Low Carbon Vehicle Operator of the Year. You might also like to take a look at the LowCVP's tenth anniversary video just published.

### FURTHER INFORMATION

[www.lowcvp.org.uk](http://www.lowcvp.org.uk)

Andy Eastlake is managing director of the Low Carbon Vehicle Partnership (LowCVP)

## LOWCVP AWARDS

# Ford and TfL scoop 10-year green achievement awards

The Low Carbon Champions Awards named Ford and Transport for London (TfL) as winners of the 'Outstanding Achievement in Low Carbon Transport over the last 10 years' award.

Graham Smith, managing director of Toyota Motor Europe London Office was named the 'Outstanding Individual in Promoting Low Carbon Transport'.

The winners were announced at the LowCVP Low Carbon Champions Awards which followed the partnership's 10th anniversary celebration.

The winner of the prestigious Low Carbon Car/ Van Manufacturer of the Year went to Toyota. The

judges said that Toyota has been a pioneer in low carbon mobility in the UK since the launch of the first Prius in 2000. It reasserted its position in 2012 by successfully introducing full hybrid technology into new segments to the extent that cars emitting less than 100g/km of CO<sub>2</sub> now represent more than 30 per cent of Toyota and Lexus sales.

The stunning all new Routemaster bus or 'New Bus for London' provided Wrightbus with the Heavy Duty Vehicle Manufacturer of the Year Award'.



FULL LIST OF WINNERS:  
<http://bit.ly/WkXQc2>

## INFRASTRUCTURE

# London and South East to get advanced hydrogen refuelling network

The UK's first integrated hydrogen powered transport system has been agreed for London and the South East, as part of a three year LHNE (London Hydrogen Network Expansion) project. The government-backed initiative co-funded by the Technology Strategy Board involves a consortium of companies with expertise in hydrogen transport working together to deliver a publicly accessible, state-of-the-art fast-fill 700 bar renewable hydrogen fuelling station network. The project will also deploy new hydrogen vehicles in London; including a number of Hyundai hydrogen fuel cell vehicles and Revolve hydrogen powered vans.

Major car manufacturers have confirmed that the hydrogen vehicles available for purchase in the UK from 2014/15 will require 700 bar fuelling systems. The LHNE project will upgrade the existing fuelling station located near Heathrow Airport to 700 bar and deliver a brand new fuelling station with this specification in London. In addition, the project will increase accessibility to the dual pressure fuelling station at Millbrook Proving



Ground in Bedfordshire, and the Transport for London station in Stratford. These developments will create the first network of 700 bar fuelling stations in the UK, ready to meet an increasing demand for hydrogen fuel. The functionality of this network will then be proved by a fleet of hydrogen vans which will be operated by Commercial Group as part of their delivery network.

The LHNE consortium comprises of Air Products, Cenex, Commercial Group, Element Energy, Heathrow Airport Ltd and Revolve Technologies Ltd and the project is co-funded by a grant from the UK's innovation agency, the Technology Strategy Board.

## EV TECHNOLOGY

# Panasonic looks to double start-stop efficiency

A new technology has been created by Panasonic that could potentially double the fuel economy improvement rate of existing start-stop systems.

The 12V energy recovery system allows the energy generated during braking to be stored in the batteries and used to power a vehicle's electrical components: meaning that power is available even when the engine is not being used.



Currently, start-stop systems rely on a single lead-acid battery to deal with the electrical needs of the vehicle: including restarting the engine and running the air conditioner. According to Panasonic, this places the battery under too much load pressure. But Panasonic's new system would be connected in parallel with the main lead-acid battery to address this problem and extend the service life of the main battery.

## EVs

## Musk heads to Twitter to bicker over NYT's negative Tesla Model S review

Tesla Motors chief executive Elon Musk has branded a *New York Times* review of a Tesla Model S as "fake". Musk defended the Model S after the review said the car ran out of power sooner than expected during a test drive on a cold, winter's day.

The *NYT* reviewer, John Broder, wrote that during the test drive from Washington DC to Connecticut, the power had drained sooner than expected, forcing him to turn down the heating and drive below the speed limit. The car

had to be towed to a charging station, he said. In a statement responding to Musk's tweets, the *NYT* said Broder's review "was completely factual, describing the trip as it occurred.

Any suggestion that the account was 'fake' is, of course, flatly untrue". Tesla says the Model S has a range of up to 265 miles (426km) per charge. Broder wrote: "He (Musk) offered me a second chance at a test drive in a few months when more charging stations come online. I'm game."



## 18-year old passes test in Ampera

Navdeep Singh has passed his driving test in a Vauxhall Ampera to become the UK's first learner driver to complete the practical driving test in an electric vehicle. Singh drove the extended-range electric vehicle in his test with RED Driving School. Ian McIntosh, CEO of RED Driving School said: "We think it's important to get young people to experience the latest vehicle technologies." Meanwhile ASK Driving School's Paul Tomlin in Stoke-on-Trent has taken delivery of a dual control Nissan Leaf to become the first driving instructor to teach in a dual-control 100 per cent electric vehicle.

## NEWS IN BRIEF

### Biofuels World Market Congress

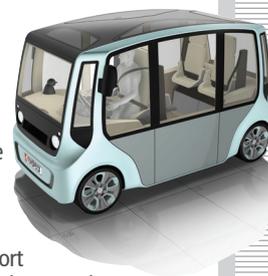
The 2013 World Biofuels Markets Congress and Exhibition takes place from the 12-14 March in Rotterdam, Netherlands. World Biofuels Markets will bring together governments, businesses, purchasers, policy makers, banks, non-governmental organisations, academics and influencers to discuss and exchange intelligence.



TO FIND OUT MORE VISIT:  
[www.worldbiofuelsmarkets.com](http://www.worldbiofuelsmarkets.com)

### Rinspeed Micromax shuttle concept at Geneva

Swiss Rinspeed will showcase its Micromax at the Geneva Motor Show. Designed for short distance transport, the Micromax is intended to be



similar to an airport shuttle, with upright seats that hold four passengers in an almost standing position. The extra floor space can be used for storage. The roomy interior is also supposed to 'afford an outstanding sense of spaciousness, with homey lounge character.' Passenger entertainment has been considered, with unlimited connectivity, a coffee-maker and refrigerator. Underneath the novel body lives an all-electric battery powertrain.

### Carbon Reduction Awards to feature at FTA Conference

The Freight Transport Association's 'Cutting Carbon, Cutting Costs Conference', which takes place on Wednesday, May 22, at the Heritage Motor Museum, Gaydon, Warwickshire, will provide specialised carbon reduction advice for freight operators with a range of workshops to suit their own fleet and business. The conference will provide delegates with information to help them improve their efficiency, reduce carbon emissions and ultimately lower fuel cost. The event will also celebrate individual companies' efforts to reduce their carbon emissions with the presentation of the inaugural Logistics Carbon Reduction Scheme (LCRS) Awards.



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[tinyurl.com/bq6k62k](http://tinyurl.com/bq6k62k)