

## Fleet Management

# Positives start to outstrip negatives

### Electric vehicles

## Utility is replacing image as the main reason to buy, says John Reed

After years of small pilot programmes – accompanied by a large amount of hype – electric and plug-in hybrid vehicles are finally entering company fleets.

Vehicle manufacturers see fleet operators, which tend to lodge larger orders and take a longer view on running costs than retail buyers, as core customers for their new-generation battery-powered vehicles.

Many fleet managers, in turn, want plug-in cars and vans in their line-up – whether to test the new technology, cut costs and carbon dioxide, or just feature pictures of them in their corporate sustainability reports.

Regulators around the world are easing the path of electronic vehicles (EVs) to market by offering a range of subsidies to early adopters, such as the UK's £5,000 plug-in car grant or France's top €5,000 bonus.

Companies are anticipating a further boost to vehicle electrification from city governments implementing low-emission zones.

But fleet managers are tough customers, not least during an economic downturn. So automakers are fine-tuning their pitches, increasingly touting EVs as value propositions, not just showpieces for corporate window-dressing.

“Until now, lots of people bought electric vehicles for presentational reasons, and made a big song and dance about them,” says Andy Heiron, head of Renault's EV programme in the UK. “Now, we are getting very business-oriented questions about payloads or fitting them out with racking, motivated by a genuine desire to get them into fleets.”

Renault has moved aggressively into EVs, along with its

partner Nissan. In mid-October, Renault began taking orders in the UK for a battery-powered version of its Kangoo small delivery van.

The French manufacturer plans to sell the van in three versions, ranging from about £17,000 to just under £19,000, excluding VAT, a price in line with comparable diesel vehicles, it says. To cut the van's cost, Renault will lease its battery to customers, beginning at a starting price based on a four-year contract of £60 a month.

Renault says it has signed letters of intent with potential customers including Transport for London, the leisure group Center Parcs, and Morrison Construction, a civil engineering group.

Steve Farmer, manager of the fleet division at Balfour Beatty, the construction and engineering group, describes the vehicle as a “great van” which, in addition to zero tailpipe emissions, has a 600kg payload.

“Our customer base is very sophisticated and very sensitive around what its contractors and supply chain are doing to protect the environment,” says Mr Farmer. “The ultimate ambition is to get as close to zero [emissions] across the fleet by 2020 as we can.”

Ford Motor is marketing an electric version of its similar-sized Transit Connect van. Azure Dynamics, Ford's partner, which fits the vans with motors, batteries and electronics, is selling it for just

under £40,000, batteries included.

While the price is steep for a vehicle of its size, Azure Dynamics is touting its low running costs. “This vehicle will cost £2 a night to charge”, says Gary Whit-tam, the company's sales and marketing director for Europe.

Mr Whittam divides buyers of the van into three groups: “The first customers are those who have a ‘green’ ethos from the managing director down, with a commitment to reduce their carbon impact,” he says.

A second group, he says, is concerned about rising fuel prices. “A third group of people don't have a green bone in their body,” he says, but if they want to operate the vehicle in the centre of Rome or Oslo a green vehicle will be better. About 300 electric Transit Connects have been sold around Europe, he says.

General Motors, which will launch the Opel/Vauxhall electric Ampera car next year – a Europeanised version of its US Chevrolet Volt – is counting on fleet customers, including the public sector, to outnumber retail buyers three to one.

“It's almost like a new segment,” says Ian Allen, launch manager for the car. He expects about 3,000 to 3,500 units of the US-built car to hit the UK in 2012, rising to 5,000 in subsequent years.

The utility companies – which are also moving into EV recharging – will be among the

biggest early customers for the cars. EDF, the France-headquartered power group, has tested plug-in cars made by Renault, Toyota, PSA Peugeot Citroën and BMW, and plans to buy 2,500 cars for its fleet by 2014-5 under a mass 50,000-vehicle tender led by the French post office. “We have a role to play in the electric mobility business,” says Igor Czerny, head of EDF's electric mobility division.

“We think the trend is irreversible – that's why it's a corporate project.”

However, sceptics say the numbers on electric cars still do not add up.

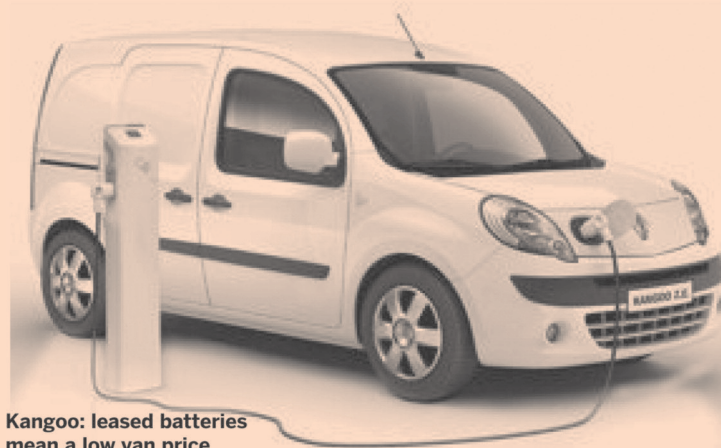
“If you look at the running cost compared with an efficient diesel, even with the government grant over three years, the cost-benefit case isn't there yet,” says David Brennan, UK managing director of LeasePlan, the vehicle and fleet management provider.

Some analysts say early adopters are using electric vehicles more for image reasons. “There are companies who know they are running EVs at a far higher cost than conventional ones, but the fact that they put their logos on the side of the cars makes it clear what they are doing it for,” says Gareth Hession, vice-president for research with Jato Dynamics, the automotive research group.

But Balfour Beatty's Mr Farmer, for one, insists that his choice is pragmatic. He points out that EVs, being mechanically simpler than conventional ones, will be cheaper to maintain. “There isn't a whole lot that can go wrong,” he says.

Mr Czerny says total cost of ownership of an EV and a conventional vehicle are the same, and points to other factors that could fuel a growing willingness to choose an EV.

“It's quiet and it's easy to use,” he says. “When you have started with this kind of vehicle, you don't want to go back.”



Kangoo: leased batteries mean a low van price

# Fleet Management

## **Car campus** Bringing electric power to the people

General Electric's fleet management arm is converting part of its campus in Eden Prairie, a suburb of Minneapolis, into a tangible demonstration of the industrial and financial conglomerate's faith in electric vehicles, **writes Bernard Simon.**

If all goes to plan, the site will be transformed by next spring into a half-mile driving course and a two-storey building, including 12 garages. One car port will be equipped with solar panels to show that electric cars can be entirely powered by clean and renewable energy.

GE plans to invite up to five corporate customers to the centre each week to discover for themselves the joys – and perhaps also sorrows – of plug-in vehicles such as the Chevrolet Volt, with its petrol-engined range extender, and all-electric models as the Nissan Leaf, Coda and the battery version of Ford Motor's Transit Connect light delivery van.

"We're really focusing on electric vehicles. We're very excited", says Deb Frodl, chief strategy officer at GE Capital Fleet Services. "It's so important that people touch the technology and really experience it."

GE is something of an exception, as individual and fleet buyers have so far been slow to embrace the new technology. A recent Deloitte survey concluded that the current crop of electric vehicles would meet the expectations of no more than 2-4 per cent of consumers worldwide in terms of range, cost and recharging time.

Even so, GE's opinion is not to be taken lightly. It operates a 30,000-vehicle fleet of its own, and provides fleet-management services for 1.5m cars and trucks owned by other companies. It has sufficient clout for some carmakers to have agreed to donate vehicles to the new "customer experience and learning centre" in return for exposure to GE customers.

The conglomerate pledged last November to buy 25,000 electric vehicles by 2015 for its own fleet and for its customers. That figure is more than double the Chevy Volt's total sales target for this year.

GE, whose fuel costs ballooned by 20 per cent in 2010, expects that electric vehicles will make up half its own fleet by 2015. Ms Frodl estimates that the average fleet driver, travelling more than 20,000 miles a year, can save about \$1,300 in a plug-in hybrid using a 50-50 combination of gasoline and electricity. The savings could rise to \$2,000 a year in an all-electric vehicle.

By early October, GE had taken delivery of 110 Volts, and expects to have several



**Clean machines: GE shows the way**

hundred more on the road by the end of the year. Employees who have driven them "absolutely love the vehicle", says Ms Frodl. "They love the technology."

While both the Volt and the Leaf are plug-in electric cars, the Leaf is powered entirely by a battery with a range of about 100 miles before it needs recharging. The Volt runs on battery power alone for 40 or so miles. After that, a small petrol engine runs simply as an generator to charge the battery, giving a total range before refuelling of about 340 miles.

For fleet and individual customers alike, "range anxiety" is one of the biggest obstacles to widespread acceptance of electric cars, especially given the initial scarcity of battery recharging stations.

GE has so far ordered only Volts for its US sales force, who each typically drive about 85 miles a day. Ms Frodl says: "We decided that the Volt was presently the best fit for GE and our drivers."

GE offers fleet customers a turnkey electric-vehicle service that includes buying the cars, installing the necessary recharging infrastructure and collecting data on driver and vehicle performance.

Other GE divisions supply much of this equipment. For example, GE sells a battery-charging unit, known as the Wattstation; it has so far installed 600 in the US and 150 in Europe. Other GE products include circuit protection equipment and transformers. Not surprisingly, these items will also be on display at the Minneapolis centre to help drum up new business.

Much of the data supplied to fleet customers comes from OnStar, a General Motors vehicle information service that is standard equipment in the Volt.

Employees are encouraged to drive fleet vehicles as carefully as their family car by allowing them to buy the company car after a set period. GE sells 10-20 per cent of its used fleet cars to its own employees.