

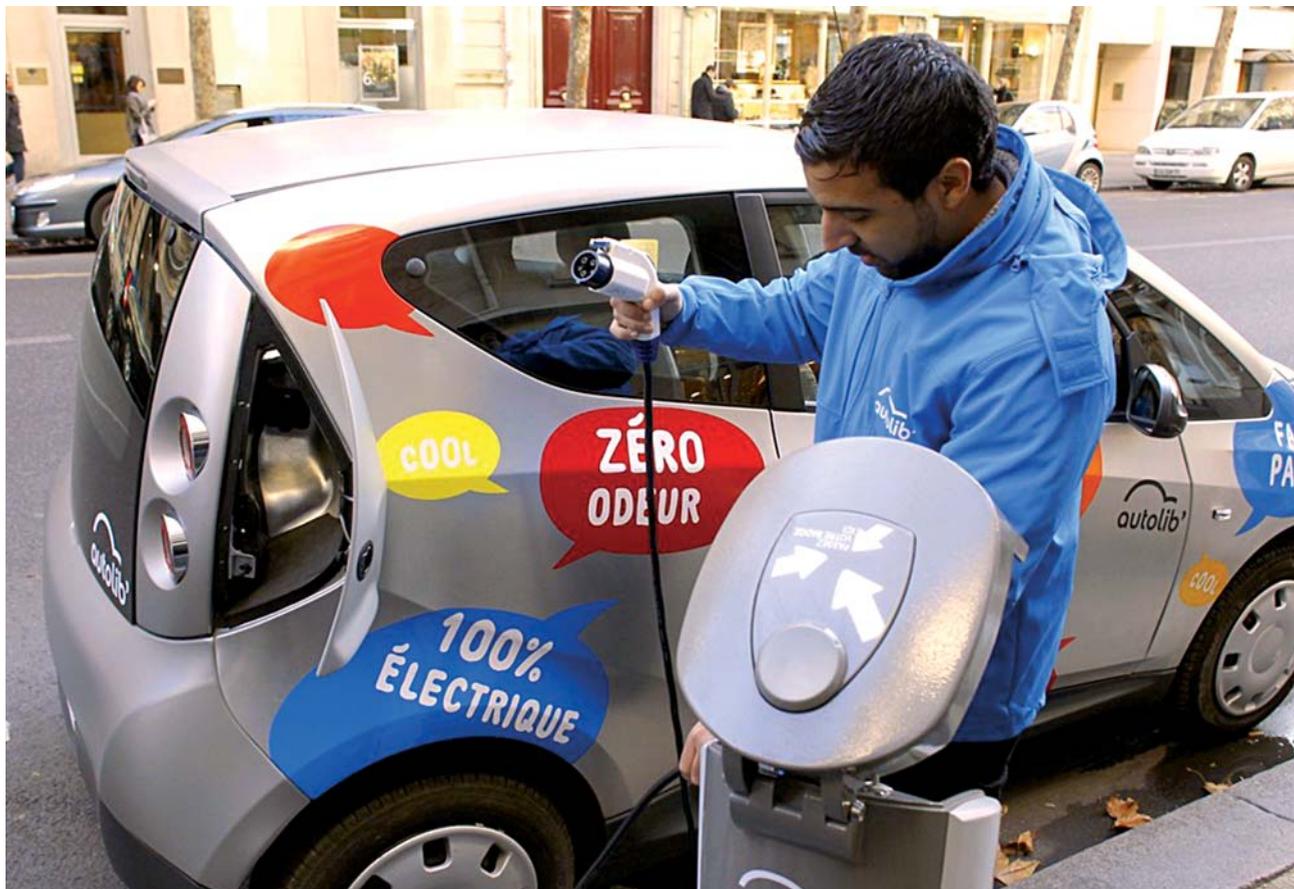
# Electric cars' future continues to remain unpredictable

Petrol prices are the big driver, pushing for pioneering technology in electric cars even if the internal combustion engine still dominates

When the Chevrolet Volt was named the 2011 North American Car of the Year in Detroit, you could have been forgiven for thinking that the electric car's time had finally come.

After years of development and false starts, a plug-in electric vehicle (albeit one that still has a petrol engine on board), aimed right at the middle of the mass market, was being celebrated as a great car that also happened to be powered by electricity. A year later and there seems to be a lot less to cheer about the Volt and the future of the electric car. The Volt itself has sold poorly, barely over 8,000 in its first year. A problem with batteries catching fire won't have helped, but Chevrolet's main competitors for the electric vehicle market, also reported dismal sales. The Nissan Leaf for example managed just under 10,000 sales in America last year.

In a total market of 12.8 million vehicles such numbers are tiny to the point of insignificance. Yet none of the manufacturers are prepared to call electric vehicles insignificant. At this year's show, as is now standard, new electric models are be-



Presentation of the charging station of an Autolib electric bluecar

ing rolled out, usually after very expensive development, and celebrated as 'the future'. Nevertheless, the executives in charge of these vehicles admit they face a big challenge getting electric vehicles accepted in the mass market.

But the main threat to the electric vehicle may in fact be an old technology that's showing remarkable resilience. Petrol-fuelled internal combustion engines may be the arch polluters of our age, but they keep getting more and more efficient. Not only

that, the auto industry keeps finding that consumers aren't anywhere near ready to give them up.

Hardly surprising then that the forecasts for how much of the global car market will be electric, and by when, are incredibly impre-

rise and vary wildly. Some among the carmakers think electric vehicles could make up as much as 25 percent of the car market by 2020. In other words, the industry is just guessing about the timing of the most basic transformation it has ever faced.

## EU summit to focus on banking union

European leaders will discuss ways of forming an EU wide banking union at a summit in Brussels, according to a document released ahead of the crunch meeting

The plans aim to break the link between the bloc's bad banks and indebted governments. EU officials are said to believe such a union could be achieved in a year. A single European banking supervisor and a common EU deposit-guarantee scheme are just two of the proposals on the table. In addition to a new banking framework, the pre-summit document reveals leaders are likely to look at much closer long-term integration.

That would go beyond the recently negotiated fiscal pact agreed between 25 of the EU's 27 countries, and almost certainly require treaty amendments. While it is unclear how long such changes would take to implement, once agreed, the pre-summit paper suggests pooling of Europe's debt would become much more realistic. What shape such mutualisation might appear, however, still remains a mystery. Up to now Germany has refused to even entertain the idea of Eurobonds saying it will not underwrite the liabilities of other Eurozone countries before deeper integration takes place.

## EU President Herman Van Rompuy tries to break patent deadlock



Among the many case files on the table at the EU summit is the single European patent

EU Commissioner Michel Barnier wants this project completed. It has been languishing on the back burner for several years, but the hope is one patent across most of the EU would stimulate innovation. During a recent visit to the Institut Pasteur in Paris, Mr. Barnier called on member states to finish the job.

"With a single patent we could

reduce the cost of protecting innovation by 10 to 20 times. Better protection means more jobs. It's high time heads of state and government removed the final hurdle by deciding where the court will be located to rule on each and every case, because if you have a single patent, you need a single jurisdiction," Mr. Barnier said.

The smart money for the court's location looks to be Paris with EU Council President Herman Van Rompuy coming out in support of the French capital. The implementation of a single European patent will be real progress according to Simon Wain-Hobson, a researcher at the Institut Pasteur. "For a company, you can then say, 'well that money can be invested in a job, and the job will create a patent', and the whole thing accelerates, so it's a sort of a virtuous circle," Mr. Wain-Hobson said.

At the moment it costs around 30,000 Euros to enforce a patent across the EU's 27 member countries, while in the US, it costs less than 2,000.

## Europe refuses UK air pollution reprieve

Government plans to delay air pollution improvements in 12 UK areas have been refused by the European Commission, which says air quality must improve

The UK may now face fines if it fails to improve air quality quickly. Air pollution reduces average life expectancy in the UK by up to eight months. But ministers have been slow to meet agreed European standards on cutting levels of the pollutant NO<sub>2</sub>. This comes mainly from vehicles. It causes problems with breathing — particularly for people with heart or lung problems.

The UK has been denied permission by the commission to delay air quality improvements in 12 areas — Aberdeen and north-east Scotland; Belfast; Birkenhead; Brighton; Bristol; Liverpool; Preston; Sheffield; south-west England; south Wales; Swansea and Tyne-side. A judgement will be made at a later date on government plans to delay meeting NO<sub>2</sub> standards in major cities until 2020 — or in the case of London, 2025. London



UK problem of air pollution

has the worst air of any European capital, and the UK is likely to be fined over the failure.

Air pollution is recognised by the government as the second-biggest public health threat, after smoking. It costs the UK an estimated £20bn a year — that's more than twice the amount estimated for obesity, which gets far more publicity. Daniel Instone, giving evidence on behalf of Defra, said

ministers were considering a nationwide network of low-emission zones in which the most polluting vehicles were banned.

NO<sub>2</sub> pollution affects long-term health. Experts giving evidence to the Environment Committee, EFRA, said the health of Olympic athletes visiting over the summer should not be harmed as long as the UK avoids a heat-induced smog episode.