# **Electric vehicles** Their time has come

A tiny number of electric vehicles have escaped from the yard and are venturing further from home than ever before. The Fleet Europe Survey of Leasing asked top leasing companies about their attitudes and predictions for electric vehicle (EV) technology. The time for plug-and-play has arrived.

little over 25 years ago a British inventor called Sir Clive Sinclair invented a three-wheeled electric-powered 'car', the Sinclair C5. How we laughed. It was tiny, underpowered and, for its time, incredibly expensive. Hardly anybody bought one. Sir Clive was ahead of his time and although we all ridiculed his little electric buggy, he's not too worried. He made his millions in electronics and is now married to an exotic dancer at least 30 years younger than him.

We seem, however, to be stuck in the 1980s with our attitudes to electric vehicles. They're still weird, with their silent motors and modest performance. We've bolted the motors on to petrol engines to make more palatable 'hybrids' and we fret about how much money we will lose on them when we dispose of them in three years' time.

#### A positive electric approach

But here's an interesting thing. In a recent Fleet Europe survey of leasing companies, every company had a positive approach to electric vehicles, most had an EV policy in place, some had products out there in the field and strategic alliances with manufacturers, and a significant number listed electric vehicles among the major influences on vehicle leasing in the next few years. A spokesperson for LeasePlan told Fleet Europe, "During 2009 LeasePlan entered into its first zero-emission mobility partnership with the Renault-Nissan Alliance. Under the



partnership terms, the two companies will study ways to promote the use of electric vehicles and investigate the options for a commercial approach towards corporate fleet clients. We also have a partnership with Peugeot-Citroën; more partnerships are currently being established as part of our strategy to offer a multi-brand choice to our clients. Electric vehicle leasing is expected to differ from conventional vehicle leasing, largely due to the investment required in batteries and the way in which these costs are spread through the life of the vehicle. There are questions over setting service and maintenance budgets, especially with respect to the cost of replacement batteries. If batteries are considered to have a 'second life' and therefore a residual value, they will be leased separately from the vehicles themselves."

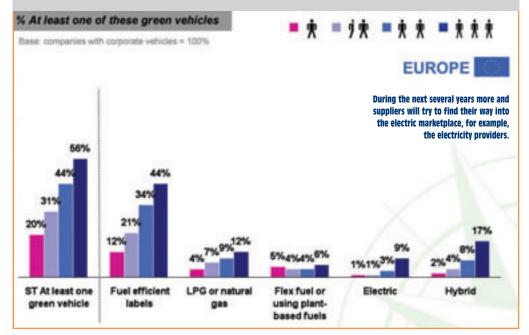
LeasePlan goes on to say, "Right now, the main issue for leasing companies and their customers is the uncertain picture of how quickly electric vehicles will be adopted by the mainstream consumer sector, especially via the used car market. How this plays out will have a significant bearing on resale values and at this time makes residual value setting more challenging than for conventional vehicles."

Netherlands-headquartered Athlon Car Lease has also partnered with the Renault-Nissan Alliance and the companies will co-operate in the provision of electric vehicles. Valentijn de Jong, senior vice-president business development and quality Athlon Car at Lease International says, "Athlon is collaborating with all players within the new value chain, such as car manufacturers,

### According to Arval

When asked to comment on the business model for electric vehicles, Arval referred to the findings of its studies into attitudes and predictions for the new technology. These are the points Arval is keen to share with fleet operators.

"Among large companies, 37 per cent tell us they intend to acquire electric vehicles in the next three years. These figures show the remarkable open-mindedness of businesses. But the business model for EV is far from being established. A central platform of services is needed. This will centralise complex flows from funding, subsidies and incentive programs, special warranty policies and buy-back programmes, offering a unified front end to customers. Full service lessors have this capability but they are not the only ones. These platforms will have to manage combined car and battery assets with very dissimilar lifecycles. All stakeholders will have to take their part of the risks linked to innovation. The operational leasing industry will be impacted by the first operational leasing experiences of full electric vehicles in the next two years."



electricity companies and infrastructure companies. Our partnership with the Renault-Nissan Alliance is the first step in becoming more involved in the EV leasing business. We are currently looking into flexible solutions

#### The battery question

Batteries and residual values are the two big question marks for electric vehicles; question marks that will restrict take-up until they are answered satisfactorily. Batteries delivering the ment batteries into radios and children's toys for years and fossil-fuelled cars require a new tankful of 'energy' every few hundred kilometres, but the prospect of replacing expensive EV batteries is more daunting.

<sup>55</sup> According tot the results of our Fleet Europe Leasing Survey 2010, every leasing company on an international level has a positive approach to electric vehicles.<sup>77</sup>

regarding battery lease as well as residual value settings. Additionally, we are investigating options for electric vehicles in terms of contract duration and life cycle." performance required by an electric vehicle are big and complex, which means they are also expensive. But they don't last as long as the cars they are fitted to. We have been putting replacedaunting. And until somebody can work out how the life cycle of batteries compares to lease durations, the value of an electric car at resale is very hard to predict. All new technologies are subject to similar reactions of fear, suspicion and caution. Mirroring the technology itself, innovation is being applied to the financial arrangements that will support electric vehicles.

Jörg Essig is head of corporate sales at Daimler Financial Services AG in Stuttgart.



invented the Sinclair C5, a three-wheeled electric-powered 'car'.

He says, "Electric cars do have a future in fleets. In fact, there are currently 100 electric smarts running successfully in the city of London. We are observing the markets and talk constantly to our customers. We can and will continue to fulfil the needs and requirements of each and every customer. We might see different options, for example a battery might be leased separately or the car and battery might be treated as one unit."

Arval seems to be one of the cautious but optimistic leasing companies. In its responses to the Fleet Europe questionnaire, the company said, "Arval considers electric vehicles as a promising but immature technology. We are assessing customer acceptance with open tests, like those organised by Arval France in its first event dedicated to electric vehicles".

"Primary challenges identified by business across Europe are the cost of the vehicle with its battery and the autonomy and recharging problems. Only the TCO approach that also incorporates its excellent maintenance profile can mitigate the cost issue, hence making full service leasing the central, if not unique, way to fund it. Based on this rationality we consider that professional users will be the first adopters, if regulatory and taxation conditions are attractive enough to compensate for the intrinsic risk of innovation taken by real fears among drivers, with "how far will it go on a charge?" being the question to replace "how far will it go on a tank?" With recharge times running to several hours, it's a reasonable fear. As a tank of diesel dwindles to its last few drops, the remedy, assuming a filling station is nearby, takes a matter of minutes.

## <sup>44</sup> Electric vehicle leasing is expected to differ from conventional vehicle leasing, largely due to the investment required in batteries.<sup>37</sup>

users. The Corporate Vehicle Observatory in France has just submitted a white paper\* that gathers the critical conditions of success needed from the public authorities."

So Arval thinks we will need more inducement, possibly through tax breaks, to persuade us to face the risks of innovative technology. The company mentioned vehicle autonomy and recharging problems. These seem to be KBC Autolease has its main offices in Belgium and Luxembourg. According to its survey response, the company believes that while there is a "respectful" take-up of hybrid vehicles across Europe, electric cars "are currently pushed by marketing purposes". It believes that the first electric cars will be used as pool cars, returning to the business premises every night to be recharged. Pascal Serres, deputy CEO of ALD Automotive, says, "The next two years will see the first pilot cases of new technology applications. For the next decade, the expected technological developments may lead to the entry of new suppliers into the marketplace, for example, the electricity providers."

Athlon Car Lease's Valentijn de Jong has already told us he is collaborating with electricity and infrastructure companies. A lot will depend on the availability of charging points. It will be fascinating to see this infrastructure grow and could lead to additional revenue streams for car parks at shopping centres and hotels.

According to Dr Nancy Storp, head of international sales and marketing, EV will be "the next step in the development of alternative fuels, and will be very attractive once a recharging network is in place". Dr Storp goes on to say, "Electric cars are still too expensive, but we expect a positive development within three years time. We think there might be two models for leasing electric vehicles, the 'traditional' full service lease contract and the 'pay per use' approach.

Rounding off the survey, Fleet Europe asked Alphabet's Dr Storp what she considers will be the next big thing in international fleet business. Her answer? Electric cars.

\* http://www.observatoire-vehicule-entreprise.com/fre/developpement-durable/actualite/livre-blanc-vehicule-electrique.html